Command NAME	ASCII command type	ASCII command structure	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
ASCII COMMANDS						
HEART BEAT	ASCII READ COMMAND	#HB<CR> Result: #HB<CR>			ASCII	
	TX	#1,HB<CR>				
	RX	#1,HB<CR>				
Sends an Heartbeat to test the communcation						
GET VERSION	ASCII READ COMMAND	#VERSION<CR> Result: #VERSION:<VersionHi>,<VersionMed>,<VersionLo><CR>			ASCII	
	TX	#1,VERSION<CR>				
	RX	#1,VERSION:1.2.00<CR>				
		Current SW version:1.2.00				
Returns the version number of the module VersionHi: Version number high (1..255) VersionMed: Version number medium (1..255) VersionLo: Version number low (1..255)						
GET TYPE	ASCII READ COMMAND	#TYPE<CR> Result: #TYPE:<Type><CR>			ASCII	
	TX	#1,TYPE<CR>				
	RX	#1,TYPE:RESI-16RO-SIO<CR>				
		Current module type:RESI-16RO-SIO				
Returns the current module type						
GET FEATURES	ASCII READ COMMAND	#FTRS<CR> Result: #FTRS:<Type><CR>			ASCII	
	TX	#1,FTRS<CR>				
	RX	#1,FTRS:RESI-16RO-SIO,16RO<CR>				
		Current module type:RESI-16RO-SIO				
Returns the current module features						
GET OWNER	ASCII READ COMMAND	#OWNER<CR> Result: #OWNER:<Owner><CR>			ASCII	
	TX	#1,OWNER<CR>				
	RX	#1,OWNER:RESI<CR>				
		Current owner:RESI				
Returns the current owner of the module						

GET CREATOR	ASCII READ COMMAND	#CREATOR<CR> Result: #CREATOR:<Creator><CR>	ASCII	
	TX	#1,CREATOR<CR>		
	RX	#1,CREATOR:DI HC SIGL,MSC<CR>		
		Current creator:DI HC SIGL,MSC		
Returns the current creator of the module				
GET COPYRIGHT	ASCII READ COMMAND	#COPYRIGHT<CR> Result: #COPYRIGHT:<Copyright><CR>	ASCII	
	TX	#1,COPYRIGHT<CR>		
	RX	#1,COPYRIGHT:2015-23 BY RESI AND DI HC SIGL,MSC WWW.RESI.CC<CR>		
		Current copyright:2015-23 BY RESI AND DI HC SIGL,MSC WWW.RESI.CC		
Returns the current copyright of the module				
GET SERIAL NUMBER	ASCII READ COMMAND	#SN<CR> Result: #SN:<Serial><CR>	ASCII	
	TX	#1,SN<CR>		
	RX	#1,SN:31003E000A53554637303820<CR>		
		Current serial number:31003E000A53554637303820		
Returns the current serial number of the module				
GET INTERNAL STATUS	ASCII READ COMMAND	#INTSTAT<CR> Result: #INTSTAT:<Status><CR>	ASCII	
	TX	#1,INTSTAT<CR>		
	RX	#1,INTSTAT:I2C1:0,I2C2:0,FRAM:28<CR>		
Returns the device specific internal status				
GET DIP SWITCH	ASCII READ COMMAND	#GDIP<CR> Result: #GDIP:<DIPSwitchDec>,<DIPSwitchHex><CR>	ASCII	
	TX	#1,GDIP<CR>		
	RX	#1,GDIP:65,0x41<CR>		
		Current DIP SWITCH settings:0100.0001		
Returns the current setting of the Dip switches as decimal number and as hexadecimal number. DIPSwitchDec DIPSwitchHex The current value of the DIP switches: Bit 0: DIP Switch 1 (=0:OFF, =1:ON) Bit 1: DIP Switch 2 (=0:OFF, =1:ON) Bit 2: DIP Switch 3 (=0:OFF, =1:ON) Bit 3: DIP Switch 4 (=0:OFF, =1:ON) Bit 4: DIP Switch 5, if available (=0:OFF, =1:ON) Bit 5: DIP Switch 6, if available (=0:OFF, =1:ON) Bit 6: DIP Switch 7, if available (=0:OFF, =1:ON) Bit 7: DIP Switch 8, if available (=0:OFF, =1:ON)				
ASCII COMMANDS				

SET MODBUS ADDRESS	ASCII WRITE COMMAND	#SMBADR:<UNITID><CR> Result: #OK<CR>	ASCII	NO
	UNITID	123		
	TX	#1,SMBADR:123<CR>		
	RX	N/A		
Redefines the unit ID of the module. This change will affect the MODBUS/RTU communication immediately. As a Unit IO you can use the values 0dec to 255dec. HINT: The new settings are activated after a system reboot or power off on cycle!				
SET MODBUS BAUDRATE	ASCII WRITE COMMAND	#SMBBAUD:<BAUD><CR> Result: #OK<CR>	ASCII	NO
	BAUD	128000:128000BD		
	TX	#1,SMBBAUD:128000<CR>		
	RX	N/A		
Sets a new baud rate in the FLASH For ULTRA SLIM IOs RESI-xxx-SIO: This baudrate is only used, if DIP switch mode DIP1=ON+DIP2=ON (BR) (default is 57600bd) For BIG IOs RESI-xxx-SIO: This baudrate is only used, if DIP switch mode DIP7=ON (PARAMETER) (default is 57600bd) The following baudrates are allowed: 300bd, 600bd, 900bd, 1200bd, 2400bd, 4800bd, 9600bd, 19200bd, 38400bd, 57600bd, 115200bd, 128000bd 230400bd, 250000bd, 256000bd HINT: The new setup parameters will be active after a restart of the module.				
SET MODBUS PARITY	ASCII WRITE COMMAND	#SMBPAR:<PARITY><CR> Result: #OK<CR>	ASCII	NO
	PARITY	ODD:ODD PARITY		
	TX	#1,SMBPAR:ODD<CR>		
	RX	N/A		
Sets a new parity for the serial interface. MBParity: NONE: no parity EVEN: even parity ODD: odd parity HINT: The new setup parameters will be active after a restart of the module.				
SET MODBUS STOPS	ASCII WRITE COMMAND	#SMBSTOP:<STOPBIT><CR> Result: #OK<CR>	ASCII	NO
	STOPBIT	TWO:TWO STOPBITS		
	TX	#1,SMBSTOP:TWO<CR>		
	RX	N/A		

Sets a new amount of stop bits for the serial interface. MBStops ONE: one stop bit TWO: two stop bits HINT: The new setup parameters will be active after a restart of the module.				
SET MODBUS PARAMS	ASCII WRITE COMMAND	#SMBPARAMS:<UNITID>,<BAUD>,<PARITY>,<STOPBIT><CR> Result: #OK<CR>	ASCII	NO
	UNITID	3		
	BAUD	115200:115200BD		
	PARITY	EVEN:EVEN PARITY		
	STOPBIT	TWO:TWO STOPBITS		
	TX	#1,SMBPARAMS:3,115200,EVEN,TWO<CR>		
	RX	N/A		
Sets all parameters for serrial interface				
GET MODBUS ADDRESS	ASCII READ COMMAND	#GMBADR<CR> Result: #GMBADR:<MBUnitDec>,<MBFLASHDec>,<MBUnitHex>,<MBFLASHHex><CR>	ASCII	
	TX	#1,GMBADR<CR>		
	RX	#1,GMBADR:1,15,0x1,0xF<CR>		
		Current MODBUS unit ID:1,15,0x1,0xF		
Shows the current used MODBUS/RTU or ASCII unit address and shows also the stored unit address in the FLASH memory, which is only used if the DIP switch for the bus address is set to 0. MBUnitDec,MBUnitHex The current used MODBUS/RTU unit or ASCII address for communication MBFLASHDec,MBFLASHHex The internal stored MODBUS/RTU unit address or ASCII address from the FLASH memory, if the DIP switch DIP3 is OFF.				
GET MODBUS BAUDRATE	ASCII READ COMMAND	#GMBBAUD<CR> Result: #GMBBAUD:<BaudRate><CR>	ASCII	
	TX	#1,GMBBAUD<CR>		
	RX	#1,GMBBAUD:115200,0x1C200<CR>		
		Current baudrate:115200,0x1C200		
This is the current configured baud rate in the FLASH For ULTRA SLIM IOs RESI-xxx-SIO: This baudrate is only used, if DIP switch mode DIP1=ON+DIP2=ON (BR) (default is 57600bd) For BIG IOs RESI-xxx-SIO: This baudrate is only used, if DIP switch mode DIP7=ON (PARAMETER) (default is 57600bd) The following baudrates are allowed: 300bd, 600bd, 900bd, 1200bd, 2400bd, 4800bd, 9600bd, 19200bd, 38400bd, 57600bd, 115200bd, 128000bd 230400bd, 250000bd, 256000bd				
GET MODBUS PARITY	ASCII READ COMMAND	#GMBPAR<CR> Result: #GMBPAR:<MBParity><CR>	ASCII	
	TX	#1,GMBPAR<CR>		
	RX	#1,GMBPAR:NONE<CR>		

		Current parity:NONE		
Shows the current configured parity of the serial interface. MBParity NONE: no parity EVEN: even parity ODD: odd parity				
GET MODBUS STOP	ASCII READ COMMAND	#GMBSTOP<CR> Result: #GMBSTOP:<MBStop><CR>	ASCII	
	TX	#1,GMBSTOP<CR>		
	RX	#1,GMBPAR:ONE<CR>		
		Current stopbit(s):ONE		
Shows the current configured parity of the serial interface. MBParity NONE: no parity EVEN: even parity ODD: odd parity				
GET MODBUS PARAMS	ASCII READ COMMAND	#GMBPARAMS<CR> Result: #GMBPARAMS:<MBUnitDec>,<MBFLASHDec>,<MBUnitHex>,<MBFLASHHex>, <MBBaudrateDec>,<MBBaudrateHex>,<MBParity>,<MBStops><CR>	ASCII	
	TX	#1,GMBPARAMS<CR>		
	RX	#1,GMBADR:1,0x1,15,0xF,115200,0x1C200,NONE,ONE<CR>		
		Current MODBUS unit ID used:1		
		Current MODBUS unit ID in FLASH:15		
		Current baudrate in FLASH:115200		
		Current parity in FLASH:NONE		
		Current stopbit(s) in FLASH:ONE		
Returns the complete settings for serial interface				
ASCII COMMANDS				
RESET	ASCII WRITE COMMAND	#RST<CR> Result: #OK<CR>	ASCII	NO
	TX	#1,RST<CR>		
	RX	N/A		
Executes a software reset (Reboot) of the module.				
FACTORY RESET	ASCII WRITE COMMAND	#FRST<CR> Result: #OK<CR>	ASCII	NO
	TX	#1,FRST<CR>		
	RX	N/A		
Performs a factory reset of all internal saved parameters				
SET MODBUS WATCHDOG TIMER	ASCII WRITE COMMAND	#SMBWATCHDOG:<WDTIME><CR> Result: #OK<CR>	ASCII	YES

	WDTIME	100		
	TX	#1,SMBWATCHDOG:100<CR>		
	RX	#1,OK<CR>		

Enables or disables the WATCHDOG Timer for the IO module.
WDTIME:
1..65535: Time for Watchdog in 1/100s
=0: Watchdog is deactivated
HINT: The Watchdog is internally handled every 100ms. If the IO module receives no valid frame within this time period, the outputs are set to predefined values!

GET MODBUS WATCHDOG TIMER	ASCII READ COMMAND	#GMBWATCHDOG<CR> Result: #GMBWATCHDOG:<WDTIME><CR>	ASCII	
	TX	#1,GMBWATCHDOG<CR>		
	RX	#1,GMBWATCHDOG:100,0x64<CR>		
		Current watchdog time:100 -> 10,0s		

Shows the actual configured time for the telegram watchdog function of the IO module.
WDTIME:
1..65535: Time for Watchdog in 1/100s
=0: Watchdog is deactivated
HINT: The Watchdog is internally handled every 100ms. If the IO module receives no valid frame within this time period, the outputs are set to predefined values!

CPU PARAMETERS

GET CPU VOLTAGE	ASCII READ COMMAND	#GCPUTEMP<CR> Result: #GCPUTEMP:<CPUTemp><CR>	ASCII	
	TX	#1,GCPUTEMP<CR>		
	RX	#1,GCPUTEMP:38.7842<CR>		
		Current internal temperature of CPU:38.7842°C		

Current internal temperature of CPU in ° Celsius.

GET CPU VOLTAGE	ASCII READ COMMAND	#GCPUVOLT<CR> Result: #GCPUVOLT:<CPUVoltage><CR>	ASCII	
	TX	#1,GCPUVOLT<CR>		
	RX	#1,GCPUVOLT:3.3632<CR>		
		Current supply voltage of CPU:3.3632V		

Current internal supply voltage of CPU in Volt.

GET CPU BACKUP	ASCII READ COMMAND	#GCPUBACK<CR> Result: #GCPUBACK:<CPUBackupVoltage><CR>	ASCII	
	TX	#1,GCPUBACK<CR>		
	RX	#1,GCPUBATT:3.1793<CR>		
		Current backup voltage of CPU:3.1793V		

Current internal backup capacitor voltage of CPU in Volt.

Register NAME	MODBUS Register	Register VALUE	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
CONVERTER STATUS						
DIP SWITCH	3x10100 4x10100 I:10099	65,0x0041 B:00 41			UINT16 R/O	
Returns the current setting of the Dip switches. For ULTRA SLIM IOs The current value of the DIP switches: Bit 0: DIP Switch 1 (=0:OFF, =1:ON) Bit 1: DIP Switch 2 (=0:OFF, =1:ON) Bit 2: DIP Switch 3 (=0:OFF, =1:ON) Bit 3: DIP Switch 4 (=0:OFF, =1:ON) For BIG IOs: The current value of the DIP switches: Bit 0: DIP Switch 1 (=0:OFF, =1:ON) Bit 1: DIP Switch 2 (=0:OFF, =1:ON) Bit 2: DIP Switch 3 (=0:OFF, =1:ON) Bit 3: DIP Switch 4 (=0:OFF, =1:ON) Bit 4: DIP Switch 5 (=0:OFF, =1:ON) Bit 5: DIP Switch 6 (=0:OFF, =1:ON) Bit 6: DIP Switch 7 (=0:OFF, =1:ON) Bit 7: DIP Switch 8 (=0:OFF, =1:ON)						
PRODUCT DATA						
HW_GROUP	3x65201 4x65201 I:65200	16384,0x4000 B:40 00			UINT16 R/O	
This is the group of hardware of the current product						
SW_GROUP	3x65202 4x65202 I:65201	32783,0x800F B:80 0F			UINT16 R/O	
This is the group of software of the current product						
SW_VERSION	3x65203 4x65203 I:65202	4608,0x1200 B:12 00			UINT16 R/O	
		SW VERSION:1.2.0				
This is the current software version of the firmware						
SW_AUTHOR	3x65204 4x65204 I:65203	18771,0x4953 B:49 53			UINT16 R/O	
This is the current software author of the firmware						
MODBUS SETTINGS						
UNIT_ID	3x65222 4x65222 I:65221	1,0x0001 B:00 01			UINT16 R/O	

		UNIT ID:1				
If the host reads this register, the current defined unit ID is returned.						
FLASH UNIT_ID	3x65223 4x65223 I:65222	15,0x000F B:00 0F		27	UINT16 R/W	NO
		UNIT ID:15				
If the host reads this register, the current defined unit ID from the FLASH is returned. This UnitID is used if DIP switch for UnitID is set to 15						
HINT:This settings will be active after you repower or reset your device !!						
BAUD_RATE	3x65224 4x65224 I:65223	115200,0x0001C200 B:00 01 C2 00	57600	57600	UINT32 R/W	NO
		115200Bd		ENTER BAUD RATE		
This is the current configured baud rate in the FLASH For ULTRA SLIM IOs RESI-xxx-SIO: This baudrate is only used, if DIP switch mode DIP1=ON+DIP2=ON (BR) (default is 57600bd) For BIG IOs RESI-xxx-SIO: This baudrate is only used, if DIP switch mode DIP7=ON (PARAMETER) (default is 57600bd)						
Valid baud rates are: 300bd, 600bd, 900bd, 1200bd, 2400bd, 4800bd, 9600bd, 19200bd, 38400bd, 57600bd, 115200bd, 128000bd 230400bd, 250000bd, 256000bd						
HINT:This settings will be active after you repower or reset your device !!						
PARITY	3x65226 4x65226 I:65225	0,0x0000 B:00 00		1:EVEN PARITY	UINT16 R/W	NO
		NO PARITY		SELECT PARITY		
If the register is read out, the currently set parity of the serial interface is returned. Writing a value to this register will change the new parity in FLASH. This will only take effect after a restart of the module. This can be triggered by writing to the RESET SYSTEM register. Parity values are 0: no parity 1: even parity 2: odd parity						
STOP BITS	3x65227 4x65227 I:65226	1,0x0001 B:00 01		2:TWO STOPBITS	UINT16 R/W	NO
		ONE STOPBIT		SELECT STOPBITS		
If the register is read out, the currently set number of stop bits of the serial interface is returned. Writing a value to this register will change the new number of stop bits in the FLASH. This will only take effect after a restart of the module. This can be triggered by writing to the RESET SYSTEM register. Values for stop bits are 1: one stop bit 2: two stop bits						
MODBUS TIMING	3x65228 4x65228 I:65227	0,0x0000 B:00 00		10	UINT16 R/W	NO

		Actual timing:0ms				
If the host reads this register, the current defined timing for MODBUS telegrams is returned. This timing is a time in ms which extends the standard 1.5 character timeout between two consecutive bytes on the serial line. If you write a new value to this register, the new settings are stored into the internal FLASH. Reboot the device to activate the new settings.						
MODBUS WATCHDOG TIME	3x65229 4x65229 I:65228	0,0x0000 B:00 00		50	UINT16 R/W	YES
		Actual watchdog time in 1/100s:0 -> 0,0s				
Writing a value onto this register defines a new time for the internal communcation watchdog timer. The value is a timespan in 1/100s. =0: The communcation watchdog is disabled =1..65535: Communcation watchdog will be trigegred after x 1/100s pause on communcation line In case of an communcation watchdog, the module sets all outputs to the states defined in the configuration output registers Reading this registe will return the current stored time from the internal FLASH						
CPU DATA						
SERIAL1	3x65521 4x65521 I:65520	49,0x0031 B:00 31			UINT16 R/O	
Serial number of module as 96 bit unsigned integer number						
SERIAL2	3x65522 4x65522 I:65521	62,0x003E B:00 3E			UINT16 R/O	
SERIAL3	3x65523 4x65523 I:65522	21258,0x530A B:53 0A			UINT16 R/O	
SERIAL4	3x65524 4x65524 I:65523	18005,0x4655 B:46 55			UINT16 R/O	
SERIAL5	3x65525 4x65525 I:65524	12343,0x3037 B:30 37			UINT16 R/O	
SERIAL6	3x65526 4x65526 I:65525	8248,0x2038 B:20 38			UINT16 R/O	
		SERIAL:31003E000A53554637303820				
Serial number of module as 96 bit unsigned integer number						
CPU TEMPERATURE	3x65527 4x65527 I:65526	3865,0x0F19 B:0F 19			UINT16 R/O	
		Current internal temperature of CPU:38,7°C				
Current internal temperature of CPU in ° Celsius multiplied by 10.						
CPU VOLTAGE	3x65528 4x65528 I:65527	336,0x0150 B:01 50			UINT16 R/O	
		Current supply voltage of CPU:3,36V				

Current internal supply voltage of CPU in Volt multiplied by 1000.						
CPU BACKUP VOLTAGE	3x65529 4x65529 I:65528	317,0x013D B:01 3D			UINT16 R/O	
		Current backup voltage of CPU:3,17V				
Current internal backup capacitor voltage of CPU in Volt multiplied by 1000.						
CONVERTER STATUS						
CONVERTER STATUS	3x65534 4x65534 I:65533	0,0x0000 B:00 00			UINT16 R/O	
Current status of the converter						
FACTORY RESET	3x65535 4x65535 I:65534	0,0x0000 B:00 00		1:PERFORM FACTORY RESET	UINT16 R/W	NO
Performs a factory reset of all internal saved parameters						
SOFTWARE RESET						
RESET	1x65536 2x65536 I:65535	0,0x00 B:00		N/A:NO CHANGE	BIT R/W	NO
Performs a software reset, whenever 1 is written to this register. If the host writes to this register 1, the module executes a soft reset (reboot).						
RESET	3x65536 4x65535 I:65535	0,0x0000 B:00 00		N/A:NO CHANGE	UINT16 R/W	NO
Performs a software reset, whenever 1 is written to this register. If the host writes to this register 1, the module executes a soft reset (reboot).						

Register NAME Command NAME	MODBUS Register ASCII Command	Register VALUE ASCII Command	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
ASCII COMMANDS						
AIOIX CONFIGURATION						
SET IO TYPES	ASCII WRITE COMMAND	#SIOTYPS:<IOTyp1>,<IOTyp2>,<IOTyp3>,<IOTyp4>,<IOTyp5>,<IOTyp6>,<IOTyp7>,<IOTyp8>,<IOTyp9>,<IOTyp10>,<IOTyp11>,<IOTyp12>,<IOTyp13>,<IOTyp14>,<IOTyp15>,<IOTyp16><CR> Result: #OK<CR>			ASCII	YES
	IOTyp1	VO[0-10V]				
	IOTyp2	VO[0-10V]				
	IOTyp3	VO[0-10V]				
	IOTyp4	VO[0-10V]				
	IOTyp5	VO[0-10V]				
	IOTyp6	VO[0-10V]				
	IOTyp7	VO[0-10V]				
	IOTyp8	VO[0-10V]				
	IOTyp9	VO[0-10V]				
	IOTyp10	VO[0-10V]				
	IOTyp11	VO[0-10V]				
	IOTyp12	VO[0-10V]				
	IOTyp13	VO[0-10V]				
	IOTyp14	VO[0-10V]				
	IOTyp15	VO[0-10V]				
	IOTyp16	VO[0-10V]				
	TX	#1,SIOTYPS:VO[0-10V],VO[0-10V],VO[0-10V],VO[0-10V],VO[0-10V],VO[0-10V],VO[0-10V],VO[0-10V],VO[0-10V],VO[0-10V],VO[0-10V],VO[0-10V],VO[0-10V],VO[0-10V],VO[0-10V],VO[0-10V]<CR>				
	RX	#255,OK<CR>				

This command defines for all 16 universal IOs a new type of IO:
IOTypx stands for the new type:
UU: Unused – high impedance
VI[0-10V]: VOLTAGE INPUT for 0 to 10V Signals
VI[2-10V]: VOLTAGE INPUT for 2 to 10V Signals
VO[0-10V]: VOLTAGE OUTPUT for 0 to 10V Signals
VO[2-10V]: VOLTAGE OUTPUT for 2 to 10V Signals]
CI[0-20mA;LP]: CURRENT INPUT for 0 to 20mA Signals – loop powered
CI[4-20mA;LP]: CURRENT INPUT for 4 to 20mA Signals – loop powered
CI[0-20mA;EP]: CURRENT INPUT for 0 to 20mA Signals – external powered
CI[4-20mA;EP]: CURRENT INPUT for 4 to 20mA Signals – external powered
CO[0-20mA]: CURRENT OUTPUT for 0 to 20mA Signals
CO[4-20mA]: CURRENT OUTPUT for 4 to 20mA Signals
RTDI[OHM]: RTD SENSOR INPUT for Ohm measurement between 0 and 1MOhm
DI[24V;L]: DIGITAL INPUT for 24Vdc – logic, threshold 12V
DI[24V;LP]: DIGITAL INPUT for 24Vdc – loop powered

HINT: The last IO type is automatically stored in FRAM and will be used after a system restart.

SET IO TYPx	ASCII WRITE COMMAND	#SIOTYP<IONR>:<IOTypx><CR> Result: #OK<CR>	ASCII	YES
	IONR	1		
	IOTypx	VO[0-10V]		
	TX	#1,SIOTYP1:VO[0-10V]<CR>		
	RX	#255,OK<CR>		
This command defines for the universal IO IONR a new type of IO: IOTypx stands for the new type: UU: Unused – high impedance VI[0-10V]: VOLTAGE INPUT for 0 to 10V Signals VI[2-10V]: VOLTAGE INPUT for 2 to 10V Signals VO[0-10V]: VOLTAGE OUTPUT for 0 to 10V Signals VO[2-10V]: VOLTAGE OUTPUT for 2 to 10V Signals] CI[0-20mA;LP]: CURRENT INPUT for 0 to 20mA Signals – loop powered CI[4-20mA;LP]: CURRENT INPUT for 4 to 20mA Signals – loop powered CI[0-20mA;EP]: CURRENT INPUT for 0 to 20mA Signals – external powered CI[4-20mA;EP]: CURRENT INPUT for 4 to 20mA Signals – external powered CO[0-20mA]: CURRENT OUTPUT for 0 to 20mA Signals CO[4-20mA]: CURRENT OUTPUT for 4 to 20mA Signals RTDI[OHM]: RTD SENSOR INPUT for Ohm measurement between 0 and 1MOhm DI[24V;L]: DIGITAL INPUT for 24Vdc – logic, threshold 12V DI[24V;LP]: DIGITAL INPUT for 24Vdc – loop powered HINT: The last IO type is automatically stored in FRAM and will be used after a system restart.				
GET IO TYPES	ASCII READ COMMAND	#GIOTYPS<CR> Result: #GIOTYPS:<IOTyp1Txt>,<IOTyp2Txt>,...,<IOTyp16Txt><CR>	ASCII	
	TX	#1,GIOTYPS<CR>		
	RX	#1,GIOTYPS:UU,UU,UU,UU,UU,UU,UU,UU,UU,UU,UU,UU,UU,UU,UU,UU<CR>		
		Actual type of IO1:UU		
		Actual type of IO2:UU		
		Actual type of IO3:UU		
		Actual type of IO4:UU		
		Actual type of IO5:UU		
		Actual type of IO6:UU		
		Actual type of IO7:UU		
		Actual type of IO8:UU		
		Actual type of IO9:UU		
		Actual type of IO10:UU		
		Actual type of IO11:UU		
		Actual type of IO12:UU		
		Actual type of IO13:UU		
		Actual type of IO14:UU		
		Actual type of IO15:UU		
		Actual type of IO16:UU		

This command shows for all 16 universal IOs the current selected type of IO:
IOTypx stands for the types:
UU: Unused – high impedance
VI[0-10V]: VOLTAGE INPUT for 0 to 10V Signals
VI[2-10V]: VOLTAGE INPUT for 2 to 10V Signals
VO[0-10V]: VOLTAGE OUTPUT for 0 to 10V Signals
VO[2-10V]: VOLTAGE OUTPUT for 2 to 10V Signals]
CI[0-20mA;LP]: CURRENT INPUT for 0 to 20mA Signals – loop powered
CI[4-20mA;LP]: CURRENT INPUT for 4 to 20mA Signals – loop powered
CI[0-20mA;EP]: CURRENT INPUT for 0 to 20mA Signals – external powered
CI[4-20mA;EP]: CURRENT INPUT for 4 to 20mA Signals – external powered
CO[0-20mA]: CURRENT OUTPUT for 0 to 20mA Signals
CO[4-20mA]: CURRENT OUTPUT for 4 to 20mA Signals
RTDI[OHM]: RTD SENSOR INPUT for Ohm measurement between 0 and 1MOhm
DI[24V;L]: DIGITAL INPUT for 24Vdc – logic, threshold 12V
DI[24V;LP]: DIGITAL INPUT for 24Vdc – loop powered

GET IO TYPx	ASCII READ COMMAND	#GIOTYP<IONR><CR> Result: #GIOTYP<IONR>:<IOTypxTxt><CR>	ASCII	
	IONR	1		
	TX	#1,GIOTYP1<CR>		
	RX	#1,GIOTYP1:UU<CR>		
		Actual type of IO1:UU		

