CONVERTER STATUS	3x05051 4x05051 I:5050	0,0x0000 B:00 00			UINT16 R/O	
DIP SWITCH	3x10010 4x10010 I:10009	15,0x000F B:00 0F			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)						
SOFTWARE RESET						
RESET	1x06001 2x06001 I:6000	0,0x00 B:00		N/A:NO CHANGE	BIT R/W	YES
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	3x06001 4x06001 I:6000	0,0x0000 B:00 00		N/A:NO CHANGE	UINT16 R/W	YES
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).						
PRODUCT DATA						
HW_GROUP	3x65201 4x65201 I:65200	8196,0x2004 B:20 04			UINT16 R/O	
This is the group of hardware of the current product						
SW_GROUP	3x65202 4x65202 I:65201	4096,0x1000 B:10 00			UINT16 R/O	
This is the group of software of the current product						
SW_VERSION	