This command shows for the universal IO IONR the current selected type:
IOTypx stands for the types:
UU: Unused – high impedance
VI[0-10V]: VOLTAGE INPUT for 0 to 10V Signals
VI[2-10V]: VOLTAGE INPUT for 2 to 10V Signals
VO[0-10V]: VOLTAGE OUTPUT for 0 to 10V Signals
VO[2-10V]: VOLTAGE OUTPUT for 2 to 10V Signals]
CI[0-20mA;LP]: CURRENT INPUT for 0 to 20mA Signals – loop powered
CI[4-20mA;LP]: CURRENT INPUT for 4 to 20mA Signals – loop powered
CI[0-20mA;EP]: CURRENT INPUT for 0 to 20mA Signals – external powered
CI[4-20mA;EP]: CURRENT INPUT for 4 to 20mA Signals – external powered
CO[0-20mA]: CURRENT OUTPUT for 0 to 20mA Signals
CO[4-20mA]: CURRENT OUTPUT for 4 to 20mA Signals
RTDI[OHM]: RTD SENSOR INPUT for Ohm measurement between 0 and 1MOhm
DI[24V;L]: DIGITAL INPUT for 24Vdc – logic, threshold 12V
DI[24V;LP]: DIGITAL INPUT for 24Vdc – loop powered

VOLTAGE INPUTS

GET VOLTAGE INPUTS IN VOLT	ASCII READ COMMAND	#GVISV<CR> Result: #GVISV:<IOVolt1Dbl>,<IOVolt2Dbl>,...,<IOVolt16Dbl><CR>	ASCII	
	TX	#1,GVISV<CR>		
	RX	#1,GVISV:999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99<CR>		
		Actual voltage on IO1:999.99V		
		Actual voltage on IO2:999.99V		
		Actual voltage on IO3:999.99V		

		Actual voltage on IO4:999.99V		
		Actual voltage on IO5:999.99V		
		Actual voltage on IO6:999.99V		
		Actual voltage on IO7:999.99V		
		Actual voltage on IO8:999.99V		
		Actual voltage on IO9:999.99V		
		Actual voltage on IO10:999.99V		
		Actual voltage on IO11:999.99V		
		Actual voltage on IO12:999.99V		
		Actual voltage on IO13:999.99V		
		Actual voltage on IO14:999.99V		
		Actual voltage on IO15:999.99V		
		Actual voltage on IO16:999.99V		
This command shows for all VOLTAGE INPUT IOs the current measurement in Volt. The measurement range is 0.0 to 10.00V. All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET VOLTAGE INPUT IN VOLT	ASCII READ COMMAND	#GVIV<IONR><CR> Result: #GVIV<IONR>:<IOxVoltDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GVIV1<CR>		
	RX	#1,GVIV1:999.99<CR>		
		Actual voltage on IO1:999.99V		
This command shows for the VOLTAGE INPUT IO <IONR> the current measurement in Volt. The measurement range is 0.0 to 10.00V. All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET VOLTAGE INPUTS IN PERCENT	ASCII READ COMMAND	#GVISP<CR> Result: #GVISP:<IOPercent1Dbl>,<IOPercent2Dbl>,...,<IOPercent16Dbl><CR>	ASCII	
	TX	#1,GVISP<CR>		
	RX	#1,GVISP:999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99<CR>		
		Actual percentage on IO1:999.99%		
		Actual percentage on IO2:999.99%		
		Actual percentage on IO3:999.99%		
		Actual percentage on IO4:999.99%		
		Actual percentage on IO5:999.99%		
		Actual percentage on IO6:999.99%		
		Actual percentage on IO7:999.99%		
		Actual percentage on IO8:999.99%		
		Actual percentage on IO9:999.99%		
		Actual percentage on IO10:999.99%		
		Actual percentage on IO11:999.99%		
		Actual percentage on IO12:999.99%		
		Actual percentage on IO13:999.99%		

		Actual percentage on IO14:999.99%		
		Actual percentage on IO15:999.99%		
		Actual percentage on IO16:999.99%		
This command shows for all VOLTAGE INPUT IOs the current measurement in Percent. The measurement range is 0.0V -> 0.0% to 10.00V -> 100.0%. All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET VOLTAGE INPUT IN PERCENT	ASCII READ COMMAND	#GVIP<IONR><CR> Result: #GVIP<IONR>:<IOxPercentDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GVIP1<CR>		
	RX	#1,GVIP1:999.99<CR>		
		Actual percentage on IO1:999.99%		
This command shows for VOLTAGE INPUT IO <IONR> the current measurement in Percent. The measurement range is 0.0V -> 0.0% to 10.00V -> 100.0%. All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
VOLTAGE DIGITAL INPUTS				
GET VOLTAGE DIGITAL INPUTS	ASCII READ COMMAND	#GVDIS<CR> Result: #GVDIS:<IODI1Dec>,<IODI2Decl>,...,<IODI16Dec><CR>	ASCII	
	TX	#1,GVDIS<CR>		
	RX	#1,GVDIS:X,X,X,X,X,X,X,X,X,X,X,X,X,X,X,X<CR>		
		Actual voltage digital input state on IO1:X		
		Actual voltage digital input state on IO2:X		
		Actual voltage digital input state on IO3:X		
		Actual voltage digital input state on IO4:X		
		Actual voltage digital input state on IO5:X		
		Actual voltage digital input state on IO6:X		
		Actual voltage digital input state on IO7:X		
		Actual voltage digital input state on IO8:X		
		Actual voltage digital input state on IO9:X		
		Actual voltage digital input state on IO10:X		
		Actual voltage digital input state on IO11:X		
		Actual voltage digital input state on IO12:X		
		Actual voltage digital input state on IO13:X		
		Actual voltage digital input state on IO14:X		
		Actual voltage digital input state on IO15:X		
		Actual voltage digital input state on IO16:X		
This command shows for all VOLTAGE DIGITAL INPUT IOs the current state. The digital input can have the values 0 and 1. All IOs with a different usage type will return X to indicate, that no measurement is done.				
GET VOLTAGE DIGITAL INPUT	ASCII READ COMMAND	#GVDI<IONR><CR> Result: #GVDI<IONR>:<IOxDIDec><CR>	ASCII	
	IONR	1		
	TX	#1,GVDI1<CR>		

	RX	#1,GVDI3:X<CR>		
		Actual voltage digital input state on IO1:X		
This command shows for VOLTAGE DIGITAL INPUT IO <IONR> the current state. The digital input can have the values 0 and 1. All IOs with a different usage type will return X to indicate, that no measurement is done.				
GET VOLTAGE DIGITAL INPUTS CURRENT	ASCII READ COMMAND	#GVDISC<CR> Result: #GVDISC:<IOmA1Dbl>,<IOmA2Dbl>,...,<IOmA16Dbl><CR>	ASCII	
	TX	#1,GVDISC<CR>		
	RX	#1,GVDISC:999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99<CR>		
		Actual input current on IO1:999.99mA		
		Actual input current on IO2:999.99mA		
		Actual input current on IO3:999.99mA		
		Actual input current on IO4:999.99mA		
		Actual input current on IO5:999.99mA		
		Actual input current on IO6:999.99mA		
		Actual input current on IO7:999.99mA		
		Actual input current on IO8:999.99mA		
		Actual input current on IO9:999.99mA		
		Actual input current on IO10:999.99mA		
		Actual input current on IO11:999.99mA		
		Actual input current on IO12:999.99mA		
		Actual input current on IO13:999.99mA		
		Actual input current on IO14:999.99mA		
		Actual input current on IO15:999.99mA		
		Actual input current on IO16:999.99mA		
This command shows for all VOLTAGE DIGITAL INPUT IOs the actual current in mA. The measurement range is 0.0mA to 35mA. All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET VOLTAGE DIGITAL INPUT CURRENT	ASCII READ COMMAND	#GVDIC<IONR><CR> Result: #GVDIC<IONR>:<IOxmADbl><CR>	ASCII	
	IONR	1		
	TX	#1,GVDIC1<CR>		
	RX	#1,GVDIC1:999.99<CR>		
		Actual input current on IO1:999.99mA		
This command shows for VOLTAGE DIGITAL INPUT IO <IONR> the actual current in mA. The measurement range is 0.0mA to 35mA. All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
VOLTAGE OUTPUTS				
SET VOLTAGE OUTPUTS IN VOLT	ASCII WRITE COMMAND	#SVOSV:<IO1VoltDbl>,<IO2VoltDbl>,<IO3VoltDbl>,<IO4VoltDbl>,<IO5VoltDbl>,<IO6VoltDbl>,<IO7VoltDbl>,<IO8VoltDbl>,<IO9VoltDbl>,<IO10VoltDbl>,<IO11VoltDbl>,<IO12VoltDbl>,<IO13VoltDbl>,<IO14VoltDbl>,<IO15VoltDbl>,<IO16VoltDbl><CR> Result: #OK<CR>	ASCII	YES

	IO1Volt	10,000		
	IO2Volt	7,500		
	IO3Volt	5,500		
	IO4Volt	2,500		
	IO5Volt	10,000		
	IO6Volt	7,500		
	IO7Volt	5,500		
	IO8Volt	2,500		
	IO9Volt	10,000		
	IO10Volt	7,500		
	IO11Volt	5,500		
	IO12Volt	2,500		
	IO13Volt	10,000		
	IO14Volt	7,500		
	IO15Volt	5,500		
	IO16Volt	2,500		
	TX	#1,SVOSV:10,7.5,5.5,2.5,10,7.5,5.5,2.5,10,7.5,5.5,2.5,10,7.5,5.5,2.5<CR>		
	RX	#255,OK<CR>		
This command sets for all VOLTAGE OUTPUT IOs the current output voltage in Volt. The range is 0.0 to 11.00V.				
SET VOLTAGE OUTPUTx IN VOLT	ASCII WRITE COMMAND	#SVOV<IONR>:<IOxVoltDbl><CR> Result: #OK<CR>	ASCII	NO
	IONR	1		
	IOxVolt	2,000		
	TX	#1,SVOV1:2<CR>		
	RX	N/A		
This command sets for VOLTAGE OUTPUT IO <IONR> the current output voltage in Volt. The range is 0.0 to 11.00V.				
SET VOLTAGE OUTPUTS IN PERCENT	ASCII WRITE COMMAND	#SVOSP:<IO1PercentDbl>,<IO2PercentDbl>,<IO3PercentDbl>,<IO4PercentDbl>,<IO5PercentDbl>,<IO6PercentDbl>,<IO7PercentDbl>,<IO8PercentDbl>,<IO9PercentDbl>,<IO10PercentDbl>,<IO11PercentDbl>,<IO12PercentDbl>,<IO13PercentDbl>,<IO14PercentDbl>,<IO15PercentDbl>,<IO16PercentDbl><CR> Result: #OK<CR>	ASCII	NO
	IO1Percent	110,000		
	IO2Percent	100,000		
	IO3Percent	75,000		
	IO4Percent	50,000		
	IO5Percent	110,000		
	IO6Percent	100,000		
	IO7Percent	75,000		
	IO8Percent	50,000		
	IO9Percent	110,000		

	IO10Percent	100,000		
	IO11Percent	75,000		
	IO12Percent	50,000		
	IO13Percent	110,000		
	IO14Percent	100,000		
	IO15Percent	75,000		
	IO16Percent	50,000		
	TX	#1,SVOSP:110,100,75,50,110,100,75,50,110,100,75,50,110,100,75,50<CR>		
	RX	N/A		
This command sets for all VOLTAGE OUTPUT IOs the current output voltage in Percent. The range is 0.0V -> 0.00% to 11.00V -> 110.00%.				
SET VOLTAGE OUTPUTx IN PERCENT	ASCII WRITE COMMAND	#SVOP<IONR>:<IOxPercentDbl><CR> Result: #OK<CR>	ASCII	NO
	IONR	1		
	IOxPercent	2,000		
	TX	#1,SVOP1:2<CR>		
	RX	N/A		
This command sets for VOLTAGE OUTPUT IO <IONR> the current output voltage in Percent. The range is 0.0V -> 0.00% to 11.00V -> 110.00%.				
GET VOLTAGE OUTPUTS IN VOLT	ASCII READ COMMAND	#GVOSV<CR> Result: #GVOSV:<IO1VoltDbl>,<IO2VoltDbl>,...,<IO16VoltDbl><CR>	ASCII	
	TX	#1,GVOSV<CR>		
	RX	#1,GVOSV:999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99<CR>		
		Actual voltage output on IO1:999.99V		
		Actual voltage output on IO2:999.99V		
		Actual voltage output on IO3:999.99V		
		Actual voltage output on IO4:999.99V		
		Actual voltage output on IO5:999.99V		
		Actual voltage output on IO6:999.99V		
		Actual voltage output on IO7:999.99V		
		Actual voltage output on IO8:999.99V		
		Actual voltage output on IO9:999.99V		
		Actual voltage output on IO10:999.99V		
		Actual voltage output on IO11:999.99V		
		Actual voltage output on IO12:999.99V		
		Actual voltage output on IO13:999.99V		
		Actual voltage output on IO14:999.99V		
		Actual voltage output on IO15:999.99V		
		Actual voltage output on IO16:999.99V		
This command shows for all VOLTAGE OUTPUT IOs the current output voltage in Volt. The range is 0.0V to 11.00V. All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				

GET VOLTAGE OUTPUT IN VOLT	ASCII READ COMMAND	#GVOV<IONR><CR> Result: #GVOV<IONR>:<IOxVoltDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GVOV1<CR>		
	RX	#1,GVOV3:999.99<CR>		
		Actual voltage output on IO1:999.99V		
This command shows for VOLTAGE OUTPUT IO <IONR> the current output voltage in Volt. The range is 0.0V to 11.00V. All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET VOLTAGE OUTPUTS IN PERCENT	ASCII READ COMMAND	#GVOSP<CR> Result: #GVOSP:<IO1PercentDbl>,<IO2PercentDbl>,...,<IO16PercentDbl><CR>	ASCII	
	TX	#1,GVOSP<CR>		
	RX	#1,GVOSP:999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99<CR>		
		Actual percentage voltage output on IO1:999.99%		
		Actual percentage voltage output on IO2:999.99%		
		Actual percentage voltage output on IO3:999.99%		
		Actual percentage voltage output on IO4:999.99%		
		Actual percentage voltage output on IO5:999.99%		
		Actual percentage voltage output on IO6:999.99%		
		Actual percentage voltage output on IO7:999.99%		
		Actual percentage voltage output on IO8:999.99%		
		Actual percentage voltage output on IO9:999.99%		
		Actual percentage voltage output on IO10:999.99%		
		Actual percentage voltage output on IO11:999.99%		
		Actual percentage voltage output on IO12:999.99%		
		Actual percentage voltage output on IO13:999.99%		
		Actual percentage voltage output on IO14:999.99%		
		Actual percentage voltage output on IO15:999.99%		
		Actual percentage voltage output on IO16:999.99%		
This command shows for all VOLTAGE OUTPUT IOs the current output voltage in Percent. The range is 0.0V -> 0.00% to 11.00V -> 110.00% (10.00V -> 100.00%). All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET VOLTAGE OUTPUT IN PERCENT	ASCII READ COMMAND	#GVOP<IONR><CR> Result: #GVOP<IONR>:<IOxPercentDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GVOP1<CR>		
	RX	#1,GVOP3:999.99<CR>		
		Actual percentage voltage output on IO1:999.99%		
This command shows for VOLTAGE OUTPUT IO <IONR> the current output voltage in Percent. The range is 0.0V -> 0.00% to 11.00V -> 110.00% (10.00V -> 100.00%). All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				

GET VOLTAGE OUTPUTS CURRENT	ASCII READ COMMAND	#GVOSC<CR> Result: #GVOSC:<IOmA1Dbl>,<IOmA2Dbl>,...,<IOmA16Dbl><CR>	ASCII	
	TX	#1,GVOSC<CR>		
	RX	#1,GVOSC:999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99<CR>		
		Actual output current on IO1:999.99mA		
		Actual output current on IO2:999.99mA		
		Actual output current on IO3:999.99mA		
		Actual output current on IO4:999.99mA		
		Actual output current on IO5:999.99mA		
		Actual output current on IO6:999.99mA		
		Actual output current on IO7:999.99mA		
		Actual output current on IO8:999.99mA		
		Actual output current on IO9:999.99mA		
		Actual output current on IO10:999.99mA		
		Actual output current on IO11:999.99mA		
		Actual output current on IO12:999.99mA		
		Actual output current on IO13:999.99mA		
		Actual output current on IO14:999.99mA		
		Actual output current on IO15:999.99mA		
		Actual output current on IO16:999.99mA		
This command shows for all VOLTAGE OUTPUT IOs the actual current in mA. The measurement range is 0.0mA to 35mA. All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET VOLTAGE OUTPUT CURRENT	ASCII READ COMMAND	#GVOC<IONR><CR> Result: #GVOC<IONR>:<IOxmADbl><CR>	ASCII	
	IONR	1		
	TX	#1,GVOC1<CR>		
	RX	#1,GVOC1:999.99<CR>		
		Actual output current on IO1:999.99mA		
This command shows for VOLTAGE OUTPUT IO <IONR> the actual current in mA. The measurement range is 0.0mA to 35mA. All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
CURRENT INPUTS				
GET CURRENT INPUTS IN mA	ASCII READ COMMAND	#GCISMA<CR> Result: #GCISMA:<IO1mADbl>,<IO2mADbl>,...,<IO16mADbl><CR>	ASCII	
	TX	#1,GCISMA<CR>		
	RX	#1,GCISMA:999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99<CR>		
		Actual current input on IO1:999.99mA		
		Actual current input on IO2:999.99mA		
		Actual current input on IO3:999.99mA		
		Actual current input on IO4:999.99mA		

		Actual current input on IO5:999.99mA		
		Actual current input on IO6:999.99mA		
		Actual current input on IO7:999.99mA		
		Actual current input on IO8:999.99mA		
		Actual current input on IO9:999.99mA		
		Actual current input on IO10:999.99mA		
		Actual current input on IO11:999.99mA		
		Actual current input on IO12:999.99mA		
		Actual current input on IO13:999.99mA		
		Actual current input on IO14:999.99mA		
		Actual current input on IO15:999.99mA		
		Actual current input on IO16:999.99mA		
This command shows for all CURRENT INPUT IOs the current measured input current in mA. The range is 0.00 to 25.00mA All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET CURRENT INPUT IN mA	ASCII READ COMMAND	#GCIMA<IONR><CR> Result: #GCIMA<IONR>:<IOxmADbl><CR>	ASCII	
	IONR	1		
	TX	#1,GCIMA1<CR>		
	RX	#1,GCIMA3:999.99<CR>		
		Actual current input on IO1:999.99mA		
This command shows for CURRENT INPUT IO <IONR> the current measured input current in mA. The range is 0.00 to 25.00mA All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET CURRENT INPUTS IN PERCENT	ASCII READ COMMAND	#GCISP<CR> Result: #GCISP:<IO1PercentDbl>,<IO2PercentDbl>,...,<IO16PercentDbl><CR>	ASCII	
	TX	#1,GCISP<CR>		
	RX	#1,GCISP:999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99<CR>		
		Actual percentage for current input on IO1:999.99%		
		Actual percentage for current input on IO2:999.99%		
		Actual percentage for current input on IO3:999.99%		
		Actual percentage for current input on IO4:999.99%		
		Actual percentage for current input on IO5:999.99%		
		Actual percentage for current input on IO6:999.99%		
		Actual percentage for current input on IO7:999.99%		
		Actual percentage for current input on IO8:999.99%		
		Actual percentage for current input on IO9:999.99%		
		Actual percentage for current input on IO10:999.99%		
		Actual percentage for current input on IO11:999.99%		
		Actual percentage for current input on IO12:999.99%		
		Actual percentage for current input on IO13:999.99%		
		Actual percentage for current input on IO14:999.99%		

		Actual percentage for current input on IO15:999.99%		
		Actual percentage for current input on IO16:999.99%		
This command shows for all CURRENT INPUT IOs the current measured input current in Percent. The range is 0.00mA -> 0.00% to 25.00mA -> 125.00% (20mA=100%) All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET CURRENT INPUT IN PERCENT	ASCII READ COMMAND	#GCIP<IONR><CR> Result: #GCIP<IONR>:<IOxPercentDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GCIP1<CR>		
	RX	#1,GCIP3:999.99<CR>		
		Actual percentage for current input on IO1:999.99%		
This command shows for CURRENT INPUT IO <IONR> the current measured input current in Percent. The range is 0.00mA -> 0.00% to 25.00mA -> 125.00% (20mA=100%) All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
CURRENT OUTPUTS				
SET CURRENT OUTPUTS IN mA	ASCII WRITE COMMAND	#SCOSMA:<IO1mADbl>,<IO2mADbl>,<IO3mADbl>,<IO4mADbl>,<IO5mADbl>,<IO6mADbl>,<IO7mADbl>,<IO8mADbl>,<IO9mADbl>,<IO10mADbl>,<IO11mADbl>,<IO12mADbl>,<IO13mADbl>,<IO14mADbl>,<IO15mADbl>,<IO16mADbl><CR> Result: #OK<CR>	ASCII	NO
	IO1mA	2,000		
	IO2mA	4,000		
	IO3mA	6,000		
	IO4mA	25,000		
	IO5mA	,000		
	IO6mA	,000		
	IO7mA	,000		
	IO8mA	,000		
	IO9mA	,000		
	IO10mA	,000		
	IO11mA	,000		
	IO12mA	,000		
	IO13mA	,000		
	IO14mA	,000		
	IO15mA	,000		
	IO16mA	,000		
	TX	#1,SCOSMA:2,4,6,25,0,0,0,0,0,0,0,0,0,0,0,0<CR>		
	RX	N/A		
This command sets for all CURRENT OUTPUT IOs the actual output current in mA. The range is 0.00mA to 25.00mA				
SET CURRENT OUTPUTx IN mA	ASCII WRITE COMMAND	#SCOMA<IONR>:<IOxmADbl><CR> Result: #OK<CR>	ASCII	NO
	IONR	1		
	IOxVolt	2,000		

	TX	#1,SCOMA1:<IOxmADbl><CR>		
	RX	N/A		
This command sets for CURRENT OUTPUT <IONR> IOs the actual output current in mA. The range is 0.00mA to 25.00mA				
SET CURRENT OUTPUTS IN PERCENT	ASCII WRITE COMMAND	#SCOSP:<IO1PercentDbl>,<IO2PercentDbl>,<IO3PercentDbl>,<IO4PercentDbl>,<IO5PercentDbl>,<IO6PercentDbl>,<IO7PercentDbl>,<IO8PercentDbl>,<IO9PercentDbl>,<IO10PercentDbl>,<IO11PercentDbl>,<IO12PercentDbl>,<IO13PercentDbl>,<IO14PercentDbl>,<IO15PercentDbl>,<IO16PercentDbl><CR> Result: #OK<CR>	ASCII	NO
	IO1Percent	125,000		
	IO2Percent	100,000		
	IO3Percent	75,000		
	IO4Percent	50,000		
	IO5Percent	,000		
	IO6Percent	,000		
	IO7Percent	,000		
	IO8Percent	,000		
	IO9Percent	,000		
	IO10Percent	,000		
	IO11Percent	,000		
	IO12Percent	,000		
	IO13Percent	,000		
	IO14Percent	,000		
	IO15Percent	,000		
	IO16Percent	,000		
	TX	#1,SCOSP:125,100,75,50,0,0,0,0,0,0,0,0,0,0,0,0<CR>		
	RX	N/A		
This command sets for all CURRENT OUTPUT IOs the new output current in Percent. The range is 0.00mA -> 0.00% to 25.00mA -> 125.00% (20mA -> 100.00%)				
SET CURRENT OUTPUTx IN PERCENT	ASCII WRITE COMMAND	#SCOP<IONR>:<IOxPercentDbl><CR> Result: #OK<CR>	ASCII	NO
	IONR	1		
	IOxPercent	,000		
	TX	#1,SCOP1:0<CR>		
	RX	N/A		
This command sets for CURRENT OUTPUT IO <IONR> the new output current in Percent. The range is 0.00mA -> 0.00% to 25.00mA -> 125.00% (20mA -> 100.00%)				
GET CURRENT OUTPUTS IN mA	ASCII READ COMMAND	#GCOSMA<CR> Result: #GCOSMA:<IO1mADbl>,<IO2mADbl>,...,<IO16mADbl><CR>	ASCII	
	TX	#1,GCOSMA<CR>		
	RX	#1,GCOSMA:999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99<CR>		
		Actual value of current output on IO1:999.99mA		

		Actual value of current output on IO2:999.99mA		
		Actual value of current output on IO3:999.99mA		
		Actual value of current output on IO4:999.99mA		
		Actual value of current output on IO5:999.99mA		
		Actual value of current output on IO6:999.99mA		
		Actual value of current output on IO7:999.99mA		
		Actual value of current output on IO8:999.99mA		
		Actual value of current output on IO9:999.99mA		
		Actual value of current output on IO10:999.99mA		
		Actual value of current output on IO11:999.99mA		
		Actual value of current output on IO12:999.99mA		
		Actual value of current output on IO13:999.99mA		
		Actual value of current output on IO14:999.99mA		
		Actual value of current output on IO15:999.99mA		
		Actual value of current output on IO16:999.99mA		
This command shows for all CURRENT OUTPUT IOs the actual output current in mA. The range is 0.00mA to 25.00mA All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET CURRENT OUTPUT IN mA	ASCII READ COMMAND	#GCOMA<IONR><CR> Result: #GCOMA<IONR>:<IOxmADbl><CR>	ASCII	
	IONR	1		
	TX	#1,GCOMA1<CR>		
	RX	#1,GCOMA3:999.99<CR>		
		Actual value of current output on IO1:999.99mA		
This command shows for CURRENT OUTPUT IO <IONR> the actual output current in mA. The range is 0.00mA to 25.00mA All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET CURRENT OUTPUTS IN PERCENT	ASCII READ COMMAND	#GCOSP<CR> Result: #GCOSP:<IO1PercentDbl>,<IO2PercentDbl>,...,<IO16PercentDbl><CR>	ASCII	
	TX	#1,GCOSP<CR>		
	RX	#1,GCOSP:999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99<CR>		
		Actual percentage of current output on IO1:999.99%		
		Actual percentage of current output on IO2:999.99%		
		Actual percentage of current output on IO3:999.99%		
		Actual percentage of current output on IO4:999.99%		
		Actual percentage of current output on IO5:999.99%		
		Actual percentage of current output on IO6:999.99%		
		Actual percentage of current output on IO7:999.99%		
		Actual percentage of current output on IO8:999.99%		
		Actual percentage of current output on IO9:999.99%		
		Actual percentage of current output on IO10:999.99%		
		Actual percentage of current output on IO11:999.99%		

		Actual percentage of current output on IO12:999.99%		
		Actual percentage of current output on IO13:999.99%		
		Actual percentage of current output on IO14:999.99%		
		Actual percentage of current output on IO15:999.99%		
		Actual percentage of current output on IO16:999.99%		
This command shows for all CURRENT OUTPUT IOs the actual output current in Percent. The range is 0.00mA -> 0.00% to 25.00mA -> 125.00% (20mA -> 100.00%) All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET CURRENT OUTPUT IN PERCENT	ASCII READ COMMAND	#GCOP<IONR><CR> Result: #GCOP<IONR>:<IOxPercentDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GCOP1<CR>		
	RX	#1,GCOP3:999.99<CR>		
		Actual percentage of current output on IO1:999.99%		
This command shows for CURRENT OUTPUT IO <IONR> the actual output current in Percent. The range is 0.00mA -> 0.00% to 25.00mA -> 125.00% (20mA -> 100.00%) All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET CURRENT OUTPUTS VOLTAGE	ASCII READ COMMAND	#GCOSV<CR> Result: #GCOSV:<IO1VoltsDbl>,<IO2VoltsDbl>,...,<IO16VoltsDbl><CR>	ASCII	
	TX	#1,GCOSV<CR>		
	RX	#1,GCOSV:999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99<CR>		
		Measured voltage of current output on IO1:999.99V		
		Measured voltage of current output on IO2:999.99V		
		Measured voltage of current output on IO3:999.99V		
		Measured voltage of current output on IO4:999.99V		
		Measured voltage of current output on IO5:999.99V		
		Measured voltage of current output on IO6:999.99V		
		Measured voltage of current output on IO7:999.99V		
		Measured voltage of current output on IO8:999.99V		
		Measured voltage of current output on IO9:999.99V		
		Measured voltage of current output on IO10:999.99V		
		Measured voltage of current output on IO11:999.99V		
		Measured voltage of current output on IO12:999.99V		
		Measured voltage of current output on IO13:999.99V		
		Measured voltage of current output on IO14:999.99V		
		Measured voltage of current output on IO15:999.99V		
		Measured voltage of current output on IO16:999.99V		
This command shows for all CURRENT OUTPUT IOs the actual output voltage in Volt. The range is 0-10V All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
GET CURRENT OUTPUT VOLTAGE	ASCII READ COMMAND	#GCOV<IONR><CR> Result: #GCOV<IONR>:<IOxVoltDbl><CR>	ASCII	

	IONR	1		
	TX	#1,GCOV1<CR>		
	RX	#1,GCOV3:999.99<CR>		
		Measured voltage of current output on IO1:999.99V		
This command shows for CURRENT OUTPUT IO <IONR> the actual output voltage in Volt. The range is 0-10V All IOs with a different usage type will return 999.99 to indicate, that no measurement is done.				
RTD INPUTS OHM				
GET RTD INPUTS IN OHM	ASCII READ COMMAND	#GRTDISOHM<CR> Result: #GRTDISOHM:<IO1OhmDbl>,<IO2OhmDbl>,...,<IO16OhmDbl><CR>	ASCII	
	TX	#1,GRTDISOHM<CR>		
	RX	#1,GRTDISOHM:99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999<CR>		
		Actual measured RTD input on IO1:99999999.999Ohm		
		Actual measured RTD input on IO2:99999999.999Ohm		
		Actual measured RTD input on IO3:99999999.999Ohm		
		Actual measured RTD input on IO4:99999999.999Ohm		
		Actual measured RTD input on IO5:99999999.999Ohm		
		Actual measured RTD input on IO6:99999999.999Ohm		
		Actual measured RTD input on IO7:99999999.999Ohm		
		Actual measured RTD input on IO8:99999999.999Ohm		
		Actual measured RTD input on IO9:99999999.999Ohm		
		Actual measured RTD input on IO10:99999999.999Ohm		
		Actual measured RTD input on IO11:99999999.999Ohm		
		Actual measured RTD input on IO12:99999999.999Ohm		
		Actual measured RTD input on IO13:99999999.999Ohm		
		Actual measured RTD input on IO14:99999999.999Ohm		
		Actual measured RTD input on IO15:99999999.999Ohm		
		Actual measured RTD input on IO16:99999999.999Ohm		
This command shows for RTD INPUT IOs the actual measured RTD value in Ohm. The range is 0.000Ohm to 1000000.00Ohm All IOs with a different usage type will return 99999999.999 to indicate, that no measurement is done.				
GET RTD INPUT IN OHM	ASCII READ COMMAND	#GRTDIOHM<IONR><CR> Result: #GRTDIOHM<IONR>:<IOxOhmDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GRTDIOHM1<CR>		
	RX	#1,GRTDIOHM3:99999999.999<CR>		
		Actual measured RTD input on IO1:99999999.999Ohm		
This command shows for RTD INPUT IO <IONR> the actual measured RTD value in Ohm. The range is 0.000Ohm to 1000000.00Ohm All IOs with a different usage type will return 99999999.999 to indicate, that no measurement is done.				

GET AVERAGE RTD INPUTS IN OHM	ASCII READ COMMAND	#GAVGRTDISOHM<CR> Result: #GAVGRTDISOHM:<IO1OhmDbl>,<IO2OhmDbl>,...,<IO16OhmDbl><CR>	ASCII	
	TX	#1,GAVGRTDISOHM<CR>		
	RX	#1,GAVGRTDISOHM:99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999,99999999.999<CR>		
		Average measured RTD input on IO1:99999999.999Ohm		
		Average measured RTD input on IO2:99999999.999Ohm		
		Average measured RTD input on IO3:99999999.999Ohm		
		Average measured RTD input on IO4:99999999.999Ohm		
		Average measured RTD input on IO5:99999999.999Ohm		
		Average measured RTD input on IO6:99999999.999Ohm		
		Average measured RTD input on IO7:99999999.999Ohm		
		Average measured RTD input on IO8:99999999.999Ohm		
		Average measured RTD input on IO9:99999999.999Ohm		
		Average measured RTD input on IO10:99999999.999Ohm		
		Average measured RTD input on IO11:99999999.999Ohm		
		Average measured RTD input on IO12:99999999.999Ohm		
		Average measured RTD input on IO13:99999999.999Ohm		
		Average measured RTD input on IO14:99999999.999Ohm		
		Average measured RTD input on IO15:99999999.999Ohm		
		Average measured RTD input on IO16:99999999.999Ohm		
This command shows for RTD INPUT IOs the average measured RTD value in Ohm. The range is 0.000Ohm to 1000000.00Ohm All IOs with a different usage type will return 99999999.999 to indicate, that no measurement is done.				
GET AVG RTD INPUT IN OHM	ASCII READ COMMAND	#GAVGRTDIOHM<IONR><CR> Result: #GAVGRTDIOHM<IONR>:<IOxOhmDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GAVGRTDIOHM1<CR>		
	RX	#1,GAVGRTDIOHM3:99999999.999<CR>		
		Average measured RTD input on IO1:99999999.999Ohm		
This command shows for RTD INPUT IO <IONR> the average measured RTD value in Ohm. The range is 0.000Ohm to 1000000.00Ohm All IOs with a different usage type will return 99999999.999 to indicate, that no measurement is done.				
RTD INPUTS PT100 CELSIUS				
GET RTD INPUTS AS PT100 CELSIUS	ASCII READ COMMAND	#GRTDISPT100C<CR> Result: #GRTDISPT100C:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GRTDISPT100C<CR>		
	RX	#1,GRTDISPT100C:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Actual measured RTD input as PT100 on IO1:9999.990°C		
		Actual measured RTD input as PT100 on IO2:9999.990°C		

		Actual measured RTD input as PT100 on IO3:9999.990°C		
		Actual measured RTD input as PT100 on IO4:9999.990°C		
		Actual measured RTD input as PT100 on IO5:9999.990°C		
		Actual measured RTD input as PT100 on IO6:9999.990°C		
		Actual measured RTD input as PT100 on IO7:9999.990°C		
		Actual measured RTD input as PT100 on IO8:9999.990°C		
		Actual measured RTD input as PT100 on IO9:9999.990°C		
		Actual measured RTD input as PT100 on IO10:9999.990°C		
		Actual measured RTD input as PT100 on IO11:9999.990°C		
		Actual measured RTD input as PT100 on IO12:9999.990°C		
		Actual measured RTD input as PT100 on IO13:9999.990°C		
		Actual measured RTD input as PT100 on IO14:9999.990°C		
		Actual measured RTD input as PT100 on IO15:9999.990°C		
		Actual measured RTD input as PT100 on IO16:9999.990°C		
This command shows for RTD INPUT IOs the actual measured RTD value linearized as PT100 sensor in °Celisus. -999.990: Temperature is lower than 50°C +999.990: Temperature is higher than 130°C All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET RTD INPUT AS PT100 CELSIUS	ASCII READ COMMAND	#GRTDIPT100C<IONR><CR> Result: #GRTDIPT100C<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GRTDIPT100C1<CR>		
	RX	#1,GRTDIPT100C3:9999.990<CR>		
		Actual measured RTD input as PT100 on IO1:9999.990°C		
This command shows for RTD INPUT IO <IONR> the actual measured RTD value linearized as PT100 sensor in °Celisus -999.990: Temperature is lower than 50°C +999.990: Temperature is higher than 130°C All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVERAGE RTD INPUTS AS PT100 CELSIUS	ASCII READ COMMAND	#GAVGRTDISPT100C<CR> Result: #GAVGRTDISPT100C:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GAVGRTDISPT100C<CR>		
	RX	#1,GAVGRTDISPT100C:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Average measured RTD input as PT100 on IO1:9999.990°C		
		Average measured RTD input as PT100 on IO2:9999.990°C		
		Average measured RTD input as PT100 on IO3:9999.990°C		
		Average measured RTD input as PT100 on IO4:9999.990°C		
		Average measured RTD input as PT100 on IO5:9999.990°C		
		Average measured RTD input as PT100 on IO6:9999.990°C		
		Average measured RTD input as PT100 on IO7:9999.990°C		
		Average measured RTD input as PT100 on IO8:9999.990°C		
		Average measured RTD input as PT100 on IO9:9999.990°C		
		Average measured RTD input as PT100 on IO10:9999.990°C		
		Average measured RTD input as PT100 on IO11:9999.990°C		

		Average measured RTD input as PT100 on IO12:9999.990°C		
		Average measured RTD input as PT100 on IO13:9999.990°C		
		Average measured RTD input as PT100 on IO14:9999.990°C		
		Average measured RTD input as PT100 on IO15:9999.990°C		
		Average measured RTD input as PT100 on IO16:9999.990°C		
This command shows for RTD INPUT IOs the average measured RTD value linearized as PT100 sensor in °Celisus. -999.990: Temperature is lower than 50°C +999.990: Temperature is higher than 130°C All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVG RTD INPUT AS PT100 CELSIUS	ASCII READ COMMAND	#GAVGRTDIPT100C<IONR><CR> Result: #GAVGRTDIPT100C<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GAVGRTDIPT100C1<CR>		
	RX	#1,GAVGRTDIPT100C16:9999.990<CR>		
		Average measured RTD input as PT100 on IO1:9999.990°C		
This command shows for RTD INPUT IO <IONR> the average measured RTD value linearized as PT100 sensor in °Celisus -999.990: Temperature is lower than 50°C +999.990: Temperature is higher than 130°C All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
RTD INPUTS PT1000 CELSIUS				
GET RTD INPUTS AS PT1000 CELSIUS	ASCII READ COMMAND	#GRTDISPT1000C<CR> Result: #GRTDISPT1000C:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GRTDISPT1000C<CR>		
	RX	#1,GRTDISPT1000C:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Actual measured RTD input as PT1000 on IO1:9999.990°C		
		Actual measured RTD input as PT1000 on IO2:9999.990°C		
		Actual measured RTD input as PT1000 on IO3:9999.990°C		
		Actual measured RTD input as PT1000 on IO4:9999.990°C		
		Actual measured RTD input as PT1000 on IO5:9999.990°C		
		Actual measured RTD input as PT1000 on IO6:9999.990°C		
		Actual measured RTD input as PT1000 on IO7:9999.990°C		
		Actual measured RTD input as PT1000 on IO8:9999.990°C		
		Actual measured RTD input as PT1000 on IO9:9999.990°C		
		Actual measured RTD input as PT1000 on IO10:9999.990°C		
		Actual measured RTD input as PT1000 on IO11:9999.990°C		
		Actual measured RTD input as PT1000 on IO12:9999.990°C		
		Actual measured RTD input as PT1000 on IO13:9999.990°C		
		Actual measured RTD input as PT1000 on IO14:9999.990°C		
		Actual measured RTD input as PT1000 on IO15:9999.990°C		
		Actual measured RTD input as PT1000 on IO16:9999.990°C		

This command shows for RTD INPUT IOs the actual measured RTD value linearized as PT100 sensor in °Celisus. -999.990: Temperature is lower than 50°C +999.990: Temperature is higher than 130°C All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET RTD INPUT AS PT1000 CELSIUS	ASCII READ COMMAND	#GRTDIPT1000C<IONR><CR> Result: #GRTDIPT1000C<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GRTDIPT1000C1<CR>		
	RX	#1,GRTDIPT1000C3:9999.990<CR>		
		Actual measured RTD input as PT1000 on IO1:9999.990°C		
This command shows for RTD INPUT IO <IONR> the actual measured RTD value linearized as PT100 sensor in °Celisus -999.990: Temperature is lower than 50°C +999.990: Temperature is higher than 130°C All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVERAGE RTD INPUTS AS PT1000 CELSIUS	ASCII READ COMMAND	#GAVGRTDISPT1000C<CR> Result: #GAVGRTDISPT1000C:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GAVGRTDISPT1000C<CR>		
	RX	#1,GAVGRTDISPT1000C:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Average measured RTD input as PT1000 on IO1:9999.990°C		
		Average measured RTD input as PT1000 on IO2:9999.990°C		
		Average measured RTD input as PT1000 on IO3:9999.990°C		
		Average measured RTD input as PT1000 on IO4:9999.990°C		
		Average measured RTD input as PT1000 on IO5:9999.990°C		
		Average measured RTD input as PT1000 on IO6:9999.990°C		
		Average measured RTD input as PT1000 on IO7:9999.990°C		
		Average measured RTD input as PT1000 on IO8:9999.990°C		
		Average measured RTD input as PT1000 on IO9:9999.990°C		
		Average measured RTD input as PT1000 on IO10:9999.990°C		
		Average measured RTD input as PT1000 on IO11:9999.990°C		
		Average measured RTD input as PT1000 on IO12:9999.990°C		
		Average measured RTD input as PT1000 on IO13:9999.990°C		
		Average measured RTD input as PT1000 on IO14:9999.990°C		
		Average measured RTD input as PT1000 on IO15:9999.990°C		
		Average measured RTD input as PT1000 on IO16:9999.990°C		
This command shows for RTD INPUT IOs the average measured RTD value linearized as PT100 sensor in °Celisus. -999.990: Temperature is lower than 50°C +999.990: Temperature is higher than 130°C All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVG RTD INPUT AS PT1000 CELSIUS	ASCII READ COMMAND	#GAVGRTDIPT1000C<IONR><CR> Result: #GAVGRTDIPT1000C<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GAVGRTDIPT1000C1<CR>		
	RX	#1,GAVGRTDIPT1000C16:9999.990<CR>		

		Average measured RTD input as PT1000 on IO1:9999.990°C		
This command shows for RTD INPUT IO <IONR> the average measured RTD value linearized as PT100 sensor in °Celisus -999.990: Temperature is lower than 50°C +999.990: Temperature is higher than 130°C All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
RTD INPUTS NI1000-DIN43760 CELSIUS				
GET RTD INPUTS AS NI1000 DIN43760 CELSIUS	ASCII READ COMMAND	#GRTDISNI1000DIN43760C<CR> Result: #GRTDISNI1000DIN43760C:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GRTDISNI1000DIN43760C<CR>		
	RX	#1,GRTDISNI1000DIN43760C:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Actual measured RTD input as NI1000-DIN43760 on IO1:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO2:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO3:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO4:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO5:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO6:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO7:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO8:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO9:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO10:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO11:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO12:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO13:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO14:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO15:9999.990°C		
		Actual measured RTD input as NI1000-DIN43760 on IO16:9999.990°C		
This command shows for RTD INPUT IOs the actual measured RTD value linearized as PT100 sensor in °Celisus. -999.990: Temperature is lower than 50°C +999.990: Temperature is higher than 130°C All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET RTD INPUT AS NI1000 DIN43760 CELSIUS	ASCII READ COMMAND	#GRTDINI1000DIN43760C<IONR><CR> Result: #GRTDINI1000DIN43760C<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GRTDINI1000DIN43760C1<CR>		
	RX	#1,GRTDINI1000DIN43760C3:9999.990<CR>		
		Actual measured RTD input as NI1000-DIN43760 on IO1:9999.990°C		
This command shows for RTD INPUT IO <IONR> the actual measured RTD value linearized as PT100 sensor in °Celisus -999.990: Temperature is lower than 50°C +999.990: Temperature is higher than 130°C All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVERAGE RTD INPUTS AS NI1000 DIN43760 CELSIUS	ASCII READ COMMAND	#GAVGRTDISNI1000DIN43760C<CR> Result: #GAVGRTDISNI1000DIN43760C:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	

	TX	#1,GAVGRTDISNI1000DIN43760C<CR>		
	RX	#1,GAVGRTDISNI1000DIN43760C:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Average measured RTD input as NI1000-DIN43760 on IO1:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO2:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO3:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO4:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO5:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO6:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO7:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO8:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO9:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO10:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO11:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO12:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO13:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO14:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO15:9999.990°C		
		Average measured RTD input as NI1000-DIN43760 on IO16:9999.990°C		
This command shows for RTD INPUT IOs the average measured RTD value linearized as PT100 sensor in °Celisus. -999.990: Temperature is lower than 50°C +999.990: Temperature is higher than 130°C All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVG RTD INPUT AS NI1000 DIN43760 CELSIUS	ASCII READ COMMAND	#GAVGRTDINI1000DIN43760C<IONR><CR> Result: #GAVGRTDINI1000DIN43760C<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GAVGRTDINI1000DIN43760C1<CR>		
	RX	#1,GAVGRTDINI1000DIN43760C16:9999.990<CR>		
		Average measured RTD input as NI1000-DIN43760 on IO1:9999.990°C		
This command shows for RTD INPUT IO <IONR> the average measured RTD value linearized as PT100 sensor in °Celisus -999.990: Temperature is lower than 50°C +999.990: Temperature is higher than 130°C All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
RTD INPUTS PT100 KELVIN				
GET RTD INPUTS AS PT100 KELVIN	ASCII READ COMMAND	#GRTDISPT100K<CR> Result: #GRTDISPT100K:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GRTDISPT100K<CR>		
	RX	#1,GRTDISPT100K:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Actual measured RTD input as PT100 on IO1:9999.990°K		
		Actual measured RTD input as PT100 on IO2:9999.990°K		
		Actual measured RTD input as PT100 on IO3:9999.990°K		
		Actual measured RTD input as PT100 on IO4:9999.990°K		

		Actual measured RTD input as PT100 on IO5:9999.990°K		
		Actual measured RTD input as PT100 on IO6:9999.990°K		
		Actual measured RTD input as PT100 on IO7:9999.990°K		
		Actual measured RTD input as PT100 on IO8:9999.990°K		
		Actual measured RTD input as PT100 on IO9:9999.990°K		
		Actual measured RTD input as PT100 on IO10:9999.990°K		
		Actual measured RTD input as PT100 on IO11:9999.990°K		
		Actual measured RTD input as PT100 on IO12:9999.990°K		
		Actual measured RTD input as PT100 on IO13:9999.990°K		
		Actual measured RTD input as PT100 on IO14:9999.990°K		
		Actual measured RTD input as PT100 on IO15:9999.990°K		
		Actual measured RTD input as PT100 on IO16:9999.990°K		
This command shows for RTD INPUT IOs the actual measured RTD value linearized as PT100 sensor in °Kelvin -999.990: Temperature is lower than 223.15°K +999.990: Temperature is higher than 403.15°K All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET RTD INPUT AS PT100 KELVIN	ASCII READ COMMAND	#GRTDIPT100K<IONR><CR> Result: #GRTDIPT100K<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GRTDIPT100K1<CR>		
	RX	#1,GRTDIPT100K3:9999.990<CR>		
		Actual measured RTD input as PT100 on IO1:9999.990°K		
This command shows for RTD INPUT IO <IONR> the actual measured RTD value linearized as PT100 sensor in °Kelvin -999.990: Temperature is lower than 223.15°K +999.990: Temperature is higher than 403.15°K All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVERAGE RTD INPUTS AS PT100 KELVIN	ASCII READ COMMAND	#GAVGRTDISPT100K<CR> Result: #GAVGRTDISPT100K:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GAVGRTDISPT100K<CR>		
	RX	#1,GAVGRTDISPT100K:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Average measured RTD input as PT100 on IO1:9999.990°K		
		Average measured RTD input as PT100 on IO2:9999.990°K		
		Average measured RTD input as PT100 on IO3:9999.990°K		
		Average measured RTD input as PT100 on IO4:9999.990°K		
		Average measured RTD input as PT100 on IO5:9999.990°K		
		Average measured RTD input as PT100 on IO6:9999.990°K		
		Average measured RTD input as PT100 on IO7:9999.990°K		
		Average measured RTD input as PT100 on IO8:9999.990°K		
		Average measured RTD input as PT100 on IO9:9999.990°K		
		Average measured RTD input as PT100 on IO10:9999.990°K		
		Average measured RTD input as PT100 on IO11:9999.990°K		
		Average measured RTD input as PT100 on IO12:9999.990°K		
		Average measured RTD input as PT100 on IO13:9999.990°K		

		Average measured RTD input as PT100 on IO14:9999.990°K		
		Average measured RTD input as PT100 on IO15:9999.990°K		
		Average measured RTD input as PT100 on IO16:9999.990°K		
This command shows for RTD INPUT IOs the average measured RTD value linearized as PT100 sensor in °Kelvin -999.990: Temperature is lower than 223.15°K +999.990: Temperature is higher than 403.15°K All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVG RTD INPUT AS PT100 KELVIN	ASCII READ COMMAND	#GAVGRTDIPT100K<IONR><CR> Result: #GAVGRTDIPT100K<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GAVGRTDIPT100K1<CR>		
	RX	#1,GAVGRTDIPT100K16:9999.990<CR>		
		Average measured RTD input as PT100 on IO1:9999.990°K		
This command shows for RTD INPUT IO <IONR> the average measured RTD value linearized as PT100 sensor in °Kelvin -999.990: Temperature is lower than 223.15°K +999.990: Temperature is higher than 403.15°K All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
RTD INPUTS PT1000 KELVIN				
GET RTD INPUTS AS PT1000 KELVIN	ASCII READ COMMAND	#GRTDISPT1000K<CR> Result: #GRTDISPT1000K:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GRTDISPT1000K<CR>		
	RX	#1,GRTDISPT1000K:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Actual measured RTD input as PT1000 on IO1:9999.990°K		
		Actual measured RTD input as PT1000 on IO2:9999.990°K		
		Actual measured RTD input as PT1000 on IO3:9999.990°K		
		Actual measured RTD input as PT1000 on IO4:9999.990°K		
		Actual measured RTD input as PT1000 on IO5:9999.990°K		
		Actual measured RTD input as PT1000 on IO6:9999.990°K		
		Actual measured RTD input as PT1000 on IO7:9999.990°K		
		Actual measured RTD input as PT1000 on IO8:9999.990°K		
		Actual measured RTD input as PT1000 on IO9:9999.990°K		
		Actual measured RTD input as PT1000 on IO10:9999.990°K		
		Actual measured RTD input as PT1000 on IO11:9999.990°K		
		Actual measured RTD input as PT1000 on IO12:9999.990°K		
		Actual measured RTD input as PT1000 on IO13:9999.990°K		
		Actual measured RTD input as PT1000 on IO14:9999.990°K		
		Actual measured RTD input as PT1000 on IO15:9999.990°K		
		Actual measured RTD input as PT1000 on IO16:9999.990°K		
This command shows for RTD INPUT IOs the actual measured RTD value linearized as PT1000 sensor in °Kelvin -999.990: Temperature is lower than 223.15°K +999.990: Temperature is higher than 403.15°K All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				

GET RTD INPUT AS PT1000 KELVIN	ASCII READ COMMAND	#GRTDIPT1000K<IONR><CR> Result: #GRTDIPT1000K<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GRTDIPT1000K1<CR>		
	RX	#1,GRTDIPT1000K3:9999.990<CR>		
		Actual measured RTD input as PT1000 on IO1:9999.990°K		
This command shows for RTD INPUT IO <IONR> the actual measured RTD value linearized as PT1000 sensor in °Kelvin -999.990: Temperature is lower than 223.15°K +999.990: Temperature is higher than 403.15°K All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVERAGE RTD INPUTS AS PT1000 KELVIN	ASCII READ COMMAND	#GAVGRTDISPT1000K<CR> Result: #GAVGRTDISPT1000K:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GAVGRTDISPT1000K<CR>		
	RX	#1,GAVGRTDISPT1000K:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Average measured RTD input as PT1000 on IO1:9999.990°K		
		Average measured RTD input as PT1000 on IO2:9999.990°K		
		Average measured RTD input as PT1000 on IO3:9999.990°K		
		Average measured RTD input as PT1000 on IO4:9999.990°K		
		Average measured RTD input as PT1000 on IO5:9999.990°K		
		Average measured RTD input as PT1000 on IO6:9999.990°K		
		Average measured RTD input as PT1000 on IO7:9999.990°K		
		Average measured RTD input as PT1000 on IO8:9999.990°K		
		Average measured RTD input as PT1000 on IO9:9999.990°K		
		Average measured RTD input as PT1000 on IO10:9999.990°K		
		Average measured RTD input as PT1000 on IO11:9999.990°K		
		Average measured RTD input as PT1000 on IO12:9999.990°K		
		Average measured RTD input as PT1000 on IO13:9999.990°K		
		Average measured RTD input as PT1000 on IO14:9999.990°K		
		Average measured RTD input as PT1000 on IO15:9999.990°K		
		Average measured RTD input as PT1000 on IO16:9999.990°K		
This command shows for RTD INPUT IOs the average measured RTD value linearized as PT1000 sensor in °Kelvin -999.990: Temperature is lower than 223.15°K +999.990: Temperature is higher than 403.15°K All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVG RTD INPUT AS PT1000 KELVIN	ASCII READ COMMAND	#GAVGRTDIPT1000K<IONR><CR> Result: #GAVGRTDIPT1000K<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GAVGRTDIPT1000K1<CR>		
	RX	#1,GAVGRTDIPT1000K16:9999.990<CR>		
		Average measured RTD input as PT1000 on IO1:9999.990°K		

This command shows for RTD INPUT IO <IONR> the average measured RTD value linearized as PT1000 sensor in °Kelvin -999.990: Temperature is lower than 223.15°K +999.990: Temperature is higher than 403.15°K All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
RTD INPUTS NI1000-DIN43760 KELVIN				
GET RTD INPUTS AS NI1000 DIN43760 KELVIN	ASCII READ COMMAND	#GRTDISNI1000DIN43760K<CR> Result: #GRTDISNI1000DIN43760K:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GRTDISNI1000DIN43760K<CR>		
	RX	#1,GRTDISNI1000DIN43760K:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Actual measured RTD input as NI1000-DIN43760 on IO1:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO2:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO3:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO4:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO5:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO6:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO7:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO8:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO9:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO10:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO11:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO12:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO13:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO14:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO15:9999.990°K		
		Actual measured RTD input as NI1000-DIN43760 on IO16:9999.990°K		
This command shows for RTD INPUT IOs the actual measured RTD value linearized as NI1000 DIN43760 sensor in °Kelvin -999.990: Temperature is lower than 223.15°K +999.990: Temperature is higher than 403.15°K All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET RTD INPUT AS NI1000 DIN43760 KELVIN	ASCII READ COMMAND	#GRTDINI1000DIN43760K<IONR><CR> Result: #GRTDINI1000DIN43760K<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GRTDINI1000DIN43760K1<CR>		
	RX	#1,GRTDINI1000DIN43760K3:9999.990<CR>		
		Actual measured RTD input as NI1000-DIN43760 on IO1:9999.990°K		
This command shows for RTD INPUT IO <IONR> the actual measured RTD value linearized as NI1000 DIN43760 sensor in °Kelvin -999.990: Temperature is lower than 223.15°K +999.990: Temperature is higher than 403.15°K All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVERAGE RTD INPUTS AS NI1000 DIN43760 KELVIN	ASCII READ COMMAND	#GAVGRTDISNI1000DIN43760K<CR> Result: #GAVGRTDISNI1000DIN43760K:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GAVGRTDISNI1000DIN43760K<CR>		

	RX	#1,GAVGRTDISNI1000DIN43760K:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Average measured RTD input as NI1000-DIN43760 on IO1:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO2:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO3:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO4:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO5:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO6:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO7:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO8:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO9:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO10:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO11:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO12:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO13:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO14:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO15:9999.990°K		
		Average measured RTD input as NI1000-DIN43760 on IO16:9999.990°K		
This command shows for RTD INPUT IOs the average measured RTD value linearized as NI1000 DIN43760 sensor in °Kelvin -999.990: Temperature is lower than 223.15°K +999.990: Temperature is higher than 403.15°K All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVG RTD INPUT AS NI1000 DIN43760 KELVIN	ASCII READ COMMAND	#GAVGRTDINI1000DIN43760K<IONR><CR> Result: #GAVGRTDINI1000DIN43760K<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GAVGRTDINI1000DIN43760K1<CR>		
	RX	#1,GAVGRTDINI1000DIN43760K16:9999.990<CR>		
		Average measured RTD input as NI1000-DIN43760 on IO1:9999.990°K		
This command shows for RTD INPUT IO <IONR> the average measured RTD value linearized as NI1000 DIN43760 sensor in °Kelvin -999.990: Temperature is lower than 223.15°K +999.990: Temperature is higher than 403.15°K All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
RTD INPUTS PT100 FAHRENHEIT				
GET RTD INPUTS AS PT100 FAHRENHEIT	ASCII READ COMMAND	#GRTDISPT100F<CR> Result: #GRTDISPT100F:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GRTDISPT100F<CR>		
	RX	#1,GRTDISPT100F:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Actual measured RTD input as PT100 on IO1:9999.990°F		
		Actual measured RTD input as PT100 on IO2:9999.990°F		
		Actual measured RTD input as PT100 on IO3:9999.990°F		
		Actual measured RTD input as PT100 on IO4:9999.990°F		
		Actual measured RTD input as PT100 on IO5:9999.990°F		
		Actual measured RTD input as PT100 on IO6:9999.990°F		

		Actual measured RTD input as PT100 on IO7:9999.990°F		
		Actual measured RTD input as PT100 on IO8:9999.990°F		
		Actual measured RTD input as PT100 on IO9:9999.990°F		
		Actual measured RTD input as PT100 on IO10:9999.990°F		
		Actual measured RTD input as PT100 on IO11:9999.990°F		
		Actual measured RTD input as PT100 on IO12:9999.990°F		
		Actual measured RTD input as PT100 on IO13:9999.990°F		
		Actual measured RTD input as PT100 on IO14:9999.990°F		
		Actual measured RTD input as PT100 on IO15:9999.990°F		
		Actual measured RTD input as PT100 on IO16:9999.990°F		
This command shows for RTD INPUT IOs the actual measured RTD value linearized as PT100 sensor in °Fahrenheit -999.990: Temperature is lower than -58°F +999.990: Temperature is higher than 266°F All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET RTD INPUT AS PT100 FAHRENHEIT	ASCII READ COMMAND	#GRTDIPT100F<IONR><CR> Result: #GRTDIPT100F<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GRTDIPT100F1<CR>		
	RX	#1,GRTDIPT100F3:9999.990<CR>		
		Actual measured RTD input as PT100 on IO1:9999.990°F		
This command shows for RTD INPUT IO <IONR> the actual measured RTD value linearized as PT100 sensor in °Fahrenheit -999.990: Temperature is lower than -58°F +999.990: Temperature is higher than 266°F All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVERAGE RTD INPUTS AS PT100 FAHRENHEIT	ASCII READ COMMAND	#GAVGRTDISPT100F<CR> Result: #GAVGRTDISPT100F:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GAVGRTDISPT100F<CR>		
	RX	#1,GAVGRTDISPT100F:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Average measured RTD input as PT100 on IO1:9999.990°F		
		Average measured RTD input as PT100 on IO2:9999.990°F		
		Average measured RTD input as PT100 on IO3:9999.990°F		
		Average measured RTD input as PT100 on IO4:9999.990°F		
		Average measured RTD input as PT100 on IO5:9999.990°F		
		Average measured RTD input as PT100 on IO6:9999.990°F		
		Average measured RTD input as PT100 on IO7:9999.990°F		
		Average measured RTD input as PT100 on IO8:9999.990°F		
		Average measured RTD input as PT100 on IO9:9999.990°F		
		Average measured RTD input as PT100 on IO10:9999.990°F		
		Average measured RTD input as PT100 on IO11:9999.990°F		
		Average measured RTD input as PT100 on IO12:9999.990°F		
		Average measured RTD input as PT100 on IO13:9999.990°F		
		Average measured RTD input as PT100 on IO14:9999.990°F		
		Average measured RTD input as PT100 on IO15:9999.990°F		

		Average measured RTD input as PT100 on IO16:9999.990°F		
This command shows for RTD INPUT IOs the average measured RTD value linearized as PT100 sensor in °Fahrenheit -999.990: Temperature is lower than -58°F +999.990: Temperature is higher than 266°F All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVG RTD INPUT AS PT100 FAHRENHEIT	ASCII READ COMMAND	#GAVGRTDIPT100F<IONR><CR> Result: #GAVGRTDIPT100F<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GAVGRTDIPT100F1<CR>		
	RX	#1,GAVGRTDIPT100F16:9999.990<CR>		
		Average measured RTD input as PT100 on IO1:9999.990°F		
This command shows for RTD INPUT IO <IONR> the average measured RTD value linearized as PT100 sensor in °Fahrenheit -999.990: Temperature is lower than -58°F +999.990: Temperature is higher than 266°F All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
RTD INPUTS PT1000 FAHRENHEIT				
GET RTD INPUTS AS PT1000 FAHRENHEIT	ASCII READ COMMAND	#GRTDISPT1000F<CR> Result: #GRTDISPT1000F:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GRTDISPT1000F<CR>		
	RX	#1,GRTDISPT1000F:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Actual measured RTD input as PT1000 on IO1:9999.990°F		
		Actual measured RTD input as PT1000 on IO2:9999.990°F		
		Actual measured RTD input as PT1000 on IO3:9999.990°F		
		Actual measured RTD input as PT1000 on IO4:9999.990°F		
		Actual measured RTD input as PT1000 on IO5:9999.990°F		
		Actual measured RTD input as PT1000 on IO6:9999.990°F		
		Actual measured RTD input as PT1000 on IO7:9999.990°F		
		Actual measured RTD input as PT1000 on IO8:9999.990°F		
		Actual measured RTD input as PT1000 on IO9:9999.990°F		
		Actual measured RTD input as PT1000 on IO10:9999.990°F		
		Actual measured RTD input as PT1000 on IO11:9999.990°F		
		Actual measured RTD input as PT1000 on IO12:9999.990°F		
		Actual measured RTD input as PT1000 on IO13:9999.990°F		
		Actual measured RTD input as PT1000 on IO14:9999.990°F		
		Actual measured RTD input as PT1000 on IO15:9999.990°F		
		Actual measured RTD input as PT1000 on IO16:9999.990°F		
This command shows for RTD INPUT IOs the actual measured RTD value linearized as PT1000 sensor in °Fahrenheit -999.990: Temperature is lower than -58°F +999.990: Temperature is higher than 266°F All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET RTD INPUT AS PT1000 FAHRENHEIT	ASCII READ COMMAND	#GRTDIPT1000F<IONR><CR> Result: #GRTDIPT1000F<IONR>:<IOxDbl><CR>	ASCII	

	IONR	1		
	TX	#1,GRTDIPT1000F1<CR>		
	RX	#1,GRTDIPT1000F3:9999.990<CR>		
		Actual measured RTD input as PT1000 on IO1:9999.990°F		
This command shows for RTD INPUT IO <IONR> the actual measured RTD value linearized as PT1000 sensor in °Fahrenheit -999.990: Temperature is lower than -58°F +999.990: Temperature is higher than 266°F All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVERAGE RTD INPUTS AS PT1000 FAHRENHEIT	ASCII READ COMMAND	#GAVGRTDISPT1000F<CR> Result: #GAVGRTDISPT1000F:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GAVGRTDISPT1000F<CR>		
	RX	#1,GAVGRTDISPT1000F:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Average measured RTD input as PT1000 on IO1:9999.990°F		
		Average measured RTD input as PT1000 on IO2:9999.990°F		
		Average measured RTD input as PT1000 on IO3:9999.990°F		
		Average measured RTD input as PT1000 on IO4:9999.990°F		
		Average measured RTD input as PT1000 on IO5:9999.990°F		
		Average measured RTD input as PT1000 on IO6:9999.990°F		
		Average measured RTD input as PT1000 on IO7:9999.990°F		
		Average measured RTD input as PT1000 on IO8:9999.990°F		
		Average measured RTD input as PT1000 on IO9:9999.990°F		
		Average measured RTD input as PT1000 on IO10:9999.990°F		
		Average measured RTD input as PT1000 on IO11:9999.990°F		
		Average measured RTD input as PT1000 on IO12:9999.990°F		
		Average measured RTD input as PT1000 on IO13:9999.990°F		
		Average measured RTD input as PT1000 on IO14:9999.990°F		
		Average measured RTD input as PT1000 on IO15:9999.990°F		
		Average measured RTD input as PT1000 on IO16:9999.990°F		
This command shows for RTD INPUT IOs the average measured RTD value linearized as PT1000 sensor in °Fahrenheit -999.990: Temperature is lower than -58°F +999.990: Temperature is higher than 266°F All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVG RTD INPUT AS PT1000 FAHRENHEIT	ASCII READ COMMAND	#GAVGRTDIPT1000F<IONR><CR> Result: #GAVGRTDIPT1000F<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GAVGRTDIPT1000F1<CR>		
	RX	#1,GAVGRTDIPT1000F16:9999.990<CR>		
		Average measured RTD input as PT1000 on IO1:9999.990°F		
This command shows for RTD INPUT IO <IONR> the average measured RTD value linearized as PT1000 sensor in °Fahrenheit -999.990: Temperature is lower than -58°F +999.990: Temperature is higher than 266°F All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
RTD INPUTS NI1000-DIN43760 FAHRENHEIT				

GET RTD INPUTS AS NI1000 DIN43760 FAHRENHEIT	ASCII READ COMMAND	#GRTDISNI1000DIN43760F<CR> Result: #GRTDISNI1000DIN43760F:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GRTDISNI1000DIN43760F<CR>		
	RX	#1,GRTDISNI1000DIN43760F:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Actual measured RTD input as NI1000-DIN43760 on IO1:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO2:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO3:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO4:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO5:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO6:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO7:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO8:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO9:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO10:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO11:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO12:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO13:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO14:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO15:9999.990°F		
		Actual measured RTD input as NI1000-DIN43760 on IO16:9999.990°F		
This command shows for RTD INPUT IOs the actual measured RTD value linearized as NI1000 DIN43760 sensor in °Fahrenheit -999.990: Temperature is lower than -58°F +999.990: Temperature is higher than 266°F All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET RTD INPUT AS NI1000 DIN43760 FARENEHEIT	ASCII READ COMMAND	#GRTDINI1000DIN43760F<IONR><CR> Result: #GRTDINI1000DIN43760F<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GRTDINI1000DIN43760F1<CR>		
	RX	#1,GRTDINI1000DIN43760F3:9999.990<CR>		
		Actual measured RTD input as NI1000-DIN43760 on IO1:9999.990°F		
This command shows for RTD INPUT IO <IONR> the actual measured RTD value linearized as NI1000 DIN43760 sensor in °Fahrenheit -999.990: Temperature is lower than -58°F +999.990: Temperature is higher than 266°F All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVERAGE RTD INPUTS AS NI1000 DIN43760 FARENEHEIT	ASCII READ COMMAND	#GAVGRTDISNI1000DIN43760F<CR> Result: #GAVGRTDISNI1000DIN43760F:<RTD1Dbl>,<RTD2Dbl>,...,<RTD16Dbl><CR>	ASCII	
	TX	#1,GAVGRTDISNI1000DIN43760F<CR>		
	RX	#1,GAVGRTDISNI1000DIN43760F:9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990,9999.990<CR>		
		Average measured RTD input as NI1000-DIN43760 on IO1:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO2:9999.990°F		

		Average measured RTD input as NI1000-DIN43760 on IO3:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO4:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO5:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO6:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO7:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO8:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO9:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO10:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO11:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO12:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO13:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO14:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO15:9999.990°F		
		Average measured RTD input as NI1000-DIN43760 on IO16:9999.990°F		
This command shows for RTD INPUT IOs the average measured RTD value linearized as NI1000 DIN43760 sensor in °Fahrenheit -999.990: Temperature is lower than -58°F +999.990: Temperature is higher than 266°F All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				
GET AVG RTD INPUT AS NI1000 DIN43760 FARENEHEIT	ASCII READ COMMAND	#GAVGRTDINI1000DIN43760F<IONR><CR> Result: #GAVGRTDINI1000DIN43760F<IONR>:<IOxDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GAVGRTDINI1000DIN43760F1<CR>		
	RX	#1,GAVGRTDINI1000DIN43760F16:9999.990<CR>		
		Average measured RTD input as NI1000-DIN43760 on IO1:9999.990°F		
This command shows for RTD INPUT IO <IONR> the average measured RTD value linearized as NI1000 DIN43760 sensor in °Fahrenheit -999.990: Temperature is lower than -58°F +999.990: Temperature is higher than 266°F All IOs with a different usage type will return 9999.990 to indicate, that no measurement is done.				

Register NAME Command NAME	MODBUS Register ASCII Command	Register VALUE ASCII Command	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
ASCII COMMANDS						
INTER PROCESSOR COMMUNICATION						
AIOX IS ONLINE	ASCII READ COMMAND	#G16AIOXISONLINE<CR> Result: #G16AIOXISONLINE:<YesNo><CR>			ASCII	
	TX	#1,G16AIOXISONLINE<CR>				
	RX	#1,G16AIOXISONLINE:YES<CR>				
		Actual communication state co-processor to AIOX processor:YES				
This command returns the actual state of the serial communication between the ARM co-processor and the additional processor for the AIOX. YES: Currently the communication is fine NO: There is a mayor problem/hardware fault between the two processors						
CHIP COMMUNICATION						
ARE CHIPS ONLINE	ASCII READ COMMAND	#ARECHIPSONLINE<CR> Result: #ARECHIPSONLINE:<Chip1IsOnline>,<Chip2IsOnline>,<Chip3IsOnline>,<Chip4IsOnline><CR>			ASCII	
	TX	#1,ARECHIPSONLINE<CR>				
	RX	#1,ARECHIPSONLINE:1,1,1,1<CR>				
		Actual state of CHIP1:1				
		Actual state of CHIP2:1				
		Actual state of CHIP3:1				
		Actual state of CHIP4:1				
This command shows the current SPI communication status with each chip. ChipxIsOnline: =0: Currently there is a SPI error in the communication and the chip is offline =1: The SPI communication with the chip is ok						
IS CHIPx ONLINE	ASCII READ COMMAND	#ISCHIPONLINE<CHIPNR><CR> Result: #ISCHIPONLINE<CHIPNR>:<ChipxIsOnline><CR>			ASCII	
	CHIPNR	1				
	TX	#1,ISCHIPONLINE1<CR>				
	RX	#1,ISCHIPONLINE1:1<CR>				
		Actual state of CHIP1:1				
This command shows the current SPI communication status with chip <CHIPNR>. =0: Currently there is a SPI error in the communication and the chip is offline =1: The SPI communication with the chip is ok						
GET ALL SPI ERRORS	ASCII READ COMMAND	#GASPIERRS<CR> Result: #GASPIERRS:<SPI1ErrDec>,<SPI2ErrDec>,<SPI3ErrDec>,<SPI4ErrDec>, <SPI1ErrHex>,<SPI2ErrHex>,<SPI3ErrHex>,<SPI4ErrHex><CR>			ASCII	

	TX	#1,GASPIERRS<CR>		
	RX	#1,GASPIERRS:0,0,0,0,0x0,0x0,0x0,0x0<CR>		
		Actual SPI errors of CHIP1:0		
		Actual SPI errors of CHIP2:0		
		Actual SPI errors of CHIP3:0		
		Actual SPI errors of CHIP4:0		
This command shows the acutal SPI errors since power up for every chip				
GET SPI ERROR	ASCII READ COMMAND	#GSPIERR<CHIPNR><CR> Result: #GSPIERR<CHIPNR>:<SPIxErrDec>,<SPIxErrHex><CR>	ASCII	
	CHIPNR	1		
	TX	#1,GSPIERR1<CR>		
	RX	#1,GSPIERR1:0,0x0<CR>		
		Actual SPI errors of CHIP1:0		
This command shows the acutal SPI errors since power up for chip <CHIPNR>				
GET CHIP STATEMACHINES	ASCII READ COMMAND	#GCHIPSMS<CR> Result: #GCHIPSMS:<Chip1StateMachine>,<Chip2StateMachine>, <Chip3StateMachine>,<Chip4StateMachine><CR>	ASCII	
	TX	#1,GCHIPSMS<CR>		
	RX	#1,GCHIPSMS:12090,12090,12070,12070<CR>		
		Actual state of CHIP1:12090		
		Actual state of CHIP2:12090		
		Actual state of CHIP3:12070		
		Actual state of CHIP4:12070		
This command shows the acutal state of the internal communication state machine for all chips				
GET CHIP STATEMACHINE	ASCII READ COMMAND	#GCHIPSM<CHIPNR><CR> Result: #GCHIPSM<CHIPNR>:<ChipxStateMachine><CR>	ASCII	
	CHIPNR	1		
	TX	#1,GCHIPSM1<CR>		
	RX	#1,GCHIPSM1:12010<CR>		
		Actual state of CHIP1:12010		
This command shows the acutal state of the internal communication state machine for chip <CHIPNR>				
RESET CHIP STATEMACHINE	ASCII WRITE COMMAND	#RCHIPSM<CHIPNR><CR> Result: #OK<CR>	ASCII	YES
	CHIPNR	1		
	TX	#1,RCHIPSM1<CR>		
	RX	N/A		
This command restarts the state machine for chip <CHIPNR>. The affected chip will be resetted & initialized completely				
CHIP STATUS				

GET ALL LIVE STATES	ASCII READ COMMAND	#GALSTATES<CR> Result: #GALSTATE:<Chip1LiveStateDec>,<Chip2LiveStateDec>, <Chip3LiveStateDec>,<Chip4LiveStateDec>, <Chip1LiveStateHex>,<Chip2LiveStateHex>, <Chip3LiveStateHex>,<Chip4LiveStateHex><CR>	ASCII	
	TX	#1,GALSTATES<CR>		
	RX	#1,GALSTATES:27648,30720,29696,29696,0x6C00,0x7800,0x7400,0x7400<CR>		
		Actual live state of CHIP1:27648,0x6C00		
		Actual live state of CHIP2:30720,0x7800		
		Actual live state of CHIP3:29696,0x7400		
		Actual live state of CHIP4:29696,0x7400		

Returns the actual chip status of all chips.
Each result bit stands for a different state:
Bit 0: VI_ERR_CURR_A: Status of channel A:Voltage or current error detected on Channel A. This bit is interpreted differently depending on which of the following IO function selected:
Voltage output: short-circuit error. The error condition is debounced for 2 ms before the status bit is set.
Current output: open circuit error. The error condition is debounced for 2 ms before the status bit is set.
Current input, loop powered: short-circuit error. A short to ground is detected
Current input, externally powered: short-circuit error. A current source >25 mA is detected
Bit 1: VI_ERR_CURR_B: Status of voltage input B. Same like VI_ERR_CURR_A
Bit 2: VI_ERR_CURR_C: Status of voltage input C. Same like VI_ERR_CURR_A
Bit 3: VI_ERR_CURR_D: Status of voltage input D. Same like VI_ERR_CURR_A
Bit 4: HI_TEMP_STATUS: If the die temperature is typically at or above 115°C, the HI_TEMP_STATUS bit is asserted
Bit 5: CHARGE_PUMP_STATUS: Charge pump error detected.
Bit 6: ALDO5V_STATUS: ALDO5V Power Supply Monitor Error. This bit is asserted when the ALDO5V pin falls below 4.05 V. Usually ~5V.
Bit 7: AVDD_STATUS: AVDD Power Supply Monitor Error. This bit is asserted when the AVDD pin falls below 9.26 V. Usually ~17V.
Bit 8: DVCC_STATUS: DVCC Power Supply Monitor Error. This bit is asserted when the DVCC pin falls below 1.93 V. Usually ~3.3V.
Bit 9: ALDO1V8_STATUS: ALDO1V8 Power Supply Monitor Error. This bit is asserted when the ALDO1V8 pin falls below 1.35 V. Usually ~1.8V.
Bit 10-12: ADC_CH_CURR: Current converted channel of the ADC (0:A, 1:B, 2:C, 3:D, 4:Diagnostic 0, 5:Diagnostic 1, 6:Diagnostic 2, 7:Diagnostic 3)
Bit 13: ADC_BUSY: ADC busy status bit.
Bit 14: ADC_DATA_RDY:ADC data ready. The ADC_DATA_RDY bit asserts when a conversion cycle has completed. The bit stays asserted until a user writes 1 to clear the bit. In single conversion mode, the ADC_RDY pin follows the ADC_DATA_RDY bit and only deasserts when the ADC_DATA_RDY bit is cleared. In continuous conversion mode, the ADC_RDY pin returns high after 24 µs.
Bit 15: RESERVED: Reserved

GET LIVE STATE	ASCII READ COMMAND	#GLSTATE<CHIPNR><CR> Result: #GLSTATE<CHIPNR>:<ChipxLiveStateDec>,<ChipxLiveStateHex><CR>	ASCII	
	CHIPNR	1		
	TX	#1,GLSTATE1<CR>		
	RX	#1,GLSTATE4:29696,0x7400<CR>		
		Actual live state of CHIP1:29696,0x7400		
		Live state bit 0: VI_ERR_CURR_A:0		
		Live state bit 1: VI_ERR_CURR_B:0		
		Live state bit 2: VI_ERR_CURR_C:0		
		Live state bit 3: VI_ERR_CURR_D:0		
		Live state bit 4: HI_TEMP_STATUS:0		
		Live state bit 5: CHARGE_PUMP_STATUS:0		
		Live state bit 6: ALDO5V_STATUS:0		

		Live state bit 7: AVDD_STATUS:0		
		Live state bit 8: DVCC_STATUS:0		
		Live state bit 9: ALDO1V8_STATUS:0		
		Live state bit 10-12: ADC_CH_CURR:5		
		Live state bit 13: ADC_BUSY:1		
		Live state bit 14: ADC_DATA_RDY:0		
		Live state bit 15: RESERVED:0		

Returns the actual chip status of chip <CHIPNR>
Each result bit stands for a different state:
Bit 0: VI_ERR_CURR_A: Status of channel A:Voltage or current error detected on Channel A. This bit is interpreted differently depending on which of the following IO function selected:
Voltage output: short-circuit error. The error condition is debounced for 2 ms before the status bit is set.
Current output: open circuit error. The error condition is debounced for 2 ms before the status bit is set.
Current input, loop powered: short-circuit error. A short to ground is detected
Current input, externally powered: short-circuit error. A current source >25 mA is detected
Bit 1: VI_ERR_CURR_B: Status of voltage input B. Same like VI_ERR_CURR_A
Bit 2: VI_ERR_CURR_C: Status of voltage input C. Same like VI_ERR_CURR_A
Bit 3: VI_ERR_CURR_D: Status of voltage input D. Same like VI_ERR_CURR_A
Bit 4: HI_TEMP_STATUS: If the die temperature is typically at or above 115°C, the HI_TEMP_STATUS bit is asserted
Bit 5: CHARGE_PUMP_STATUS: Charge pump error detected.
Bit 6: ALDO5V_STATUS: ALDO5V Power Supply Monitor Error. This bit is asserted when the ALDO5V pin falls below 4.05 V. Usually ~5V.
Bit 7: AVDD_STATUS: AVDD Power Supply Monitor Error. This bit is asserted when the AVDD pin falls below 9.26 V. Usually ~17V.
Bit 8: DVCC_STATUS: DVCC Power Supply Monitor Error. This bit is asserted when the DVCC pin falls below 1.93 V. Usually ~3.3V.
Bit 9: ALDO1V8_STATUS: ALDO1V8 Power Supply Monitor Error. This bit is asserted when the ALDO1V8 pin falls below 1.35 V. Usually ~1.8V.
Bit 10-12: ADC_CH_CURR: Current converted channel of the ADC (0:A, 1:B, 2:C, 3:D, 4:Diagnostic 0, 5:Diagnostic 1, 6:Diagnostic 2, 7:Diagnostic 3)
Bit 13: ADC_BUSY: ADC busy status bit.
Bit 14: ADC_DATA_RDY:ADC data ready. The ADC_DATA_RDY bit asserts when a conversion cycle has completed. The bit stays asserted until a user writes 1 to clear the bit. In single conversion mode, the ADC_RDY pin follows the ADC_DATA_RDY bit and only deasserts when the ADC_DATA_RDY bit is cleared. In continuous conversion mode, the ADC_RDY pin returns high after 24 µs.
Bit 15: RESERVED: Reserved

GET ALL ALERT STATES	ASCII READ COMMAND	#GAASTATES<CR> Result: #GAASTATES:<Chip1AlertStateDec>,<Chip2AlertStateDec>, <Chip3AlertStateDec>,<Chip4AlertStateDec>, <Chip1AlertStateHex>,<Chip2AlertStateHex>, <Chip3AlertStateHex>,<Chip4AlertStateHex><CR>	ASCII	
	TX	#1,GAASTATES<CR>		
	RX	#1,GAASTATES:33792,33792,33792,33792,0x8400,0x8400,0x8400,0x8400<CR>		
		Actual alert state of CHIP1:33792,0x8400		
		Actual alert state of CHIP2:33792,0x8400		
		Actual alert state of CHIP3:33792,0x8400		
		Actual alert state of CHIP4:33792,0x8400		

Returns the actual alert states for all chips.
Each result bit stands for a different state:
Bit 0: VI_ERR_CURR_A: Status of channel A:Voltage or current error detected on Channel A. This bit is interpreted differently depending on which of the following IO function selected:
Voltage output: short-circuit error. The error condition is debounced for 2 ms before the status bit is set.
Current output: open circuit error. The error condition is debounced for 2 ms before the status bit is set.
Current input, loop powered: short-circuit error. A short to ground is detected
Current input, externally powered: short-circuit error. A current source >25 mA is detected
Bit 1: VI_ERR_CURR_B: Status of voltage input B. Same like VI_ERR_CURR_A
Bit 2: VI_ERR_CURR_C: Status of voltage input C. Same like VI_ERR_CURR_A
Bit 3: VI_ERR_CURR_D: Status of voltage input D. Same like VI_ERR_CURR_A
Bit 4: HI_TEMP_STATUS: If the die temperature is typically at or above 115°C, the HI_TEMP_STATUS bit is asserted
Bit 5: CHARGE_PUMP_STATUS: Charge pump error detected.
Bit 6: ALDO5V_STATUS: ALDO5V Power Supply Monitor Error. This bit is asserted when the ALDO5V pin falls below 4.05 V. Usually ~5V.
Bit 7: AVDD_STATUS: AVDD Power Supply Monitor Error. This bit is asserted when the AVDD pin falls below 9.26 V. Usually ~17V.
Bit 8: DVCC_STATUS: DVCC Power Supply Monitor Error. This bit is asserted when the DVCC pin falls below 1.93 V. Usually ~3.3V.
Bit 9: ALDO1V8_STATUS: ALDO1V8 Power Supply Monitor Error. This bit is asserted when the ALDO1V8 pin falls below 1.35 V. Usually ~1.8V.
Bit 10: ADC_CONV_ERR: ADC Conversion Error. ADC results may be outside the selected measurement range.
Bit 11: ADC_SAT_ERR: ADC Saturation Error. ADC may be outside the user selected measurement range.
Bit 12: SPI_SCLK_CNT_ERR: SPI SCLK count error detected. This bit is asserted if an SPI command is applied but 32 SCLKs are not provided.
Bit 13: SPI_CRC_ERR: SPI CRC error detected. This bit is asserted if an invalid CRC is received.
Bit 14: CAL_MEM_ERR: Calibration Memory Error. This flag asserts under the following two conditions: When a calibration memory CRC error or an uncorrectable error correcting code (ECC) error is detected on the calibration memory upload. It is not possible to clear this bit if there is a CRC error or uncorrectable ECC error. It is recommended to reset the device and check the supplies in this situation. When there is an attempted SPI access to a register before the calibration memory refresh is complete. Do not address the device until the calibration memory is refreshed. Writing 1 to this bit clears the flag, if the flag is asserted due to this condition.
Bit 15: RESET_OCCURRED: Reset occurred. This bit is asserted after a reset event, which asserts the ALERT pin after the reset. Write a 1 to this bit to clear the flag. Note that a mask bit is not provided for this bit.

GET ALERT STATE	ASCII READ COMMAND	#GASTATE<CHIPNR><CR> Result: #GASTATE<CHIPNR>:<ChipxAlertState><CR>	ASCII	
	CHIPNR	1		
	TX	#1,GASTATE1<CR>		
	RX	#1,GASTATE4:33792,0x8400<CR>		
		Actual alert state of CHIP1:33792,0x8400		
		Alert state bit 0: VI_ERR_A:0		
		Alert state bit 1: VI_ERR_B:0		
		Alert state bit 2: VI_ERR_C:0		
		Alert state bit 3: VI_ERR_D:0		
		Alert state bit 4: HI_TEMP_ERR:0		
		Alert state bit 5: CHARGE_PUMP_ERR:0		
		Alert state bit 6: ALDO5V_ERR:0		
		Alert state bit 7: AVDD_ERR:0		
		Alert state bit 8: DVCC_ERR:0		
		Alert state bit 9: ALDO1V8_ERR:0		
		Alert state bit 10: ADC_CONV_ERR:1		
		Alert state bit 11: ADC_SAT_ERR:0		
		Alert state bit 12: SPI_SCLK_CNT_ERR:0		
		Alert state bit 13: SPI_CRC_ERR:0		
		Alert state bit 14: CAL_MEM_ERR:0		
		Alert state bit 15: RESET OCCURED:0		

Returns the actual alert states for chip <CHIPNR>.
Each result bit stands for a different state:
Bit 0: VI_ERR_CURR_A: Status of channel A:Voltage or current error detected on Channel A. This bit is interpreted differently depending on which of the following IO function selected:
Voltage output: short-circuit error. The error condition is debounced for 2 ms before the status bit is set.
Current output: open circuit error. The error condition is debounced for 2 ms before the status bit is set.
Current input, loop powered: short-circuit error. A short to ground is detected
Current input, externally powered: short-circuit error. A current source >25 mA is detected
Bit 1: VI_ERR_CURR_B: Status of voltage input B. Same like VI_ERR_CURR_A
Bit 2: VI_ERR_CURR_C: Status of voltage input C. Same like VI_ERR_CURR_A
Bit 3: VI_ERR_CURR_D: Status of voltage input D. Same like VI_ERR_CURR_A
Bit 4: HI_TEMP_STATUS: If the die temperature is typically at or above 115°C, the HI_TEMP_STATUS bit is asserted
Bit 5: CHARGE_PUMP_STATUS: Charge pump error detected.
Bit 6: ALDO5V_STATUS: ALDO5V Power Supply Monitor Error. This bit is asserted when the ALDO5V pin falls below 4.05 V. Usually ~5V.
Bit 7: AVDD_STATUS: AVDD Power Supply Monitor Error. This bit is asserted when the AVDD pin falls below 9.26 V. Usually ~17V.
Bit 8: DVCC_STATUS: DVCC Power Supply Monitor Error. This bit is asserted when the DVCC pin falls below 1.93 V. Usually ~3.3V.
Bit 9: ALDO1V8_STATUS: ALDO1V8 Power Supply Monitor Error. This bit is asserted when the ALDO1V8 pin falls below 1.35 V. Usually ~1.8V.
Bit 10: ADC_CONV_ERR: ADC Conversion Error. ADC results may be outside the selected measurement range.
Bit 11: ADC_SAT_ERR: ADC Saturation Error. ADC may be outside the user selected measurement range.
Bit 12: SPI_SCLK_CNT_ERR: SPI SCLK count error detected. This bit is asserted if an SPI command is applied but 32 SCLKs are not provided.
Bit 13: SPI_CRC_ERR: SPI CRC error detected. This bit is asserted if an invalid CRC is received.
Bit 14: CAL_MEM_ERR: Calibration Memory Error. This flag asserts under the following two conditions: When a calibration memory CRC error or an uncorrectable error correcting code (ECC) error is detected on the calibration memory upload. It is not possible to clear this bit if there is a CRC error or uncorrectable ECC error. It is recommended to reset the device and check the supplies in this situation. When there is an attempted SPI access to a register before the calibration memory refresh is complete. Do not address the device until the calibration memory is refreshed. Writing 1 to this bit clears the flag, if the flag is asserted due to this condition.
Bit 15: RESET_OCCURRED: Reset occurred. This bit is asserted after a reset event, which asserts the ALERT pin after the reset. Write a 1 to this bit to clear the flag. Note that a mask bit is not provided for this bit.

CLEAR ALERT STATE	ASCII WRITE COMMAND	#CALERTS<CHIPNR>:<AlertState><CR> Result: #OK<CR>		ASCII	YES
	CHIPNR	1			
	Bit 0	1:RESET FLAG	0:VI_ERR_A		
	Bit 1	1:RESET FLAG	1:VI_ERR_B		
	Bit 2	1:RESET FLAG	2:VI_ERR_C		
	Bit 3	1:RESET FLAG	3:VI_ERR_D		
	Bit 4	1:RESET FLAG	4:HI_TEMP_ERR		
	Bit 5	1:RESET FLAG	5:CHARGE_PUMP_ERR		
	Bit 6	1:RESET FLAG	6:ALDO5V_ERR		
	Bit 7	1:RESET FLAG	7:AVDD_ERR		
	Bit 8	1:RESET FLAG	8:DVCC_ERR		
	Bit 9	1:RESET FLAG	9:ALDO1V8_ERR		
	Bit 10	1:RESET FLAG	10:ADC_CONV_ERR		
	Bit 11	1:RESET FLAG	11:ADC_SAT_ERR		
	Bit 12	1:RESET FLAG	12:SPI_SCLK_ERR		
	Bit 13	1:RESET FLAG	13:SPI_CRC_ERR		
	Bit 14	1:RESET FLAG	14:CAL_MEM_ERR		
	Bit 15	1:RESET FLAG	15:RESET_OCCURED		
	TX	#1,CALERTS1:65535<CR>			
	RX	N/A			

With this command you can reset individual alert bits in the alert status register

CHIP TEMPERATURES

GET CHIP TEMPERATURES	ASCII READ COMMAND	#GCHIPTEMPS<CR> Result: #GCHIPTEMPS:<Chip1TempDbl>,<Chip2TempDbl>,<Chip3TempDbl>,<Chip4TempDbl><CR>	ASCII	
	TX	#1,GCHIPTEMPS<CR>		
	RX	#1,GCHIPTEMPS:46.37,47.49,45.59,46.70<CR>		
		Actual temperature of CHIP1:46.37°C		
		Actual temperature of CHIP2:47.49°C		
		Actual temperature of CHIP3:45.59°C		
		Actual temperature of CHIP4:46.70°C		
This command returns for every AIOX chip the actual chip temperature in °C				
GET CHIP TEMPERATURE	ASCII READ COMMAND	#GCHIPTEMP<CHIPNR><CR> Result: #GCHIPTEMP<CHIPNR>:<ChipxTempDbl><CR>	ASCII	
	CHIPNR	1		
	TX	#1,GCHIPTEMP1<CR>		
	RX	#1,GCHIPTEMP1:46.37<CR>		
		Actual temperature of CHIP1:46.37°C		
This command returns for AIOX chip <CHIPNR> the actual chip temperature in °C				
AVERAGE CHIP TEMPERATURES				
GET AVERAGE CHIP TEMPERATURES	ASCII READ COMMAND	#GAVGCHIPTEMPS<CR> Result: #GAVGCHIPTEMPS:<Chip1TempDbl>,<Chip2TempDbl>,<Chip3TempDbl>,<Chip4TempDbl><CR>	ASCII	
	TX	#1,GAVGCHIPTEMPS<CR>		
	RX	#1,GAVGCHIPTEMPS:46.36,47.47,45.48,46.66<CR>		
		Average temperature of CHIP1:46.36°C		
		Average temperature of CHIP2:47.47°C		
		Average temperature of CHIP3:45.48°C		
		Average temperature of CHIP4:46.66°C		
This command returns for every AIOX chip the average chip temperature in °C				
GET AVERAGE CHIP TEMPERATURE	ASCII READ COMMAND	#GAVGCHIPTEMP<CHIPNR><CR> Result: #GAVGCHIPTEMP<CHIPNR>:<ChipxTempDbl><CR>	ASCII	
	CHIPNR	1		
	TX	#1,GAVGCHIPTEMP1<CR>		
	RX	#1,GAVGCHIPTEMP1:46.36<CR>		
		Average temperature of CHIP1:46.36°C		
This command returns for AIOX chip <CHIPNR> the average chip temperature in °C				
CHIP SUPPLY VOLTAGES				
GET SUPPLY VOLTAGES	ASCII READ COMMAND	#GVAVDDS<CR> Result: #GVAVDDS:<Chip1VAVDDDbl>,<Chip2VAVDDDbl>,<Chip3VAVDDDbl>,<Chip4VAVDDDbl><CR>	ASCII	
	TX	#1,GVAVDDS<CR>		

	RX	#1,GVAVDDS:14.61,14.62,14.62,14.60<CR>		
		Actual supply voltage of CHIP1:14.61V		
		Actual supply voltage of CHIP2:14.62V		
		Actual supply voltage of CHIP3:14.62V		
		Actual supply voltage of CHIP4:14.60V		
This command returns for every AIOX chip the actual supply voltage in Volts. This must be >14.5V, if not, there is a severe wiring or other hardware issue!				
GET SUPPLY VOLTAGE	ASCII READ COMMAND	#GVAVDD<CHIPNR><CR> Result: #GVAVDD<CHIPNR>:<ChipxVAVDD><CR>	ASCII	
	CHIPNR	1		
	TX	#1,GVAVDD1<CR>		
	RX	#1,GVAVDD1:14.61<CR>		
		Actual supply voltage of CHIP1:14.61V		
This command returns for AIOX chip <CHIPNR> the actual supply voltage in Volts. This must be >14.5V, if not, there is a severe wiring or other hardware issue!				
AVERAGE CHIP SUPPLY VOLTAGES				
GET AVERAGE SUPPLY VOLTAGES	ASCII READ COMMAND	#GAVGVAVDDS<CR> Result: #GAVGVAVDDS:<Chip1VAVDDDbl>,<Chip2VAVDDDbl>, <Chip3VAVDDDbl>,<Chip4VAVDDDbl><CR>	ASCII	
	TX	#1,GAVGVAVDDS<CR>		
	RX	#1,GAVGVAVDDS:14.61,14.60,14.62,14.60<CR>		
		Average supply voltage of CHIP1:14.61V		
		Average supply voltage of CHIP2:14.60V		
		Average supply voltage of CHIP3:14.62V		
		Average supply voltage of CHIP4:14.60V		
This command returns for every AIOX chip the average supply voltage in Volts. This must be >14.5V, if not, there is a severe wiring or other hardware issue!				
GET AVERAGE SUPPLY VOLTAGE	ASCII READ COMMAND	#GAVGVAVDD<CHIPNR><CR> Result: #GAVGVAVDD<CHIPNR>:<ChipxVAVDD><CR>	ASCII	
	CHIPNR	1		
	TX	#1,GAVGVAVDD1<CR>		
	RX	#1,GAVGVAVDD1:14.61<CR>		
		Average supply voltage of CHIP1:14.61V		
This command returns for AIOX chip <CHIPNR> the average supply voltage in Volts. This must be >14.5V, if not, there is a severe wiring or other hardware issue!				
CHIP GROUND VOLTAGES				
GET GROUND VOLTAGES	ASCII READ COMMAND	#GVAGNDS<CR> Result: #GVAGNDS:<Chip1VAGNDDbl>,<Chip2VAGNDDbl>, <Chip3VAGNDDbl>,<Chip4VAGNDDbl><CR>	ASCII	

	TX	#1,GVAGNDS<CR>		
	RX	#1,GVAGNDS:0.00,0.00,0.00,0.00<CR>		
		Actual ground voltage of CHIP1:0.00V		
		Actual ground voltage of CHIP2:0.00V		
		Actual ground voltage of CHIP3:0.00V		
		Actual ground voltage of CHIP4:0.00V		
This command returns for every AIOX chip the actual ground voltage in Volts. This must be 0, if not, there is a severe wiring or other hardware issue!				
GET GROUND VOLTAGE	ASCII READ COMMAND	#GVAGND<CHIPNR><CR> Result: #GVAGND<CHIPNR>:<ChipxVAGNDDbl><CR>	ASCII	
	CHIPNR	1		
	TX	#1,GVAGND1<CR>		
	RX	#1,GVAGND1:0.00<CR>		
		Actual ground voltage of CHIP1:0.00V		
This command returns for AIOX chip <CHIPNR> the actual ground voltage in Volts. This must be 0, if not, there is a severe wiring or other hardware issue!				
AVERAGE CHIP GROUND VOLTAGES				
GET AVERAGE GROUND VOLTAGES	ASCII READ COMMAND	#GAVGVAGNDS<CR> Result: #GAVGVAGNDS:<Chip1VAGNDDbl>,<Chip2VAGNDDbl>, <Chip3VAGNDDbl>,<Chip4VAGNDDbl><CR>	ASCII	
	TX	#1,GAVGVAGNDS<CR>		
	RX	#1,GAVGVAGNDS:0.00,0.00,0.00,0.00<CR>		
		Average ground voltage of CHIP1:0.00V		
		Average ground voltage of CHIP2:0.00V		
		Average ground voltage of CHIP3:0.00V		
		Average ground voltage of CHIP4:0.00V		
This command returns for every AIOX chip the average ground voltage in Volts. This must be 0, if not, there is a severe wiring or other hardware issue!				
GET AVERAGE GROUND VOLTAGE	ASCII READ COMMAND	#GAVGVAGND<CHIPNR><CR> Result: #GAVGVAGND<CHIPNR>:<ChipxVAVGNDDbl><CR>	ASCII	
	CHIPNR	1		
	TX	#1,GAVGVAGND1<CR>		
	RX	#1,GAVGVAGND1:0.00<CR>		
		Average ground voltage of CHIP1:0.00V		
This command returns for AIOX chip <CHIPNR> the average ground voltage in Volts. This must be 0, if not, there is a severe wiring or other hardware issue!				

Register NAME Command NAME	MODBUS Register ASCII Command	Register VALUE ASCII Command	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
ASCII COMMANDS						
SET CONFIG OUTPUT VALUES	ASCII WRITE COMMAND	#SCFGOVS:<IO1CfgValDbl>,<IO2CfgValDbl>,<IO3CfgValDbl>,<IO4CfgValDbl>,<IO5CfgValDbl>,<IO6CfgValDbl>,<IO7CfgValDbl>,<IO8CfgValDbl>,<IO9CfgValDbl>,<IO10CfgValDbl>,<IO11CfgValDbl>,<IO12CfgValDbl>,<IO13CfgValDbl>,<IO14CfgValDbl>,<IO15CfgValDbl>,<IO16CfgValDbl><CR> Result: #OK<CR>			ASCII	YES
	IO1Value	,000				
	IO2Value	,000				
	IO3Value	,000				
	IO4Value	,000				
	IO5Value	,000				
	IO6Value	,000				
	IO7Value	,000				
	IO8Value	,000				
	IO9Value	,000				
	IO10Value	,000				
	IO11Value	,000				
	IO12Value	,000				
	IO13Value	,000				
	IO14Value	,000				
	IO15Value	,000				
	IO16Value	,000				
	TX	#1,SCFGOVS:0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0<CR>				
	RX	N/A				
This command sets for all outputs the standard value in Volt or in mA, which are used when the controller is restartet or performing a watchdog reset and the channel is used as voltage output or current output. For voltage outputs the range is 0 to 11,0V. For current outputs the range is 0 to 25mA.						
SET CONFIG OUTPUT VALUEx	ASCII WRITE COMMAND	#SCFGOV<IONR>:<IOxCfgValueDbl><CR> Result: #OK<CR>			ASCII	YES
	IONR	16				
	IOxCfgValue	,000				
	TX	#1,SCFGOV16:0<CR>				
	RX	N/A				
This command sets for one outputs the standard value in Volt or in mA, which is used when the controller is restartet and the channel is used as voltage output or current output. For voltage outputs the range is 0 to 11,0V. For current outputs the range is 0 to 25mA.						
GET CONFIG OUTPUT VALUES	ASCII READ COMMAND	#GCFGOVS<CR> Result: #GCFGOVS:<IOVolt1Dbl>,<IOVolt2Dbl>,...,<IOVolt16Dbl><CR>			ASCII	

	TX	#1,GCFGOVS<CR>		
	RX	#1,GCFGOVS:999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99,999.99<CR>		
		Actual config value on IO1:999.99V or mA		
		Actual config value on IO2:999.99V or mA		
		Actual config value on IO3:999.99V or mA		
		Actual config value on IO4:999.99V or mA		
		Actual config value on IO5:999.99V or mA		
		Actual config value on IO6:999.99V or mA		
		Actual config value on IO7:999.99V or mA		
		Actual config value on IO8:999.99V or mA		
		Actual config value on IO9:999.99V or mA		
		Actual config value on IO10:999.99V or mA		
		Actual config value on IO11:999.99V or mA		
		Actual config value on IO12:999.99V or mA		
		Actual config value on IO13:999.99V or mA		
		Actual config value on IO14:999.99V or mA		
		Actual config value on IO15:999.99V or mA		
		Actual config value on IO16:999.99V or mA		
This command shows for all channels the current saved startup values for use as voltage or current outputs For voltage outputs the range is 0 to 11,0V. For current outputs the range is 0 to 25mA. All IOs with a different usage type will return 999.99.				
GET CONFIG OUTPUT VALUE	ASCII READ COMMAND	#GCFGOV<IONR><CR> Result: #GCFGOV<IONR>:<IOxValueDbl><CR>	ASCII	
	IONR	1		
	TX	#1,GCFGOV1<CR>		
	RX	#1,GCFGOV1:999.99<CR>		
		Actual config value on IO1:999.99V or mA		
This command shows for one channel the current saved startup value for use as voltage or current output. For voltage outputs the range is 0 to 11,0V. For current outputs the range is 0 to 25mA. All IOs with a different usage type will return 999.99.				
RESET 16AIOXCPU	ASCII WRITE COMMAND	#R16AIOXCPU<CR> Result: #OK<CR>	ASCII	NO
	TX	#1,R16AIOXCPU<CR>		
	RX	N/A		
This command restarts the internal CPU of the 16AIOX addon print. All channels will be resetted & initialized completely				

Register NAME Command NAME	MODBUS Register ASCII Command	Register VALUE ASCII Command	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
AIOX IO TYPES						
IO TYPE1	3x40001 4x40001 I:40000	0,0x0000 B:00 00		13:RTDI[OHM]	UINT16 R/W	YES
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
Current configured IO type for AIOXx =0: UNUSED =1: VOLTAGE INPUT[0-10V] =2: VOLTAGE INPUT[2-10V] =3: VOLTAGE OUTPUT[0-10V] =4: VOLTAGE OUTPUT[2-10V] =5: CURRENT INPUT LOOP POWERED[0-20mA] =6: CURRENT INPUT LOOP POWERED[4-20mA] =7: CURRENT INPUT EXTERNAL POWERED[0-20mA] =8: CURRENT INPUT EXTERNAL POWERED[4-20mA] =9: CURRENT OUTPUT[0-20mA] =10: CURRENT OUTPUT[4-20mA] =11: DIGITAL INPUT LOGIC 24V= =12: DIGITAL INPUT LOOP POWERED =13: RESISTANCE MEASUREMENT HINT: The last IO type is automatically stored in FRAM and will be used after a system restart.						
IO TYPE2	3x40002 4x40002 I:40001	0,0x0000 B:00 00		12:DI[24V;LP]	UINT16 R/W	YES
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
IO TYPE3	3x40003 4x40003 I:40002	0,0x0000 B:00 00		1:VI[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
IO TYPE4	3x40004 4x40004 I:40003	0,0x0000 B:00 00		1:VI[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
IO TYPE5	3x40005 4x40005 I:40004	0,0x0000 B:00 00		3:VO[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
IO TYPE6	3x40006 4x40006 I:40005	0,0x0000 B:00 00		3:VO[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		

IO TYPE7	3x40007 4x40007 I:40006	0,0x0000 B:00 00		3:VO[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
IO TYPE8	3x40008 4x40008 I:40007	0,0x0000 B:00 00		3:VO[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
IO TYPE9	3x40009 4x40009 I:40008	0,0x0000 B:00 00		3:VO[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
IO TYPE10	3x40010 4x40010 I:40009	0,0x0000 B:00 00		3:VO[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
IO TYPE11	3x40011 4x40011 I:40010	0,0x0000 B:00 00		3:VO[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
IO TYPE12	3x40012 4x40012 I:40011	0,0x0000 B:00 00		3:VO[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
IO TYPE13	3x40013 4x40013 I:40012	0,0x0000 B:00 00		3:VO[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
IO TYPE14	3x40014 4x40014 I:40013	0,0x0000 B:00 00		3:VO[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
IO TYPE15	3x40015 4x40015 I:40014	0,0x0000 B:00 00		3:VO[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
IO TYPE16	3x40016 4x40016 I:40015	0,0x0000 B:00 00		1:VI[0-10V]	UINT16 R/W	NO
		Actual IO type of AIOx:0:UU		CHOOSE NEW IO TYPE FROM LIST		
AIOX:VOLTAGE INPUTS						
VOLTAGE INPUT1 IN VOLTS	3x40017 4x40017 I:40016	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				

Current value of voltage input in x*100V, range 0-10V =65535,0xFFFF: The channel is not configured as voltage input						
VOLTAGE INPUT2 IN VOLTS	3x40018 4x40018 I:40017	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT3 IN VOLTS	3x40019 4x40019 I:40018	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT4 IN VOLTS	3x40020 4x40020 I:40019	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT5 IN VOLTS	3x40021 4x40021 I:40020	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT6 IN VOLTS	3x40022 4x40022 I:40021	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT7 IN VOLTS	3x40023 4x40023 I:40022	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT8 IN VOLTS	3x40024 4x40024 I:40023	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT9 IN VOLTS	3x40025 4x40025 I:40024	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT10 IN VOLTS	3x40026 4x40026 I:40025	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT11 IN VOLTS	3x40027 4x40027 I:40026	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT12 IN VOLTS	3x40028 4x40028 I:40027	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				

VOLTAGE INPUT13 IN VOLTS	3x40029 4x40029 I:40028	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT14 IN VOLTS	3x40030 4x40030 I:40029	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT15 IN VOLTS	3x40031 4x40031 I:40030	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT16 IN VOLTS	3x40032 4x40032 I:40031	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
AIOX:VOLTAGE INPUTS						
VOLTAGE INPUT1 IN PERCENT	3x40033 4x40033 I:40032	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
Current value of voltage input in x*100%, range 0-100% =65535,0xFFFF: The channel is not configured as voltage input						
VOLTAGE INPUT3 IN PERCENT	3x40034 4x40034 I:40033	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT3 IN PERCENT	3x40035 4x40035 I:40034	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT4 IN PERCENT	3x40036 4x40036 I:40035	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT5 IN PERCENT	3x40037 4x40037 I:40036	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT6 IN PERCENT	3x40038 4x40038 I:40037	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT7 IN PERCENT	3x40039 4x40039 I:40038	65535,0xFFFF B:FF FF			UINT16 R/O	

		Actual value of VIx:65535=N/V				
VOLTAGE INPUT8 IN PERCENT	3x40040 4x40040 I:40039	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT9 IN PERCENT	3x40041 4x40041 I:40040	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT10 IN PERCENT	3x40042 4x40042 I:40041	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT11 IN PERCENT	3x40043 4x40043 I:40042	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT12 IN PERCENT	3x40044 4x40044 I:40043	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT13 IN PERCENT	3x40045 4x40045 I:40044	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT14 IN PERCENT	3x40046 4x40046 I:40045	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT15 IN PERCENT	3x40047 4x40047 I:40046	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
VOLTAGE INPUT16 IN PERCENT	3x40048 4x40048 I:40047	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
AIOX:VOLTAGE OUTPUTS						
VOLTAGE OUTPUT1 IN VOLTS	3x40049 4x40049 I:40048	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
Current value of voltage output in x*100V, range 0-11V =65535,0xFFFF: The channel is not configured as voltage output Writing a new value onto this register sets voltage output x to a new output value in Volt						

VOLTAGE OUTPUT2 IN VOLTS	3x40050 4x40050 I:40049	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT3 IN VOLTS	3x40051 4x40051 I:40050	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT4 IN VOLTS	3x40052 4x40052 I:40051	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT5 IN VOLTS	3x40053 4x40053 I:40052	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT6 IN VOLTS	3x40054 4x40054 I:40053	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT7 IN VOLTS	3x40055 4x40055 I:40054	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT8 IN VOLTS	3x40056 4x40056 I:40055	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT9 IN VOLTS	3x40057 4x40057 I:40056	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT10 IN VOLTS	3x40058 4x40058 I:40057	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT11 IN VOLTS	3x40059 4x40059 I:40058	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT12 IN VOLTS	3x40060 4x40060 I:40059	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		

VOLTAGE OUTPUT13 IN VOLTS	3x40061 4x40061 I:40060	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT14 IN VOLTS	3x40062 4x40062 I:40061	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT15 IN VOLTS	3x40063 4x40063 I:40062	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT16 IN VOLTS	3x40064 4x40064 I:40063	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
AIOX:VOLTAGE OUTPUTS						
VOLTAGE OUTPUT1 IN PERCENT	3x40065 4x40065 I:40064	65535,0xFFFF B:FF FF	11000	110	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
Current value of voltage output in x*100%, range 0-110% (100%=10V) =65535,0xFFFF: The channel is not configured as voltage output Writing a new value onto this register sets voltage output x to a new output value in percent						
VOLTAGE OUTPUT2 IN PERCENT	3x40066 4x40066 I:40065	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT3 IN PERCENT	3x40067 4x40067 I:40066	65535,0xFFFF B:FF FF	3000	30	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT4 IN PERCENT	3x40068 4x40068 I:40067	65535,0xFFFF B:FF FF	7500	75	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT5 IN PERCENT	3x40069 4x40069 I:40068	65535,0xFFFF B:FF FF	0	0	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT6 IN PERCENT	3x40070 4x40070 I:40069	65535,0xFFFF B:FF FF	0	0	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		

VOLTAGE OUTPUT7 IN PERCENT	3x40071 4x40071 I:40070	65535,0xFFFF B:FF FF	0	0	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT8 IN PERCENT	3x40072 4x40072 I:40071	65535,0xFFFF B:FF FF	0	0	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT9 IN PERCENT	3x40073 4x40073 I:40072	65535,0xFFFF B:FF FF	0	0	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT10 IN PERCENT	3x40074 4x40074 I:40073	65535,0xFFFF B:FF FF	0	0	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT11 IN PERCENT	3x40075 4x40075 I:40074	65535,0xFFFF B:FF FF	0	0	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT12 IN PERCENT	3x40076 4x40076 I:40075	65535,0xFFFF B:FF FF	0	0	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT13 IN PERCENT	3x40077 4x40077 I:40076	65535,0xFFFF B:FF FF	0	0	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT14 IN PERCENT	3x40078 4x40078 I:40077	65535,0xFFFF B:FF FF	0	0	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT15 IN PERCENT	3x40079 4x40079 I:40078	65535,0xFFFF B:FF FF	0	0	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
VOLTAGE OUTPUT16 IN PERCENT	3x40080 4x40080 I:40079	65535,0xFFFF B:FF FF	0	0	UINT16 R/W	NO
		Actual value of VOx:65535=N/V		ENTER NEW VALUE FOR VOx		
AIOX:VOLTAGE OUTPUTS						
VOLTAGE OUTPUT1 MEASURED CURRENT	3x40081 4x40081 I:40080	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				

Returns the measured output current in x*100mA on voltage output VOx, Range -25mA..+25mA =-32768,0x8000: The channel is not configured as voltage output						
VOLTAGE OUTPUT2 MEASURED CURRENT	3x40082 4x40082 I:40081	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
VOLTAGE OUTPUT3 MEASURED CURRENT	3x40083 4x40083 I:40082	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
VOLTAGE OUTPUT4 MEASURED CURRENT	3x40084 4x40084 I:40083	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
VOLTAGE OUTPUT5 MEASURED CURRENT	3x40085 4x40085 I:40084	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
VOLTAGE OUTPUT6 MEASURED CURRENT	3x40086 4x40086 I:40085	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
VOLTAGE OUTPUT7 MEASURED CURRENT	3x40087 4x40087 I:40086	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
VOLTAGE OUTPUT8 MEASURED CURRENT	3x40088 4x40088 I:40087	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
VOLTAGE OUTPUT9 MEASURED CURRENT	3x40089 4x40089 I:40088	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
VOLTAGE OUTPUT10 MEASURED CURRENT	3x40090 4x40090 I:40089	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
VOLTAGE OUTPUT11 MEASURED CURRENT	3x40091 4x40091 I:40090	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
VOLTAGE OUTPUT12 MEASURED CURRENT	3x40092 4x40092 I:40091	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				

VOLTAGE OUTPUT13 MEASURED CURRENT	3x40093 4x40093 I:40092	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
VOLTAGE OUTPUT14 MEASURED CURRENT	3x40094 4x40094 I:40093	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
VOLTAGE OUTPUT15 MEASURED CURRENT	3x40095 4x40095 I:40094	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
VOLTAGE OUTPUT16 MEASURED CURRENT	3x40096 4x40096 I:40095	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of VOx:-32768=N/V				
AIOX:CURRENT INPUTS						
CURRENT INPUT1 IN MILLIAMPERE	3x40097 4x40097 I:40096	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
Current value of current input in x*100mA, range 0-25mA =65535,0xFFFF: The channel is not configured as current input						
CURRENT INPUT2 IN MILLIAMPERE	3x40098 4x40098 I:40097	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
CURRENT INPUT3 IN MILLIAMPERE	3x40099 4x40099 I:40098	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
CURRENT INPUT4 IN MILLIAMPERE	3x40100 4x40100 I:40099	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
CURRENT INPUT5 IN MILLIAMPERE	3x40101 4x40101 I:40100	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
CURRENT INPUT6 IN MILLIAMPERE	3x40102 4x40102 I:40101	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
CURRENT INPUT7 IN MILLIAMPERE	3x40103 4x40103 I:40102	65535,0xFFFF B:FF FF			UINT16 R/O	

		Actual value of VIx:65535=N/V				
CURRENT INPUT8 IN MILLIAMPERE	3x40104 4x40104 I:40103	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
CURRENT INPUT9 IN MILLIAMPERE	3x40105 4x40105 I:40104	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
CURRENT INPUT10 IN MILLIAMPERE	3x40106 4x40106 I:40105	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
CURRENT INPUT11 IN MILLIAMPERE	3x40107 4x40107 I:40106	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
CURRENT INPUT12 IN MILLIAMPERE	3x40108 4x40108 I:40107	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
CURRENT INPUT13 IN MILLIAMPERE	3x40109 4x40109 I:40108	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
CURRENT INPUT14 IN MILLIAMPERE	3x40110 4x40110 I:40109	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
CURRENT INPUT15 IN MILLIAMPERE	3x40111 4x40111 I:40110	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
CURRENT INPUT16 IN MILLIAMPERE	3x40112 4x40112 I:40111	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of VIx:65535=N/V				
AIOX:CURRENT INPUTS						
CURRENT INPUT1 IN PERCENT	3x40113 4x40113 I:40112	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
Current value of current input in x*100%, range 0-125% (100%=20mA) =65535,0xFFFF: The channel is not configured as current input						

CURRENT INPUT2 IN PERCENT	3x40114 4x40114 I:40113	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
CURRENT INPUT3 IN PERCENT	3x40115 4x40115 I:40114	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
CURRENT INPUT4 IN PERCENT	3x40116 4x40116 I:40115	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
CURRENT INPUT5 IN PERCENT	3x40117 4x40117 I:40116	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
CURRENT INPUT6 IN PERCENT	3x40118 4x40118 I:40117	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
CURRENT INPUT7 IN PERCENT	3x40119 4x40119 I:40118	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
CURRENT INPUT8 IN PERCENT	3x40120 4x40120 I:40119	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
CURRENT INPUT9 IN PERCENT	3x40121 4x40121 I:40120	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
CURRENT INPUT10 IN PERCENT	3x40122 4x40122 I:40121	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
CURRENT INPUT11 IN PERCENT	3x40123 4x40123 I:40122	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
CURRENT INPUT12 IN PERCENT	3x40124 4x40124 I:40123	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				

CURRENT INPUT13 IN PERCENT	3x40125 4x40125 I:40124	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
CURRENT INPUT14 IN PERCENT	3x40126 4x40126 I:40125	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
CURRENT INPUT15 IN PERCENT	3x40127 4x40127 I:40126	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
CURRENT INPUT16 IN PERCENT	3x40128 4x40128 I:40127	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual value of CIx:65535=N/V				
AIOX:CURRENT OUTPUTS						
CURRENT OUTPUT1 IN MILIAMPERE	3x40129 4x40129 I:40128	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
Current value of current output in x*100mA, range 0-25mA =65535,0xFFFF: The channel is not configured as current output Writing a new value onto this register sets current output x to a new output value in Milliampere						
CURRENT OUTPUT2 IN MILIAMPERE	3x40130 4x40130 I:40129	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT3 IN MILIAMPERE	3x40131 4x40131 I:40130	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT4 IN MILIAMPERE	3x40132 4x40132 I:40131	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT5 IN MILIAMPERE	3x40133 4x40133 I:40132	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT6 IN MILIAMPERE	3x40134 4x40134 I:40133	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		

CURRENT OUTPUT7 IN MILIAMPERE	3x40135 4x40135 I:40134	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT8 IN MILIAMPERE	3x40136 4x40136 I:40135	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT9 IN MILIAMPERE	3x40137 4x40137 I:40136	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT10 IN MILIAMPERE	3x40138 4x40138 I:40137	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT11 IN MILIAMPERE	3x40139 4x40139 I:40138	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT12 IN MILIAMPERE	3x40140 4x40140 I:40139	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT13 IN MILIAMPERE	3x40141 4x40141 I:40140	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT14 IN MILIAMPERE	3x40142 4x40142 I:40141	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT15 IN MILIAMPERE	3x40143 4x40143 I:40142	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT16 IN MILIAMPERE	3x40144 4x40144 I:40143	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
AIOX:CURRENT OUTPUTS						
CURRENT OUTPUT1 IN PERCENT	3x40145 4x40145 I:40144	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		

Current value of current output in x*100%, range 0-125% (100%=20mA) =65535,0xFFFF: The channel is not configured as current output Writing a new value onto this register sets current output x to a new output value in percent						
CURRENT OUTPUT2 IN PERCENT	3x40146 4x40146 I:40145	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT3 IN PERCENT	3x40147 4x40147 I:40146	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT4 IN PERCENT	3x40148 4x40148 I:40147	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT5 IN PERCENT	3x40149 4x40149 I:40148	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT6 IN PERCENT	3x40150 4x40150 I:40149	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT7 IN PERCENT	3x40151 4x40151 I:40150	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT8 IN PERCENT	3x40152 4x40152 I:40151	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT9 IN PERCENT	3x40153 4x40153 I:40152	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT10 IN PERCENT	3x40154 4x40154 I:40153	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT11 IN PERCENT	3x40155 4x40155 I:40154	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		

CURRENT OUTPUT12 IN PERCENT	3x40156 4x40156 I:40155	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT13 IN PERCENT	3x40157 4x40157 I:40156	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT14 IN PERCENT	3x40158 4x40158 I:40157	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT15 IN PERCENT	3x40159 4x40159 I:40158	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
CURRENT OUTPUT16 IN PERCENT	3x40160 4x40160 I:40159	65535,0xFFFF B:FF FF	5000	50	UINT16 R/W	NO
		Actual value of COx:65535=N/V		ENTER NEW VALUE FOR COx		
AIOX:CURRENT OUTPUTS						
CURRENT OUTPUT1 MEASURED VOLTS	3x40161 4x40161 I:40160	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
Current measured output voltage for current output x*100V, range 0-10V =65535,0xFFFF: The channel is not configured as current output						
CURRENT OUTPUT2 MEASURED VOLTS	3x40162 4x40162 I:40161	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT3 MEASURED VOLTS	3x40163 4x40163 I:40162	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT4 MEASURED VOLTS	3x40164 4x40164 I:40163	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT5 MEASURED VOLTS	3x40165 4x40165 I:40164	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT6 MEASURED VOLTS	3x40166 4x40166 I:40165	65535,0xFFFF B:FF FF			UINT16 R/O	

		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT7 MEASURED VOLTS	3x40167 4x40167 I:40166	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT8 MEASURED VOLTS	3x40168 4x40168 I:40167	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT9 MEASURED VOLTS	3x40169 4x40169 I:40168	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT10 MEASURED VOLTS	3x40170 4x40170 I:40169	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT11 MEASURED VOLTS	3x40171 4x40171 I:40170	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT12 MEASURED VOLTS	3x40172 4x40172 I:40171	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT13 MEASURED VOLTS	3x40173 4x40173 I:40172	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT14 MEASURED VOLTS	3x40174 4x40174 I:40173	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT15 MEASURED VOLTS	3x40175 4x40175 I:40174	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
CURRENT OUTPUT16 MEASURED VOLTS	3x40176 4x40176 I:40175	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
AIOX:DIGITAL INPUTS						
DIGITAL INPUT1	3x40177 4x40177 I:40176	65535,0xFFFF B:FF FF			UINT16 R/O	

		Actual state of digital input DIx:65535=N/V				
Current measured state of digital input DIx =0: Digital input is OFF or loop is closed =1: Digital input is ON (+24V attached) or loop is open =65535,0xFFFF: The channel is not configured as digital input						
DIGITAL INPUT2	3x40178 4x40178 I:40177	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual state of digital input DIx:65535=N/V				
DIGITAL INPUT3	3x40179 4x40179 I:40178	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
DIGITAL INPUT4	3x40180 4x40180 I:40179	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
DIGITAL INPUT5	3x40181 4x40181 I:40180	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
DIGITAL INPUT6	3x40182 4x40182 I:40181	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
DIGITAL INPUT7	3x40183 4x40183 I:40182	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
DIGITAL INPUT8	3x40184 4x40184 I:40183	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
DIGITAL INPUT9	3x40185 4x40185 I:40184	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
DIGITAL INPUT10	3x40186 4x40186 I:40185	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
DIGITAL INPUT11	3x40187 4x40187 I:40186	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				

DIGITAL INPUT12	3x40188 4x40188 I:40187	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
DIGITAL INPUT13	3x40189 4x40189 I:40188	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
DIGITAL INPUT14	3x40190 4x40190 I:40189	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
DIGITAL INPUT15	3x40191 4x40191 I:40190	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
DIGITAL INPUT16	3x40192 4x40192 I:40191	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured output voltage COx:65535=N/V				
AIOX:DIGITAL INPUTS						
DIGITAL INPUT1 MEASURED CURRENT	3x40193 4x40193 I:40192	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
Returns the measured output current in x*100mA on DIGITAL INPUT VOx, Range -25mA..+25mA =-32768,0x8000: The channel is not configured as DIGITAL INPUT						
DIGITAL INPUT2 MEASURED CURRENT	3x40194 4x40194 I:40193	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT3 MEASURED CURRENT	3x40195 4x40195 I:40194	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT4 MEASURED CURRENT	3x40196 4x40196 I:40195	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT5 MEASURED CURRENT	3x40197 4x40197 I:40196	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT6 MEASURED CURRENT	3x40198 4x40198 I:40197	-32768,0x8000 B:80 00			SINT16 R/O	

		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT7 MEASURED CURRENT	3x40199 4x40199 I:40198	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT8 MEASURED CURRENT	3x40200 4x40200 I:40199	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT9 MEASURED CURRENT	3x40201 4x40201 I:40200	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT10 MEASURED CURRENT	3x40202 4x40202 I:40201	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT11 MEASURED CURRENT	3x40203 4x40203 I:40202	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT12 MEASURED CURRENT	3x40204 4x40204 I:40203	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT13 MEASURED CURRENT	3x40205 4x40205 I:40204	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT14 MEASURED CURRENT	3x40206 4x40206 I:40205	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT15 MEASURED CURRENT	3x40207 4x40207 I:40206	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				
DIGITAL INPUT16 MEASURED CURRENT	3x40208 4x40208 I:40207	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured output current of DIx:-32768=N/V				

Register NAME Command NAME	MODBUS Register ASCII Command	Register VALUE ASCII Command	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
AIOX:RTD INPUTS OHM*10						
RTD INPUT1 IN OHM*10	3x41001 4x41001 I:41000	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
Current measured RTD in Ohm*10 between 0 and 600000 =0..60000: Current measured resistance in Ohm*10 =65534,0xFFFE: The sensor or cabling is open (broken, not connected, or out of range) =65535,0xFFFF: The channel is not configured as RTD input						
RTD INPUT2 IN OHM*10	3x41002 4x41002 I:41001	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT3 IN OHM*10	3x41003 4x41003 I:41002	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT4 IN OHM*10	3x41004 4x41004 I:41003	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT5 IN OHM*10	3x41005 4x41005 I:41004	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT6 IN OHM*10	3x41006 4x41006 I:41005	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT7 IN OHM*10	3x41007 4x41007 I:41006	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT8 IN OHM*10	3x41008 4x41008 I:41007	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT9 IN OHM*10	3x41009 4x41009 I:41008	65534,0xFFFE B:FF FE			UINT16 R/O	

		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT10 IN OHM*10	3x41010 4x41010 I:41009	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT11 IN OHM*10	3x41011 4x41011 I:41010	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT12 IN OHM*10	3x41012 4x41012 I:41011	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT13 IN OHM*10	3x41013 4x41013 I:41012	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT14 IN OHM*10	3x41014 4x41014 I:41013	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT15 IN OHM*10	3x41015 4x41015 I:41014	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
RTD INPUT16 IN OHM*10	3x41016 4x41016 I:41015	65534,0xFFFE B:FF FE			UINT16 R/O	
		Actual measured ohm value of RTDIx:65534=OPEN				
AIOX:RTD INPUTS OHM*1						
RTD INPUT1 IN OHM	3x41017 4x41017 I:41016	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
Current measured RTD in Ohm*1 between 0 and 60000 =0..60000: Current measured resistance in Ohm*1 =65534,0xFFFE: The sensor or cabling is open (broken, not connected, or out of range) =65535,0xFFFF: The channel is not configured as RTD input						
RTD INPUT2 IN OHM	3x41018 4x41018 I:41017	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT3 IN OHM	3x41019 4x41019 I:41018	65535,0xFFFF B:FF FF			UINT16 R/O	

		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT4 IN OHM	3x41020 4x41020 I:41019	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT5 IN OHM	3x41021 4x41021 I:41020	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT6 IN OHM	3x41022 4x41022 I:41021	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT7 IN OHM	3x41023 4x41023 I:41022	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT8 IN OHM	3x41024 4x41024 I:41023	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT9 IN OHM	3x41025 4x41025 I:41024	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT10 IN OHM	3x41026 4x41026 I:41025	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT11 IN OHM	3x41027 4x41027 I:41026	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT12 IN OHM	3x41028 4x41028 I:41027	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT13 IN OHM	3x41029 4x41029 I:41028	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT14 IN OHM	3x41030 4x41030 I:41029	65535,0xFFFF B:FF FF			UINT16 R/O	

		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT15 IN OHM	3x41031 4x41031 I:41030	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT16 IN OHM	3x41032 4x41032 I:41031	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
AIOX:RTD INPUTS OHM/10						
RTD INPUT1 IN OHM/10	3x41033 4x41033 I:41032	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
Current measured RTD in Ohm/10 between 0 and 60000 =0..60000: Current measured resistance in Ohm/10 =65534,0xFFFE: The sensor or cabling is open (broken, not connected, or out of range) =65535,0xFFFF: The channel is not configured as RTD input						
RTD INPUT2 IN OHM/10	3x41034 4x41034 I:41033	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT3 IN OHM/10	3x41035 4x41035 I:41034	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT4 IN OHM/10	3x41036 4x41036 I:41035	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT5 IN OHM/10	3x41037 4x41037 I:41036	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT6 IN OHM/10	3x41038 4x41038 I:41037	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT7 IN OHM/10	3x41039 4x41039 I:41038	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT8 IN OHM/10	3x41040 4x41040 I:41039	65535,0xFFFF B:FF FF			UINT16 R/O	

		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT9 IN OHM/10	3x41041 4x41041 I:41040	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT10 IN OHM/10	3x41042 4x41042 I:41041	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT11 IN OHM/10	3x41043 4x41043 I:41042	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT12 IN OHM/10	3x41044 4x41044 I:41043	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT13 IN OHM/10	3x41045 4x41045 I:41044	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT14 IN OHM/10	3x41046 4x41046 I:41045	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT15 IN OHM/10	3x41047 4x41047 I:41046	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
RTD INPUT16 IN OHM/10	3x41048 4x41048 I:41047	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured ohm value of RTDIx:65535=N/V				
AIOX:RTD INPUTS PT100 CELSIUS						
RTD INPUT1 AS PT100 IN CELSIUS	3x41049 4x41049 I:41048	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
Current measured RTD sensor value linearized as PT100 sensor in Celsius*100 in the range of -5000 to +13000 for -50.0 to +130.0 °C -32766,0x8002: Measured value is below -50°C -32767,0x8001: Measured value is above +130°C -32768,0x8000: The channel is not configured as RTD input						
RTD INPUT2 AS PT100 IN CELSIUS	3x41050 4x41050 I:41049	-32768,0x8000 B:80 00			SINT16 R/O	

		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT3 AS PT100 IN CELSIUS	3x41051 4x41051 I:41050	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT4 AS PT100 IN CELSIUS	3x41052 4x41052 I:41051	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT5 AS PT100 IN CELSIUS	3x41053 4x41053 I:41052	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT6 AS PT100 IN CELSIUS	3x41054 4x41054 I:41053	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT7 AS PT100 IN CELSIUS	3x41055 4x41055 I:41054	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT8 AS PT100 IN CELSIUS	3x41056 4x41056 I:41055	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT9 AS PT100 IN CELSIUS	3x41057 4x41057 I:41056	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT10 AS PT100 IN CELSIUS	3x41058 4x41058 I:41057	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT11 AS PT100 IN CELSIUS	3x41059 4x41059 I:41058	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT12 AS PT100 IN CELSIUS	3x41060 4x41060 I:41059	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT13 AS PT100 IN CELSIUS	3x41061 4x41061 I:41060	-32768,0x8000 B:80 00			SINT16 R/O	

		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT14 AS PT100 IN CELSIUS	3x41062 4x41062 I:41061	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT15 AS PT100 IN CELSIUS	3x41063 4x41063 I:41062	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT16 AS PT100 IN CELSIUS	3x41064 4x41064 I:41063	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
AIOX:RTD INPUTS PT1000 CELSIUS						
RTD INPUT1 AS PT1000 IN CELSIUS	3x41065 4x41065 I:41064	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
Current measured RTD sensor value linearized as PT1000 sensor in Celsius*100 in the range of -5000 to +13000 for -50.0 to +130.0 °C -32766,0x8002: Measured value is below -50°C -32767,0x8001: Measured value is above +130°C -32768,0x8000: The channel is not configured as RTD input						
RTD INPUT2 AS PT1000 IN CELSIUS	3x41066 4x41066 I:41065	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT3 AS PT1000 IN CELSIUS	3x41067 4x41067 I:41066	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT4 AS PT1000 IN CELSIUS	3x41068 4x41068 I:41067	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT5 AS PT1000 IN CELSIUS	3x41069 4x41069 I:41068	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT6 AS PT1000 IN CELSIUS	3x41070 4x41070 I:41069	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT7 AS PT1000 IN CELSIUS	3x41071 4x41071 I:41070	-32768,0x8000 B:80 00			SINT16 R/O	

		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT8 AS PT1000 IN CELSIUS	3x41072 4x41072 I:41071	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT9 AS PT1000 IN CELSIUS	3x41073 4x41073 I:41072	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT10 AS PT1000 IN CELSIUS	3x41074 4x41074 I:41073	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT11 AS PT1000 IN CELSIUS	3x41075 4x41075 I:41074	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT12 AS PT1000 IN CELSIUS	3x41076 4x41076 I:41075	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT13 AS PT1000 IN CELSIUS	3x41077 4x41077 I:41076	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT14 AS PT1000 IN CELSIUS	3x41078 4x41078 I:41077	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT15 AS PT1000 IN CELSIUS	3x41079 4x41079 I:41078	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT16 AS PT1000 IN CELSIUS	3x41080 4x41080 I:41079	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
AIOX:RTD INPUTS NI1000-DIN43760 CELSIUS						
RTD INPUT1 AS NI1000-DIN43760 IN CELSIUS	3x41081 4x41081 I:41080	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				

Current measured RTD sensor value linearized as NI1000-DIN43760 sensor in Celsius*100 in the range of -5000 to +13000 for -50.0 to +130.0 °C -32766,0x8002: Measured value is below -50°C -32767,0x8001: Measured value is above +130°C -32768,0x8000: The channel is not configured as RTD input						
RTD INPUT2 AS NI1000-DIN43760 IN CELSIUS	3x41082 4x41082 I:41081	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT3 AS NI1000-DIN43760 IN CELSIUS	3x41083 4x41083 I:41082	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT4 AS NI1000-DIN43760 IN CELSIUS	3x41084 4x41084 I:41083	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT5 AS NI1000-DIN43760 IN CELSIUS	3x41085 4x41085 I:41084	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT6 AS NI1000-DIN43760 IN CELSIUS	3x41086 4x41086 I:41085	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT7 AS NI1000-DIN43760 IN CELSIUS	3x41087 4x41087 I:41086	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT8 AS NI1000-DIN43760 IN CELSIUS	3x41088 4x41088 I:41087	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT9 AS NI1000-DIN43760 IN CELSIUS	3x41089 4x41089 I:41088	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT10 AS NI1000-DIN43760 IN CELSIUS	3x41090 4x41090 I:41089	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT11 AS NI1000-DIN43760 IN CELSIUS	3x41091 4x41091 I:41090	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				

RTD INPUT12 AS NI1000-DIN43760 IN CELSIUS	3x41092 4x41092 I:41091	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT13 AS NI1000-DIN43760 IN CELSIUS	3x41093 4x41093 I:41092	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT14 AS NI1000-DIN43760 IN CELSIUS	3x41094 4x41094 I:41093	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT15 AS NI1000-DIN43760 IN CELSIUS	3x41095 4x41095 I:41094	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT16 AS NI1000-DIN43760 IN CELSIUS	3x41096 4x41096 I:41095	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AIOX:RTD INPUTS PT100 KELVIN						
RTD INPUT1 AS PT100 IN KELVIN	3x41097 4x41097 I:41096	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
Current measured RTD sensor value linearized as PT100 sensor in Kelvin*100 in the range of 22315 to 40315 for 223.15 to 403.15 °K 65533,0xFFFD: Measured value is below 223,15°K 65534,0xFFFE: Measured value is above 403,15°K 65535,0xFFFF: The channel is not configured as RTD input						
RTD INPUT2 AS PT100 IN KELVIN	3x41098 4x41098 I:41097	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
RTD INPUT3 AS PT100 IN KELVIN	3x41099 4x41099 I:41098	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
RTD INPUT4 AS PT100 IN KELVIN	3x41100 4x41100 I:41099	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
RTD INPUT5 AS PT100 IN KELVIN	3x41101 4x41101 I:41100	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				

RTD INPUT6 AS PT100 IN KELVIN	3x41102 4x41102 I:41101	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
RTD INPUT7 AS PT100 IN KELVIN	3x41103 4x41103 I:41102	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
RTD INPUT8 AS PT100 IN KELVIN	3x41104 4x41104 I:41103	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
RTD INPUT9 AS PT100 IN KELVIN	3x41105 4x41105 I:41104	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
RTD INPUT10 AS PT100 IN KELVIN	3x41106 4x41106 I:41105	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
RTD INPUT11 AS PT100 IN KELVIN	3x41107 4x41107 I:41106	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
RTD INPUT12 AS PT100 IN KELVIN	3x41108 4x41108 I:41107	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
RTD INPUT13 AS PT100 IN KELVIN	3x41109 4x41109 I:41108	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
RTD INPUT14 AS PT100 IN KELVIN	3x41110 4x41110 I:41109	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
RTD INPUT15 AS PT100 IN KELVIN	3x41111 4x41111 I:41110	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				
RTD INPUT16 AS PT100 IN KELVIN	3x41112 4x41112 I:41111	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT100 temperature RTDIx:65535=655,35°K				

AIOX:RTD INPUTS PT1000 KELVIN						
RTD INPUT1 AS PT1000 IN KELVIN	3x41113 4x41113 I:41112	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
Current measured RTD sensor value linearized as PT1000 sensor in Kelvin*100 in the range of 22315 to 40315 for 223.15 to 403.15 °K 65533,0xFFFD: Measured value is below 223,15°K 65534,0xFFFE: Measured value is above 403,15°K 65535,0xFFFF: The channel is not configured as RTD input						
RTD INPUT2 AS PT1000 IN KELVIN	3x41114 4x41114 I:41113	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
RTD INPUT3 AS PT1000 IN KELVIN	3x41115 4x41115 I:41114	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
RTD INPUT4 AS PT1000 IN KELVIN	3x41116 4x41116 I:41115	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
RTD INPUT5 AS PT1000 IN KELVIN	3x41117 4x41117 I:41116	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
RTD INPUT6 AS PT1000 IN KELVIN	3x41118 4x41118 I:41117	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
RTD INPUT7 AS PT1000 IN KELVIN	3x41119 4x41119 I:41118	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
RTD INPUT8 AS PT1000 IN KELVIN	3x41120 4x41120 I:41119	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
RTD INPUT9 AS PT1000 IN KELVIN	3x41121 4x41121 I:41120	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
RTD INPUT10 AS PT1000 IN KELVIN	3x41122 4x41122 I:41121	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				

RTD INPUT11 AS PT1000 IN KELVIN	3x41123 4x41123 I:41122	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
RTD INPUT12 AS PT1000 IN KELVIN	3x41124 4x41124 I:41123	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
RTD INPUT13 AS PT1000 IN KELVIN	3x41125 4x41125 I:41124	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
RTD INPUT14 AS PT1000 IN KELVIN	3x41126 4x41126 I:41125	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
RTD INPUT15 AS PT1000 IN KELVIN	3x41127 4x41127 I:41126	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
RTD INPUT16 AS PT1000 IN KELVIN	3x41128 4x41128 I:41127	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured PT1000 temperature RTDIx:65535=655,35°K				
AIOX:RTD INPUTS NI1000-DIN43760 KELVIN						
RTD INPUT1 AS NI1000-DIN43760 IN KELVIN	3x41129 4x41129 I:41128	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
Current measured RTD sensor value linearized as NI1000-DIN43760 sensor in Kelvin*100 in the range of 22315 to 40315 for 223.15 to 403.15 °K 65533,0xFFFD: Measured value is below 223,15°K 65534,0xFFFE: Measured value is above 403,15°K 65535,0xFFFF: The channel is not configured as RTD input						
RTD INPUT2 AS NI1000-DIN43760 IN KELVIN	3x41130 4x41130 I:41129	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
RTD INPUT3 AS NI1000-DIN43760 IN KELVIN	3x41131 4x41131 I:41130	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
RTD INPUT4 AS NI1000-DIN43760 IN KELVIN	3x41132 4x41132 I:41131	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				

RTD INPUT5 AS NI1000-DIN43760 IN KELVIN	3x41133 4x41133 I:41132	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
RTD INPUT6 AS NI1000-DIN43760 IN KELVIN	3x41134 4x41134 I:41133	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
RTD INPUT7 AS NI1000-DIN43760 IN KELVIN	3x41135 4x41135 I:41134	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
RTD INPUT8 AS NI1000-DIN43760 IN KELVIN	3x41136 4x41136 I:41135	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
RTD INPUT9 AS NI1000-DIN43760 IN KELVIN	3x41137 4x41137 I:41136	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
RTD INPUT10 AS NI1000-DIN43760 IN KELVIN	3x41138 4x41138 I:41137	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
RTD INPUT11 AS NI1000-DIN43760 IN KELVIN	3x41139 4x41139 I:41138	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
RTD INPUT12 AS NI1000-DIN43760 IN KELVIN	3x41140 4x41140 I:41139	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
RTD INPUT13 AS NI1000-DIN43760 IN KELVIN	3x41141 4x41141 I:41140	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
RTD INPUT14 AS NI1000-DIN43760 IN KELVIN	3x41142 4x41142 I:41141	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
RTD INPUT15 AS NI1000-DIN43760 IN KELVIN	3x41143 4x41143 I:41142	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				

RTD INPUT16 AS NI1000-DIN43760 IN KELVIN	3x41144 4x41144 I:41143	65535,0xFFFF B:FF FF			UINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AIOX:RTD INPUTS PT100 FAHRENHEIT						
RTD INPUT1 AS PT100 IN FAHRENHEIT	3x41145 4x41145 I:41144	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
Current measured RTD sensor value linearized as PT100 sensor in Fahrenheit*100 in the range of -5800 to +26600 for -58.0 to +266.0 °F -32766,0x8002: Measured value is below -58°C -32767,0x8001: Measured value is above +266°C -32768,0x8000: The channel is not configured as RTD input						
RTD INPUT2 AS PT100 IN FAHRENHEIT	3x41146 4x41146 I:41145	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT3 AS PT100 IN FAHRENHEIT	3x41147 4x41147 I:41146	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT4 AS PT100 IN FAHRENHEIT	3x41148 4x41148 I:41147	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT5 AS PT100 IN FAHRENHEIT	3x41149 4x41149 I:41148	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT6 AS PT100 IN FAHRENHEIT	3x41150 4x41150 I:41149	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT7 AS PT100 IN FAHRENHEIT	3x41151 4x41151 I:41150	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT8 AS PT100 IN FAHRENHEIT	3x41152 4x41152 I:41151	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT9 AS PT100 IN FAHRENHEIT	3x41153 4x41153 I:41152	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				

RTD INPUT10 AS PT100 IN FAHRENHEIT	3x41154 4x41154 I:41153	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT11 AS PT100 IN FAHRENHEIT	3x41155 4x41155 I:41154	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT12 AS PT100 IN FAHRENHEIT	3x41156 4x41156 I:41155	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT13 AS PT100 IN FAHRENHEIT	3x41157 4x41157 I:41156	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT14 AS PT100 IN FAHRENHEIT	3x41158 4x41158 I:41157	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT15 AS PT100 IN FAHRENHEIT	3x41159 4x41159 I:41158	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
RTD INPUT16 AS PT100 IN FAHRENHEIT	3x41160 4x41160 I:41159	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT100 temperature RTDIx:-32768=N/V				
AIOX:RTD INPUTS PT1000 FAHRENHEIT						
RTD INPUT1 AS PT1000 IN FAHRENHEIT	3x41161 4x41161 I:41160	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
Current measured RTD sensor value linearized as PT1000 sensor in Fahrenheit*100 in the range of -5800 to +26600 for -58.0 to +266.0 °F -32766,0x8002: Measured value is below -58°C -32767,0x8001: Measured value is above +266°C -32768,0x8000: The channel is not configured as RTD input						
RTD INPUT2 AS PT1000 IN FAHRENHEIT	3x41162 4x41162 I:41161	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT3 AS PT1000 IN FAHRENHEIT	3x41163 4x41163 I:41162	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				

RTD INPUT4 AS PT1000 IN FAHRENHEIT	3x41164 4x41164 I:41163	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT5 AS PT1000 IN FAHRENHEIT	3x41165 4x41165 I:41164	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT6 AS PT1000 IN FAHRENHEIT	3x41166 4x41166 I:41165	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT7 AS PT1000 IN FAHRENHEIT	3x41167 4x41167 I:41166	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT8 AS PT1000 IN FAHRENHEIT	3x41168 4x41168 I:41167	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT9 AS PT1000 IN FAHRENHEIT	3x41169 4x41169 I:41168	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT10 AS PT1000 IN FAHRENHEIT	3x41170 4x41170 I:41169	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT11 AS PT1000 IN FAHRENHEIT	3x41171 4x41171 I:41170	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT12 AS PT1000 IN FAHRENHEIT	3x41172 4x41172 I:41171	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT13 AS PT1000 IN FAHRENHEIT	3x41173 4x41173 I:41172	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT14 AS PT1000 IN FAHRENHEIT	3x41174 4x41174 I:41173	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				

RTD INPUT15 AS PT1000 IN FAHRENHEIT	3x41175 4x41175 I:41174	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
RTD INPUT16 AS PT1000 IN FAHRENHEIT	3x41176 4x41176 I:41175	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured PT1000 temperature RTDIx:-32768=N/V				
AIOX:RTD INPUTS NI1000-DIN43760 FAHRENHEIT						
RTD INPUT1 AS NI1000-DIN43760 IN FAHRENHEIT	3x41177 4x41177 I:41176	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
Current measured RTD sensor value linearized as NI1000-DIN43760 sensor in Fahrenheit*100 in the range of -5800 to +26600 for -58.0 to +266.0 °F -32766,0x8002: Measured value is below -58°C -32767,0x8001: Measured value is above +266°C -32768,0x8000: The channel is not configured as RTD input						
RTD INPUT2 AS NI1000-DIN43760 IN FAHRENHEIT	3x41178 4x41178 I:41177	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT3 AS NI1000-DIN43760 IN FAHRENHEIT	3x41179 4x41179 I:41178	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT4 AS NI1000-DIN43760 IN FAHRENHEIT	3x41180 4x41180 I:41179	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT5 AS NI1000-DIN43760 IN FAHRENHEIT	3x41181 4x41181 I:41180	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT6 AS NI1000-DIN43760 IN FAHRENHEIT	3x41182 4x41182 I:41181	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT7 AS NI1000-DIN43760 IN FAHRENHEIT	3x41183 4x41183 I:41182	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT8 AS NI1000-DIN43760 IN FAHRENHEIT	3x41184 4x41184 I:41183	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				

RTD INPUT9 AS NI1000-DIN43760 IN FAHRENHEIT	3x41185 4x41185 I:41184	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT10 AS NI1000-DIN43760 IN FAHRENHEIT	3x41186 4x41186 I:41185	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT11 AS NI1000-DIN43760 IN FAHRENHEIT	3x41187 4x41187 I:41186	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT12 AS NI1000-DIN43760 IN FAHRENHEIT	3x41188 4x41188 I:41187	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT13 AS NI1000-DIN43760 IN FAHRENHEIT	3x41189 4x41189 I:41188	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT14 AS NI1000-DIN43760 IN FAHRENHEIT	3x41190 4x41190 I:41189	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT15 AS NI1000-DIN43760 IN FAHRENHEIT	3x41191 4x41191 I:41190	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				
RTD INPUT16 AS NI1000-DIN43760 IN FAHRENHEIT	3x41192 4x41192 I:41191	-32768,0x8000 B:80 00			SINT16 R/O	
		Actual measured NI1000-DIN43760 temperature RTDIx:-32768=N/V				

AIOX:RTD INPUTS OHM*100						
RTD INPUT1 IN OHM*100	3x41501 4x41501 I:41500	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
Current measured RTD in Ohm*100 =0xFFFFFFFF: The channel is not configured as RTD input						
RTD INPUT2 IN OHM*100	3x41503 4x41503 I:41502	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				

RTD INPUT3 IN OHM*100	3x41505 4x41505 I:41504	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT4 IN OHM*100	3x41507 4x41507 I:41506	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT5 IN OHM*100	3x41509 4x41509 I:41508	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT6 IN OHM*100	3x41511 4x41511 I:41510	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT7 IN OHM*100	3x41513 4x41513 I:41512	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT8 IN OHM*100	3x41515 4x41515 I:41514	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT9 IN OHM*100	3x41517 4x41517 I:41516	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT10 IN OHM*100	3x41519 4x41519 I:41518	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT11 IN OHM*100	3x41521 4x41521 I:41520	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT12 IN OHM*100	3x41523 4x41523 I:41522	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT13 IN OHM*100	3x41525 4x41525 I:41524	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				

RTD INPUT14 IN OHM*100	3x41527 4x41527 I:41526	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT15 IN OHM*100	3x41529 4x41529 I:41528	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT16 IN OHM*100	3x41531 4x41531 I:41530	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
AIOX:RTD INPUTS OHM*100						
RTD INPUT1 IN OHM*100	3x41533 4x41533 I:41532	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
Current measured RTD in Ohm*100 =0xFFFFFFFF: The channel is not configured as RTD input						
RTD INPUT2 IN OHM*100	3x41535 4x41535 I:41534	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT3 IN OHM*100	3x41537 4x41537 I:41536	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT4 IN OHM*100	3x41539 4x41539 I:41538	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT5 IN OHM*100	3x41541 4x41541 I:41540	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT6 IN OHM*100	3x41543 4x41543 I:41542	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT7 IN OHM*100	3x41545 4x41545 I:41544	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				

RTD INPUT8 IN OHM*100	3x41547 4x41547 I:41546	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT9 IN OHM*100	3x41549 4x41549 I:41548	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT10 IN OHM*100	3x41551 4x41551 I:41550	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT11 IN OHM*100	3x41553 4x41553 I:41552	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT12 IN OHM*100	3x41555 4x41555 I:41554	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT13 IN OHM*100	3x41557 4x41557 I:41556	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT14 IN OHM*100	3x41559 4x41559 I:41558	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT15 IN OHM*100	3x41561 4x41561 I:41560	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				
RTD INPUT16 IN OHM*100	3x41563 4x41563 I:41562	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Actual measured ohm value of RTDIx:-1=N/V				

Register NAME Command NAME	MODBUS Register ASCII Command	Register VALUE ASCII Command	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
AIOX:AVERAGE RTD INPUTS OHM*10						
AVERAGE RTD INPUT1 IN OHM*10	3x42001 4x42001 I:42000	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
Measured average RTD in Ohm*10 between 0 and 600000 =0..60000: Measured average resistance in Ohm*10 =65534,0xFFFE: The sensor or cabling is open (broken, not connected, or out of range) =65535,0xFFFF: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 IN OHM*10	3x42002 4x42002 I:42001	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT3 IN OHM*10	3x42003 4x42003 I:42002	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT4 IN OHM*10	3x42004 4x42004 I:42003	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT5 IN OHM*10	3x42005 4x42005 I:42004	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT6 IN OHM*10	3x42006 4x42006 I:42005	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT7 IN OHM*10	3x42007 4x42007 I:42006	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT8 IN OHM*10	3x42008 4x42008 I:42007	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT9 IN OHM*10	3x42009 4x42009 I:42008	65535,0xFFFF B:FF FF			UINT16 R/O	

		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT10 IN OHM*10	3x42010 4x42010 I:42009	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT11 IN OHM*10	3x42011 4x42011 I:42010	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT12 IN OHM*10	3x42012 4x42012 I:42011	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT13 IN OHM*10	3x42013 4x42013 I:42012	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT14 IN OHM*10	3x42014 4x42014 I:42013	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT15 IN OHM*10	3x42015 4x42015 I:42014	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT16 IN OHM*10	3x42016 4x42016 I:42015	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AIOX:AVERAGE RTD INPUTS OHM*1						
AVERAGE RTD INPUT1 IN OHM	3x42017 4x42017 I:42016	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
Measured average RTD in Ohm*1 between 0 and 60000 =0..60000: Measured average resistance in Ohm*1 =65534,0xFFFE: The sensor or cabling is open (broken, not connected, or out of range) =65535,0xFFFF: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 IN OHM	3x42018 4x42018 I:42017	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT3 IN OHM	3x42019 4x42019 I:42018	65535,0xFFFF B:FF FF			UINT16 R/O	

		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT4 IN OHM	3x42020 4x42020 I:42019	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT5 IN OHM	3x42021 4x42021 I:42020	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT6 IN OHM	3x42022 4x42022 I:42021	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT7 IN OHM	3x42023 4x42023 I:42022	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT8 IN OHM	3x42024 4x42024 I:42023	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT9 IN OHM	3x42025 4x42025 I:42024	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT10 IN OHM	3x42026 4x42026 I:42025	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT11 IN OHM	3x42027 4x42027 I:42026	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT12 IN OHM	3x42028 4x42028 I:42027	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT13 IN OHM	3x42029 4x42029 I:42028	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT14 IN OHM	3x42030 4x42030 I:42029	65535,0xFFFF B:FF FF			UINT16 R/O	

		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT15 IN OHM	3x42031 4x42031 I:42030	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT16 IN OHM	3x42032 4x42032 I:42031	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AIOX:AVERAGE RTD INPUTS OHM/10						
AVERAGE RTD INPUT1 IN OHM/10	3x42033 4x42033 I:42032	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
Measured average RTD in Ohm/10 between 0 and 60000 =0..60000: Measured average resistance in Ohm/10 =65534,0xFFFE: The sensor or cabling is open (broken, not connected, or out of range) =65535,0xFFFF: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 IN OHM/10	3x42034 4x42034 I:42033	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT3 IN OHM/10	3x42035 4x42035 I:42034	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT4 IN OHM/10	3x42036 4x42036 I:42035	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT5 IN OHM/10	3x42037 4x42037 I:42036	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT6 IN OHM/10	3x42038 4x42038 I:42037	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT7 IN OHM/10	3x42039 4x42039 I:42038	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT8 IN OHM/10	3x42040 4x42040 I:42039	65535,0xFFFF B:FF FF			UINT16 R/O	

		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT9 IN OHM/10	3x42041 4x42041 I:42040	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT10 IN OHM/10	3x42042 4x42042 I:42041	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT11 IN OHM/10	3x42043 4x42043 I:42042	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT12 IN OHM/10	3x42044 4x42044 I:42043	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT13 IN OHM/10	3x42045 4x42045 I:42044	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT14 IN OHM/10	3x42046 4x42046 I:42045	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT15 IN OHM/10	3x42047 4x42047 I:42046	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AVERAGE RTD INPUT16 IN OHM/10	3x42048 4x42048 I:42047	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average ohm value of RTDIx:65535=N/V				
AIOX:AVERAGE RTD INPUTS PT100 CELSIUS						
AVERAGE RTD INPUT1 AS PT100 IN CELSIUS	3x42049 4x42049 I:42048	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
Calculated average value of RTD sensor value linearized as PT100 sensor in Celsius*100 in the range of -5000 to +13000 for -50.0 to +130.0 °C -32766,0x8002: Measured value is below -50°C -32767,0x8001: Measured value is above +130°C -32768,0x8000: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 AS PT100 IN CELSIUS	3x42050 4x42050 I:42049	-32768,0x8000 B:80 00			SINT16 R/O	

		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT3 AS PT100 IN CELSIUS	3x42051 4x42051 I:42050	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT4 AS PT100 IN CELSIUS	3x42052 4x42052 I:42051	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT5 AS PT100 IN CELSIUS	3x42053 4x42053 I:42052	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT6 AS PT100 IN CELSIUS	3x42054 4x42054 I:42053	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT7 AS PT100 IN CELSIUS	3x42055 4x42055 I:42054	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT8 AS PT100 IN CELSIUS	3x42056 4x42056 I:42055	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT9 AS PT100 IN CELSIUS	3x42057 4x42057 I:42056	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT10 AS PT100 IN CELSIUS	3x42058 4x42058 I:42057	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT11 AS PT100 IN CELSIUS	3x42059 4x42059 I:42058	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT12 AS PT100 IN CELSIUS	3x42060 4x42060 I:42059	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT13 AS PT100 IN CELSIUS	3x42061 4x42061 I:42060	-32768,0x8000 B:80 00			SINT16 R/O	

		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT14 AS PT100 IN CELSIUS	3x42062 4x42062 I:42061	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT15 AS PT100 IN CELSIUS	3x42063 4x42063 I:42062	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT16 AS PT100 IN CELSIUS	3x42064 4x42064 I:42063	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AIOX:AVERAGE RTD INPUTS PT1000 CELSIUS						
AVERAGE RTD INPUT1 AS PT1000 IN CELSIUS	3x42065 4x42065 I:42064	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
Calculated average value of RTD sensor value linearized as PT1000 sensor in Celsius*100 in the range of -5000 to +13000 for -50.0 to +130.0 °C -32766,0x8002: Measured value is below -50°C -32767,0x8001: Measured value is above +130°C -32768,0x8000: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 AS PT1000 IN CELSIUS	3x42066 4x42066 I:42065	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT3 AS PT1000 IN CELSIUS	3x42067 4x42067 I:42066	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT4 AS PT1000 IN CELSIUS	3x42068 4x42068 I:42067	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT5 AS PT1000 IN CELSIUS	3x42069 4x42069 I:42068	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT6 AS PT1000 IN CELSIUS	3x42070 4x42070 I:42069	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT7 AS PT1000 IN CELSIUS	3x42071 4x42071 I:42070	-32768,0x8000 B:80 00			SINT16 R/O	

		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT8 AS PT1000 IN CELSIUS	3x42072 4x42072 I:42071	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT9 AS PT1000 IN CELSIUS	3x42073 4x42073 I:42072	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT10 AS PT1000 IN CELSIUS	3x42074 4x42074 I:42073	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT11 AS PT1000 IN CELSIUS	3x42075 4x42075 I:42074	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT12 AS PT1000 IN CELSIUS	3x42076 4x42076 I:42075	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT13 AS PT1000 IN CELSIUS	3x42077 4x42077 I:42076	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT14 AS PT1000 IN CELSIUS	3x42078 4x42078 I:42077	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT15 AS PT1000 IN CELSIUS	3x42079 4x42079 I:42078	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT16 AS PT1000 IN CELSIUS	3x42080 4x42080 I:42079	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AIOX:AVERAGE RTD INPUTS NI1000-DIN43760 CELSIUS						
AVERAGE RTD INPUT1 AS NI1000-DIN43760 IN CELSIUS	3x42081 4x42081 I:42080	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				

Calculated average value of RTD sensor value linearized as NI1000-DIN43760 sensor in Celsius*100 in the range of -5000 to +13000 for -50.0 to +130.0 °C -32766,0x8002: Measured value is below -50°C -32767,0x8001: Measured value is above +130°C -32768,0x8000: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 AS NI1000-DIN43760 IN CELSIUS	3x42082 4x42082 I:42081	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT3 AS NI1000-DIN43760 IN CELSIUS	3x42083 4x42083 I:42082	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT4 AS NI1000-DIN43760 IN CELSIUS	3x42084 4x42084 I:42083	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT5 AS NI1000-DIN43760 IN CELSIUS	3x42085 4x42085 I:42084	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT6 AS NI1000-DIN43760 IN CELSIUS	3x42086 4x42086 I:42085	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT7 AS NI1000-DIN43760 IN CELSIUS	3x42087 4x42087 I:42086	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT8 AS NI1000-DIN43760 IN CELSIUS	3x42088 4x42088 I:42087	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT9 AS NI1000-DIN43760 IN CELSIUS	3x42089 4x42089 I:42088	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT10 AS NI1000-DIN43760 IN CELSIUS	3x42090 4x42090 I:42089	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT11 AS NI1000-DIN43760 IN CELSIUS	3x42091 4x42091 I:42090	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				

AVERAGE RTD INPUT12 AS NI1000-DIN43760 IN CELSIUS	3x42092 4x42092 I:42091	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT13 AS NI1000-DIN43760 IN CELSIUS	3x42093 4x42093 I:42092	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT14 AS NI1000-DIN43760 IN CELSIUS	3x42094 4x42094 I:42093	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT15 AS NI1000-DIN43760 IN CELSIUS	3x42095 4x42095 I:42094	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT16 AS NI1000-DIN43760 IN CELSIUS	3x42096 4x42096 I:42095	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AIOX:AVERAGE RTD INPUTS PT100 KELVIN						
AVERAGE RTD INPUT1 AS PT100 IN KELVIN	3x42097 4x42097 I:42096	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
Average value of measured RTD sensor linearized as PT100 sensor in Kelvin*100 in the range of 22315 to 40315 for 223.15 to 403.15 °K 65533,0xFFFD: Measured value is below 223,15°K 65534,0xFFFE: Measured value is above 403,15°K 65535,0xFFFF: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 AS PT100 IN KELVIN	3x42098 4x42098 I:42097	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT3 AS PT100 IN KELVIN	3x42099 4x42099 I:42098	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT4 AS PT100 IN KELVIN	3x42100 4x42100 I:42099	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT5 AS PT100 IN KELVIN	3x42101 4x42101 I:42100	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				

AVERAGE RTD INPUT6 AS PT100 IN KELVIN	3x42102 4x42102 I:42101	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT7 AS PT100 IN KELVIN	3x42103 4x42103 I:42102	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT8 AS PT100 IN KELVIN	3x42104 4x42104 I:42103	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT9 AS PT100 IN KELVIN	3x42105 4x42105 I:42104	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT10 AS PT100 IN KELVIN	3x42106 4x42106 I:42105	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT11 AS PT100 IN KELVIN	3x42107 4x42107 I:42106	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT12 AS PT100 IN KELVIN	3x42108 4x42108 I:42107	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT13 AS PT100 IN KELVIN	3x42109 4x42109 I:42108	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT14 AS PT100 IN KELVIN	3x42110 4x42110 I:42109	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT15 AS PT100 IN KELVIN	3x42111 4x42111 I:42110	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT16 AS PT100 IN KELVIN	3x42112 4x42112 I:42111	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT100 temperature RTDIx:65535=655,35°K				

AIOX:AVERAGE RTD INPUTS PT1000 KELVIN						
AVERAGE RTD INPUT1 AS PT1000 IN KELVIN	3x42113 4x42113 I:42112	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
Average value of measured RTD sensor linearized as PT1000 sensor in Kelvin*100 in the range of 22315 to 40315 for 223.15 to 403.15 °K 65533,0xFFFD: Measured value is below 223,15°K 65534,0xFFFE: Measured value is above 403,15°K 65535,0xFFFF: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 AS PT1000 IN KELVIN	3x42114 4x42114 I:42113	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT3 AS PT1000 IN KELVIN	3x42115 4x42115 I:42114	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT4 AS PT1000 IN KELVIN	3x42116 4x42116 I:42115	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT5 AS PT1000 IN KELVIN	3x42117 4x42117 I:42116	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT6 AS PT1000 IN KELVIN	3x42118 4x42118 I:42117	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT7 AS PT1000 IN KELVIN	3x42119 4x42119 I:42118	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT8 AS PT1000 IN KELVIN	3x42120 4x42120 I:42119	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT9 AS PT1000 IN KELVIN	3x42121 4x42121 I:42120	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT10 AS PT1000 IN KELVIN	3x42122 4x42122 I:42121	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				

AVERAGE RTD INPUT11 AS PT1000 IN KELVIN	3x42123 4x42123 I:42122	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT12 AS PT1000 IN KELVIN	3x42124 4x42124 I:42123	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT13 AS PT1000 IN KELVIN	3x42125 4x42125 I:42124	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT14 AS PT1000 IN KELVIN	3x42126 4x42126 I:42125	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT15 AS PT1000 IN KELVIN	3x42127 4x42127 I:42126	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT16 AS PT1000 IN KELVIN	3x42128 4x42128 I:42127	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average PT1000 temperature RTDIx:65535=655,35°K				
AIOX:AVERAGE RTD INPUTS NI1000-DIN43760 KELVIN						
AVERAGE RTD INPUT1 AS NI1000-DIN43760 IN KELVIN	3x42129 4x42129 I:42128	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
Average value of measured RTD sensor linearized as NI1000-DIN43760 sensor in Kelvin*100 in the range of 22315 to 40315 for 223.15 to 403.15 °K 65533,0xFFFD: Measured value is below 223,15°K 65534,0xFFFE: Measured value is above 403,15°K 65535,0xFFFF: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 AS NI1000-DIN43760 IN KELVIN	3x42130 4x42130 I:42129	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT3 AS NI1000-DIN43760 IN KELVIN	3x42131 4x42131 I:42130	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT4 AS NI1000-DIN43760 IN KELVIN	3x42132 4x42132 I:42131	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				

AVERAGE RTD INPUT5 AS NI1000-DIN43760 IN KELVIN	3x42133 4x42133 I:42132	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT6 AS NI1000-DIN43760 IN KELVIN	3x42134 4x42134 I:42133	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT7 AS NI1000-DIN43760 IN KELVIN	3x42135 4x42135 I:42134	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT8 AS NI1000-DIN43760 IN KELVIN	3x42136 4x42136 I:42135	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT9 AS NI1000-DIN43760 IN KELVIN	3x42137 4x42137 I:42136	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT10 AS NI1000-DIN43760 IN KELVIN	3x42138 4x42138 I:42137	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT11 AS NI1000-DIN43760 IN KELVIN	3x42139 4x42139 I:42138	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT12 AS NI1000-DIN43760 IN KELVIN	3x42140 4x42140 I:42139	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT13 AS NI1000-DIN43760 IN KELVIN	3x42141 4x42141 I:42140	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT14 AS NI1000-DIN43760 IN KELVIN	3x42142 4x42142 I:42141	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AVERAGE RTD INPUT15 AS NI1000-DIN43760 IN KELVIN	3x42143 4x42143 I:42142	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				

AVERAGE RTD INPUT16 AS NI1000-DIN43760 IN KELVIN	3x42144 4x42144 I:42143	65535,0xFFFF B:FF FF			UINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:65535=655,35°K				
AIOX:AVERAGE RTD INPUTS PT100 FAHRENHEIT						
AVERAGE RTD INPUT1 AS PT100 IN FAHRENHEIT	3x42145 4x42145 I:42144	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
Average value of measured RTD sensor value linearized as PT100 sensor in Fahrenheit*100 in the range of -5800 to +26600 for -58.0 to +266.0 °F -32766,0x8002: Measured value is below -58°C -32767,0x8001: Measured value is above +266°C -32768,0x8000: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 AS PT100 IN FAHRENHEIT	3x42146 4x42146 I:42145	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT3 AS PT100 IN FAHRENHEIT	3x42147 4x42147 I:42146	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT4 AS PT100 IN FAHRENHEIT	3x42148 4x42148 I:42147	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT5 AS PT100 IN FAHRENHEIT	3x42149 4x42149 I:42148	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT6 AS PT100 IN FAHRENHEIT	3x42150 4x42150 I:42149	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT7 AS PT100 IN FAHRENHEIT	3x42151 4x42151 I:42150	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT8 AS PT100 IN FAHRENHEIT	3x42152 4x42152 I:42151	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT9 AS PT100 IN FAHRENHEIT	3x42153 4x42153 I:42152	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				

AVERAGE RTD INPUT10 AS PT100 IN FAHRENHEIT	3x42154 4x42154 I:42153	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT11 AS PT100 IN FAHRENHEIT	3x42155 4x42155 I:42154	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT12 AS PT100 IN FAHRENHEIT	3x42156 4x42156 I:42155	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT13 AS PT100 IN FAHRENHEIT	3x42157 4x42157 I:42156	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT14 AS PT100 IN FAHRENHEIT	3x42158 4x42158 I:42157	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT15 AS PT100 IN FAHRENHEIT	3x42159 4x42159 I:42158	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT16 AS PT100 IN FAHRENHEIT	3x42160 4x42160 I:42159	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT100 temperature RTDIx:-32768=N/V				
AIOX:AVERAGE RTD INPUTS PT1000 FAHRENHEIT						
AVERAGE RTD INPUT1 AS PT1000 IN FAHRENHEIT	3x42161 4x42161 I:42160	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
Average value of measured RTD sensor value linearized as PT1000 sensor in Fahrenheit*100 in the range of -5800 to +26600 for -58.0 to +266.0 °F -32766,0x8002: Measured value is below -58°C -32767,0x8001: Measured value is above +266°C -32768,0x8000: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 AS PT1000 IN FAHRENHEIT	3x42162 4x42162 I:42161	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT3 AS PT1000 IN FAHRENHEIT	3x42163 4x42163 I:42162	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				

AVERAGE RTD INPUT4 AS PT1000 IN FAHRENHEIT	3x42164 4x42164 I:42163	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT5 AS PT1000 IN FAHRENHEIT	3x42165 4x42165 I:42164	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT6 AS PT1000 IN FAHRENHEIT	3x42166 4x42166 I:42165	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT7 AS PT1000 IN FAHRENHEIT	3x42167 4x42167 I:42166	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT8 AS PT1000 IN FAHRENHEIT	3x42168 4x42168 I:42167	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT9 AS PT1000 IN FAHRENHEIT	3x42169 4x42169 I:42168	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT10 AS PT1000 IN FAHRENHEIT	3x42170 4x42170 I:42169	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT11 AS PT1000 IN FAHRENHEIT	3x42171 4x42171 I:42170	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT12 AS PT1000 IN FAHRENHEIT	3x42172 4x42172 I:42171	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT13 AS PT1000 IN FAHRENHEIT	3x42173 4x42173 I:42172	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT14 AS PT1000 IN FAHRENHEIT	3x42174 4x42174 I:42173	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				

AVERAGE RTD INPUT15 AS PT1000 IN FAHRENHEIT	3x42175 4x42175 I:42174	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT16 AS PT1000 IN FAHRENHEIT	3x42176 4x42176 I:42175	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average PT1000 temperature RTDIx:-32768=N/V				
AIOX:AVERAGE RTD INPUTS NI1000-DIN43760 FAHRENHEIT						
AVERAGE RTD INPUT1 AS NI1000-DIN43760 IN FAHRENHEIT	3x42177 4x42177 I:42176	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
Average value of measured RTD sensor value linearized as NI1000-DIN43760 sensor in Fahrenheit*100 in the range of -5800 to +26600 for -58.0 to +266.0 °F -32766,0x8002: Measured value is below -58°C -32767,0x8001: Measured value is above +266°C -32768,0x8000: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 AS NI1000-DIN43760 IN FAHRENHEIT	3x42178 4x42178 I:42177	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT3 AS NI1000-DIN43760 IN FAHRENHEIT	3x42179 4x42179 I:42178	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT4 AS NI1000-DIN43760 IN FAHRENHEIT	3x42180 4x42180 I:42179	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT5 AS NI1000-DIN43760 IN FAHRENHEIT	3x42181 4x42181 I:42180	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT6 AS NI1000-DIN43760 IN FAHRENHEIT	3x42182 4x42182 I:42181	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT7 AS NI1000-DIN43760 IN FAHRENHEIT	3x42183 4x42183 I:42182	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT8 AS NI1000-DIN43760 IN FAHRENHEIT	3x42184 4x42184 I:42183	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				

AVERAGE RTD INPUT9 AS NI1000-DIN43760 IN FAHRENHEIT	3x42185 4x42185 I:42184	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT10 AS NI1000-DIN43760 IN FAHRENHEIT	3x42186 4x42186 I:42185	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT11 AS NI1000-DIN43760 IN FAHRENHEIT	3x42187 4x42187 I:42186	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT12 AS NI1000-DIN43760 IN FAHRENHEIT	3x42188 4x42188 I:42187	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT13 AS NI1000-DIN43760 IN FAHRENHEIT	3x42189 4x42189 I:42188	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT14 AS NI1000-DIN43760 IN FAHRENHEIT	3x42190 4x42190 I:42189	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT15 AS NI1000-DIN43760 IN FAHRENHEIT	3x42191 4x42191 I:42190	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				
AVERAGE RTD INPUT16 AS NI1000-DIN43760 IN FAHRENHEIT	3x42192 4x42192 I:42191	-32768,0x8000 B:80 00			SINT16 R/O	
		Measured average NI1000-DIN43760 temperature RTDIx:-32768=N/V				

AIOX:RTD INPUTS OHM*100						
AVERAGE RTD INPUT1 IN OHM*100	3x42501 4x42501 I:42500	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
Measured average RTD in Ohm*100 =0xFFFFFFFF: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 IN OHM*100	3x42503 4x42503 I:42502	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				

AVERAGE RTD INPUT3 IN OHM*100	3x42505 4x42505 I:42504	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT4 IN OHM*100	3x42507 4x42507 I:42506	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT5 IN OHM*100	3x42509 4x42509 I:42508	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT6 IN OHM*100	3x42511 4x42511 I:42510	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT7 IN OHM*100	3x42513 4x42513 I:42512	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT8 IN OHM*100	3x42515 4x42515 I:42514	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT9 IN OHM*100	3x42517 4x42517 I:42516	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT10 IN OHM*100	3x42519 4x42519 I:42518	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT11 IN OHM*100	3x42521 4x42521 I:42520	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT12 IN OHM*100	3x42523 4x42523 I:42522	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT13 IN OHM*100	3x42525 4x42525 I:42524	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				

AVERAGE RTD INPUT14 IN OHM*100	3x42527 4x42527 I:42526	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT15 IN OHM*100	3x42529 4x42529 I:42528	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT16 IN OHM*100	3x42531 4x42531 I:42530	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32 R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AIOX:AVERAGE RTD INPUTS OHM*100						
AVERAGE RTD INPUT1 IN OHM*100	3x42533 4x42533 I:42532	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
Measured average RTD in Ohm*100 =0xFFFFFFFF: The channel is not configured as RTD input						
AVERAGE RTD INPUT2 IN OHM*100	3x42535 4x42535 I:42534	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT3 IN OHM*100	3x42537 4x42537 I:42536	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT4 IN OHM*100	3x42539 4x42539 I:42538	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT5 IN OHM*100	3x42541 4x42541 I:42540	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT6 IN OHM*100	3x42543 4x42543 I:42542	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT7 IN OHM*100	3x42545 4x42545 I:42544	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				

AVERAGE RTD INPUT8 IN OHM*100	3x42547 4x42547 I:42546	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT9 IN OHM*100	3x42549 4x42549 I:42548	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT10 IN OHM*100	3x42551 4x42551 I:42550	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT11 IN OHM*100	3x42553 4x42553 I:42552	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT12 IN OHM*100	3x42555 4x42555 I:42554	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT13 IN OHM*100	3x42557 4x42557 I:42556	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT14 IN OHM*100	3x42559 4x42559 I:42558	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT15 IN OHM*100	3x42561 4x42561 I:42560	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				
AVERAGE RTD INPUT16 IN OHM*100	3x42563 4x42563 I:42562	4294967295,0xFFFFFFFF B:FF FF FF FF			UINT32R R/O	
		Measured average ohm value of RTDIx:-1=N/V				

Register NAME Command NAME	MODBUS Register ASCII Command	Register VALUE ASCII Command	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
AIOX CHIP TEMPERATURE						
TEMPERATURE CHIP 1 IN CELSIUS	3x43001 4x43001 I:43000	464,0x01D0 B:01 D0			UINT16 R/O	
		Actual measured temperature of CHIPx:46,4°C				
Current measured chip temperature for CHIPx in x*10 °C. Each CHIP supports 4 AIOX channels.						
TEMPERATURE CHIP 2 IN CELSIUS	3x43002 4x43002 I:43001	475,0x01DB B:01 DB			UINT16 R/O	
		Actual measured temperature of CHIPx:47,5°C				
TEMPERATURE CHIP 3 IN CELSIUS	3x43003 4x43003 I:43002	456,0x01C8 B:01 C8			UINT16 R/O	
		Actual measured temperature of CHIPx:45,6°C				
TEMPERATURE CHIP 4 IN CELSIUS	3x43004 4x43004 I:43003	468,0x01D4 B:01 D4			UINT16 R/O	
		Actual measured temperature of CHIPx:46,8°C				
AIOX CHIP TEMPERATURE						
AVERAGE TEMPERATURE CHIP 1 IN CELSIUS	3x43005 4x43005 I:43004	464,0x01D0 B:01 D0			UINT16 R/O	
		Measured average temperature of CHIPx:46,4°C				
Measured average chip temperature for CHIPx in x*10 °C. Each CHIP supports 4 AIOX channels.						
AVERAGE TEMPERATURE CHIP 2 IN CELSIUS	3x43006 4x43006 I:43005	475,0x01DB B:01 DB			UINT16 R/O	
		Measured average temperature of CHIPx:47,5°C				
AVERAGE TEMPERATURE CHIP 3 IN CELSIUS	3x43007 4x43007 I:43006	456,0x01C8 B:01 C8			UINT16 R/O	
		Measured average temperature of CHIPx:45,6°C				
AVERAGE TEMPERATURE CHIP 4 IN CELSIUS	3x43008 4x43008 I:43007	467,0x01D3 B:01 D3			UINT16 R/O	
		Measured average temperature of CHIPx:46,7°C				
AIOX CHIP VOLTAGES						
Vavdd CHIP 1 IN VOLT	3x43009 4x43009 I:43008	146,0x0092 B:00 92			UINT16 R/O	
		Actual measured voltage Vavdd of CHIPx:14,6V				

Current measured voltage Vavdd for CHIPx in x*10 Volts. Each CHIP supports 4 AIOX channels. This must be >14.5V, if not, there is a severe wiring or other hardware issue!						
Vavdd CHIP 2 IN VOLT	3x43010 4x43010 I:43009	146,0x0092 B:00 92			UINT16 R/O	
		Actual measured voltage Vavdd of CHIPx:14,6V				
Vavdd CHIP 3 IN VOLT	3x43011 4x43011 I:43010	146,0x0092 B:00 92			UINT16 R/O	
		Actual measured voltage Vavdd of CHIPx:14,6V				
Vavdd CHIP 4 IN VOLT	3x43012 4x43012 I:43011	146,0x0092 B:00 92			UINT16 R/O	
		Actual measured voltage Vavdd of CHIPx:14,6V				
AIOX CHIP VOLTAGES						
AVERAGE Vavdd CHIP 1 IN VOLT	3x43013 4x43013 I:43012	146,0x0092 B:00 92			UINT16 R/O	
		Measured average voltage Vavdd of CHIPx:14,6V				
Current measured voltage Vavdd for CHIPx in x*10 Volts. Each CHIP supports 4 AIOX channels. This must be >14.5V, if not, there is a severe wiring or other hardware issue!						
AVERAGE Vavdd CHIP 2 IN VOLT	3x43014 4x43014 I:43013	146,0x0092 B:00 92			UINT16 R/O	
		Measured average voltage Vavdd of CHIPx:14,6V				
AVERAGE Vavdd CHIP 3 IN VOLT	3x43015 4x43015 I:43014	146,0x0092 B:00 92			UINT16 R/O	
		Measured average voltage Vavdd of CHIPx:14,6V				
AVERAGE Vavdd CHIP 4 IN VOLT	3x43016 4x43016 I:43015	145,0x0091 B:00 91			UINT16 R/O	
		Measured average voltage Vavdd of CHIPx:14,5V				
AIOX CHIP VOLTAGES						
Vagnd CHIP 1 IN VOLT	3x43017 4x43017 I:43016	0,0x0000 B:00 00			UINT16 R/O	
		Actual measured voltage Vagnd of CHIPx:0,0V				
Current measured voltage Vagnd for CHIPx in x*10 Volts. Each CHIP supports 4 AIOX channels. This must be 0V, if not, there is a severe wiring or other hardware issue!						
Vagnd CHIP 2 IN VOLT	3x43018 4x43018 I:43017	0,0x0000 B:00 00			UINT16 R/O	
		Actual measured voltage Vagnd of CHIPx:0,0V				

Vagnd CHIP 3 IN VOLT	3x43019 4x43019 I:43018	0,0x0000 B:00 00			UINT16 R/O	
		Actual measured voltage Vagnd of CHIPx:0,0V				
Vagnd CHIP 4 IN VOLT	3x43020 4x43020 I:43019	0,0x0000 B:00 00			UINT16 R/O	
		Actual measured voltage Vagnd of CHIPx:0,0V				
AIOX CHIP VOLTAGES						
AVERAGE Vagnd CHIP 1 IN VOLT	3x43021 4x43021 I:43020	0,0x0000 B:00 00			UINT16 R/O	
		Measured average voltage Vagnd of CHIPx:0,0V				
Current measured voltage Vagnd for CHIPx in x*10 Volts. Each CHIP supports 4 AIOX channels. This must be 0V, if not, there is a severe wiring or other hardware issue!						
AVERAGE Vagnd CHIP 2 IN VOLT	3x43022 4x43022 I:43021	0,0x0000 B:00 00			UINT16 R/O	
		Measured average voltage Vagnd of CHIPx:0,0V				
AVERAGE Vagnd CHIP 3 IN VOLT	3x43023 4x43023 I:43022	0,0x0000 B:00 00			UINT16 R/O	
		Measured average voltage Vagnd of CHIPx:0,0V				
AVERAGE Vagnd CHIP 4 IN VOLT	3x43024 4x43024 I:43023	0,0x0000 B:00 00			UINT16 R/O	
		Measured average voltage Vagnd of CHIPx:0,0V				
AIOX CHIP STATUS						
LIVE STATUS CHIP 1	3x43025 4x43025 I:43024	30720,0x7800 B:78 00			UINT16 R/O	
		Actual live status of CHIPx:7800				

Current live status for CHIPx. Each CHIP supports 4 AIOX channels. Each result bit stands for a different state: Bit 0: VI_ERR_CURR_A: Status of channel A:Voltage or current error detected on Channel A. This bit is interpreted differently depending on which of the following IO function selected: Voltage output: short-circuit error. The error condition is debounced for 2 ms before the status bit is set. Current output: open circuit error. The error condition is debounced for 2 ms before the status bit is set. Current input, loop powered: short-circuit error. A short to ground is detected Current input, externally powered: short-circuit error. A current source >25 mA is detected Bit 1: VI_ERR_CURR_B: Status of voltage input B. Same like VI_ERR_CURR_A Bit 2: VI_ERR_CURR_C: Status of voltage input C. Same like VI_ERR_CURR_A Bit 3: VI_ERR_CURR_D: Status of voltage input D. Same like VI_ERR_CURR_A Bit 4: HI_TEMP_STATUS: If the die temperature is typically at or above 115°C, the HI_TEMP_STATUS bit is asserted Bit 5: CHARGE_PUMP_STATUS: Charge pump error detected. Bit 6: ALDO5V_STATUS: ALDO5V Power Supply Monitor Error. This bit is asserted when the ALDO5V pin falls below 4.05 V. Usually ~5V. Bit 7: AVDD_STATUS: AVDD Power Supply Monitor Error. This bit is asserted when the AVDD pin falls below 9.26 V. Usually ~17V. Bit 8: DVCC_STATUS: DVCC Power Supply Monitor Error. This bit is asserted when the DVCC pin falls below 1.93 V. Usually ~3.3V. Bit 9: ALDO1V8_STATUS: ALDO1V8 Power Supply Monitor Error. This bit is asserted when the ALDO1V8 pin falls below 1.35 V. Usually ~1.8V. Bit 10-12: ADC_CH_CURR: Current converted channel of the ADC (0:A, 1:B, 2:C, 3:D, 4:Diagnostic 0, 5:Diagnostic 1, 6:Diagnostic 2, 7:Diagnostic 3) Bit 13: ADC_BUSY: ADC busy status bit. Bit 14: ADC_DATA_RDY:ADC data ready. The ADC_DATA_RDY bit asserts when a conversion cycle has completed. The bit stays asserted until a user writes 1 to clear the bit. In single conversion mode, the ADC_RDY pin follows the ADC_DATA_RDY bit and only deasserts when the ADC_DATA_RDY bit is cleared. In continuous conversion mode, the ADC_RDY pin returns high after 24 µs. Bit 15: RESERVED: Reserved						
LIVE STATUS CHIP 2	3x43026 4x43026 I:43025	24576,0x6000 B:60 00			UINT16 R/O	
		Actual live status of CHIPx:6000				
LIVE STATUS CHIP 3	3x43027 4x43027 I:43026	28672,0x7000 B:70 00			UINT16 R/O	
		Actual live status of CHIPx:7000				
LIVE STATUS CHIP 4	3x43028 4x43028 I:43027	28672,0x7000 B:70 00			UINT16 R/O	
		Actual live status of CHIPx:7000				
AIOX CHIP STATUS						
ALERT STATUS CHIP 1	3x43029 4x43029 I:43028	33792,0x8400 B:84 00			UINT16 R/O	
		Actual alert status of CHIPx:8400				

Current alert status for CHIPx. Each CHIP supports 4 AIOX channels.
Each result bit stands for a different state:
Bit 0: VI_ERR_CURR_A: Status of channel A:Voltage or current error detected on Channel A. This bit is interpreted differently depending on which of the following IO function selected:
Voltage output: short-circuit error. The error condition is debounced for 2 ms before the status bit is set.
Current output: open circuit error. The error condition is debounced for 2 ms before the status bit is set.
Current input, loop powered: short-circuit error. A short to ground is detected
Current input, externally powered: short-circuit error. A current source >25 mA is detected
Bit 1: VI_ERR_CURR_B: Status of voltage input B. Same like VI_ERR_CURR_A
Bit 2: VI_ERR_CURR_C: Status of voltage input C. Same like VI_ERR_CURR_A
Bit 3: VI_ERR_CURR_D: Status of voltage input D. Same like VI_ERR_CURR_A
Bit 4: HI_TEMP_STATUS: If the die temperature is typically at or above 115°C, the HI_TEMP_STATUS bit is asserted
Bit 5: CHARGE_PUMP_STATUS: Charge pump error detected.
Bit 6: ALDO5V_STATUS: ALDO5V Power Supply Monitor Error. This bit is asserted when the ALDO5V pin falls below 4.05 V. Usually ~5V.
Bit 7: AVDD_STATUS: AVDD Power Supply Monitor Error. This bit is asserted when the AVDD pin falls below 9.26 V. Usually ~17V.
Bit 8: DVCC_STATUS: DVCC Power Supply Monitor Error. This bit is asserted when the DVCC pin falls below 1.93 V. Usually ~3.3V.
Bit 9: ALDO1V8_STATUS: ALDO1V8 Power Supply Monitor Error. This bit is asserted when the ALDO1V8 pin falls below 1.35 V. Usually ~1.8V.
Bit 10: ADC_CONV_ERR: ADC Conversion Error. ADC results may be outside the selected measurement range.
Bit 11: ADC_SAT_ERR: ADC Saturation Error. ADC may be outside the user selected measurement range.
Bit 12: SPI_SCLK_CNT_ERR: SPI SCLK count error detected. This bit is asserted if an SPI command is applied but 32 SCLKs are not provided.
Bit 13: SPI_CRC_ERR: SPI CRC error detected. This bit is asserted if an invalid CRC is received.
Bit 14: CAL_MEM_ERR: Calibration Memory Error. This flag asserts under the following two conditions: When a calibration memory CRC error or an uncorrectable error correcting code (ECC) error is detected on the calibration memory upload. It is not possible to clear this bit if there is a CRC error or uncorrectable ECC error. It is recommended to reset the device and check the supplies in this situation. When there is an attempted SPI access to a register before the calibration memory refresh is complete. Do not address the device until the calibration memory is refreshed. Writing 1 to this bit clears the flag, if the flag is asserted due to this condition.
Bit 15: RESET_OCCURRED: Reset occurred. This bit is asserted after a reset event, which asserts the ALERT pin after the reset. Write a 1 to this bit to clear the flag. Note that a mask bit is not provided for this bit.

ALERT STATUS CHIP 2	3x43030 4x43030 I:43029	33792,0x8400 B:84 00			UINT16 R/O	
		Actual alert status of CHIPx:8400				
ALERT STATUS CHIP 3	3x43031 4x43031 I:43030	33792,0x8400 B:84 00			UINT16 R/O	
		Actual alert status of CHIPx:8400				
ALERT STATUS CHIP 4	3x43032 4x43032 I:43031	33792,0x8400 B:84 00			UINT16 R/O	
		Actual alert status of CHIPx:8400				
AIOX SPI STATUS						
SPI ERRORS CHIP 1	3x43033 4x43033 I:43032	0,0x0000 B:00 00			UINT16 R/O	
		Actual SPI error counter of CHIPx:0 error(s)				
Current SPI error counter for CHIPx. Each CHIP supports 4 AIOX channels. This command shows the acutal SPI errors since power up for every chip						
SPI ERRORS CHIP 2	3x43034 4x43034 I:43033	0,0x0000 B:00 00			UINT16 R/O	
		Actual SPI error counter of CHIPx:0 error(s)				
SPI ERRORS CHIP 3	3x43035 4x43035 I:43034	0,0x0000 B:00 00			UINT16 R/O	

		Actual SPI error counter of CHIPx:0 error(s)				
SPI ERRORS CHIP 4	3x43036 4x43036 I:43035	0,0x0000 B:00 00			UINT16 R/O	
		Actual SPI error counter of CHIPx:0 error(s)				
AIOX STATE MACHINES						
STATE MACHINE CHIP 1	3x43037 4x43037 I:43036	12070,0x2F26 B:2F 26			UINT16 R/O	
		Actual state of CHIPx:12070				
This command shows the acutal state of the internal communication state machine for CHIPx						
STATE MACHINE CHIP 2	3x43038 4x43038 I:43037	12050,0x2F12 B:2F 12			UINT16 R/O	
		Actual state of CHIPx:12050				
STATE MACHINE CHIP 3	3x43039 4x43039 I:43038	11030,0x2B16 B:2B 16			UINT16 R/O	
		Actual state of CHIPx:11030				
STATE MACHINE CHIP 4	3x43040 4x43040 I:43039	11030,0x2B16 B:2B 16			UINT16 R/O	
		Actual state of CHIPx:11030				
AIOX ONLINE						
IS ONLINE CHIP 1	3x43041 4x43041 I:43040	1,0x0001 B:00 01			UINT16 R/O	
		Is CHIPx online:1=YES				
This command shows the acutal state of the internal communication state machine for CHIPx						
IS ONLINE CHIP 2	3x43042 4x43042 I:43041	1,0x0001 B:00 01			UINT16 R/O	
		Is CHIPx online:1=YES				
IS ONLINE CHIP 3	3x43043 4x43043 I:43042	1,0x0001 B:00 01			UINT16 R/O	
		Is CHIPx online:1=YES				
IS ONLINE CHIP 4	3x43044 4x43044 I:43043	1,0x0001 B:00 01			UINT16 R/O	
		Is CHIPx online:1=YES				
AIOX CLEAR ALARM STATE						
CLEAR ALERT STATES CHIP 1	3x43045 4x43045 I:43044	0,0x0000 B:00 00	65535		UINT16 R/W	YES
		0:VI_ERR_A		1:RESET FLAG		

		1:VI_ERR_B		1:RESET FLAG		
		2:VI_ERR_C		1:RESET FLAG		
		3:VI_ERR_D		1:RESET FLAG		
		4:HI_TEMP_ERR		1:RESET FLAG		
		5:CHARGE_PUMP_ERR		1:RESET FLAG		
		6:ALDO5V_ERR		1:RESET FLAG		
		7:AVDD_ERR		1:RESET FLAG		
		8:DVCC_ERR		1:RESET FLAG		
		9:ALDO1V8_ERR		1:RESET FLAG		
		10:ADC_CONV_ERR		1:RESET FLAG		
		11:ADC_SAT_ERR		1:RESET FLAG		
		12:SPI_SCLK_ERR		1:RESET FLAG		
		13:SPI_CRC_ERR		1:RESET FLAG		
		14:CAL_MEM_ERR		1:RESET FLAG		
		15:RESET_OCCURED		1:RESET FLAG		
With this command you can reset individual alert bits in the alert status register of CHIPx						
CLEAR ALERT STATES CHIP 2	3x43046 4x43046 I:43045	0,0x0000 B:00 00	65535		UINT16 R/W	YES
		0:VI_ERR_A		1:RESET FLAG		
		1:VI_ERR_B		1:RESET FLAG		
		2:VI_ERR_C		1:RESET FLAG		
		3:VI_ERR_D		1:RESET FLAG		
		4:HI_TEMP_ERR		1:RESET FLAG		
		5:CHARGE_PUMP_ERR		1:RESET FLAG		
		6:ALDO5V_ERR		1:RESET FLAG		
		7:AVDD_ERR		1:RESET FLAG		
		8:DVCC_ERR		1:RESET FLAG		
		9:ALDO1V8_ERR		1:RESET FLAG		
		10:ADC_CONV_ERR		1:RESET FLAG		
		11:ADC_SAT_ERR		1:RESET FLAG		
		12:SPI_SCLK_ERR		1:RESET FLAG		
		13:SPI_CRC_ERR		1:RESET FLAG		
		14:CAL_MEM_ERR		1:RESET FLAG		
		15:RESET_OCCURED		1:RESET FLAG		
With this command you can reset individual alert bits in the alert status register of CHIPx						
CLEAR ALERT STATES CHIP 3	3x43047 4x43047 I:43046	0,0x0000 B:00 00	65535		UINT16 R/W	YES
		0:VI_ERR_A		1:RESET FLAG		
		1:VI_ERR_B		1:RESET FLAG		
		2:VI_ERR_C		1:RESET FLAG		
		3:VI_ERR_D		1:RESET FLAG		
		4:HI_TEMP_ERR		1:RESET FLAG		
		5:CHARGE_PUMP_ERR		1:RESET FLAG		

		6:ALDO5V_ERR		1:RESET FLAG		
		7:AVDD_ERR		1:RESET FLAG		
		8:DVCC_ERR		1:RESET FLAG		
		9:ALDO1V8_ERR		1:RESET FLAG		
		10:ADC_CONV_ERR		1:RESET FLAG		
		11:ADC_SAT_ERR		1:RESET FLAG		
		12:SPI_SCLK_ERR		1:RESET FLAG		
		13:SPI_CRC_ERR		1:RESET FLAG		
		14:CAL_MEM_ERR		1:RESET FLAG		
		15:RESET_OCCURED		1:RESET FLAG		
With this command you can reset individual alert bits in the alert status register of CHIPx						
CLEAR ALERT STATES CHIP 4	3x43048 4x43048 I:43047	0,0x0000 B:00 00	65535		UINT16 R/W	YES
		0:VI_ERR_A		1:RESET FLAG		
		1:VI_ERR_B		1:RESET FLAG		
		2:VI_ERR_C		1:RESET FLAG		
		3:VI_ERR_D		1:RESET FLAG		
		4:HI_TEMP_ERR		1:RESET FLAG		
		5:CHARGE_PUMP_ERR		1:RESET FLAG		
		6:ALDO5V_ERR		1:RESET FLAG		
		7:AVDD_ERR		1:RESET FLAG		
		8:DVCC_ERR		1:RESET FLAG		
		9:ALDO1V8_ERR		1:RESET FLAG		
		10:ADC_CONV_ERR		1:RESET FLAG		
		11:ADC_SAT_ERR		1:RESET FLAG		
		12:SPI_SCLK_ERR		1:RESET FLAG		
		13:SPI_CRC_ERR		1:RESET FLAG		
		14:CAL_MEM_ERR		1:RESET FLAG		
		15:RESET_OCCURED		1:RESET FLAG		
With this command you can reset individual alert bits in the alert status register of CHIPx						
AIOX RESET STATE MACHINE						
RESET CHIP 1 STATE MACHINE	3x43049 4x43049 I:43048	0,0x0000 B:00 00	1	1:RESET STATE MACHINE	UINT16 R/W	YES
This command restarts the state machine for chip CHIPx . The affected chip will be resetted & initialized completely						
RESET CHIP 2 STATE MACHINE	3x43050 4x43050 I:43049	0,0x0000 B:00 00	1	1:RESET STATE MACHINE	UINT16 R/W	YES
RESET CHIP 3 STATE MACHINE	3x43051 4x43051 I:43050	0,0x0000 B:00 00	1	1:RESET STATE MACHINE	UINT16 R/W	YES
RESET CHIP 4 STATE MACHINE	3x43052 4x43052 I:43051	0,0x0000 B:00 00	1	1:RESET STATE MACHINE	UINT16 R/W	YES

Register NAME Command NAME	MODBUS Register ASCII Command	Register VALUE ASCII Command	NEW REAL VALUE	NEW VALUE	DATA TYPE	DO WRITE
AIOX CONFIG OUTPUT VALUES						
CONFIG OUTPUT VALUE AIOX1	3x44001 4x44001 I:44000	65535,0xFFFF B:FF FF	100	1	UINT16 R/W	YES
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
This command sets for all outputs the standard value in Volt*100 or in mA*100, which are used when the controller is restartet or a watchdog condition has occured and the channel is used as voltage output or current output. For voltage outputs the range is 0 to 1100 (0 to 11,0V). For current outputs the range is 0 to 2500 (0 to 25mA). All IOs with a different usage type will return 65535,0xFFFF.						
CONFIG OUTPUT VALUE AIOX2	3x44002 4x44002 I:44001	65535,0xFFFF B:FF FF	200	2	UINT16 R/W	YES
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX3	3x44003 4x44003 I:44002	65535,0xFFFF B:FF FF	300	3	UINT16 R/W	YES
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX4	3x44004 4x44004 I:44003	65535,0xFFFF B:FF FF	400	4	UINT16 R/W	YES
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX5	3x44005 4x44005 I:44004	65535,0xFFFF B:FF FF	500	5	UINT16 R/W	YES
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX6	3x44006 4x44006 I:44005	65535,0xFFFF B:FF FF	600	6	UINT16 R/W	YES
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX7	3x44007 4x44007 I:44006	65535,0xFFFF B:FF FF	700	7	UINT16 R/W	YES
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX8	3x44008 4x44008 I:44007	65535,0xFFFF B:FF FF	800	8	UINT16 R/W	YES
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX9	3x44009 4x44009 I:44008	65535,0xFFFF B:FF FF	900	9	UINT16 R/W	YES

		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX10	3x44010 4x44010 I:44009	65535,0xFFFF B:FF FF	1000	10	UINT16 R/W	YES
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX11	3x44011 4x44011 I:44010	65535,0xFFFF B:FF FF	1100	11	UINT16 R/W	YES
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX12	3x44012 4x44012 I:44011	65535,0xFFFF B:FF FF	2500	25	UINT16 R/W	YES
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX13	3x44013 4x44013 I:44012	65535,0xFFFF B:FF FF	2500	25	UINT16 R/W	NO
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX14	3x44014 4x44014 I:44013	65535,0xFFFF B:FF FF	2500	25	UINT16 R/W	NO
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX15	3x44015 4x44015 I:44014	65535,0xFFFF B:FF FF	2500	25	UINT16 R/W	NO
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
CONFIG OUTPUT VALUE AIOX16	3x44016 4x44016 I:44015	65535,0xFFFF B:FF FF	2500	25	UINT16 R/W	NO
		Actual config value for AIOx:N/A		ENTER NEW CONFIG VALUE FOR AIOx		
INTER PROCESSOR COMMUNICATION						
AIOX IS ONLINE	3x50000 4x50000 I:49999	1,0x0001 B:00 01			UINT16 R/O	
		Actual communication status co-processor to AIOX processor:OK				
This command returns the actual state of the serial communication between the ARM co-processor and the additional processor for the AIOX. =1: Currently the communication is fine =0: There is a mayor problem/hardware fault between the two processors						

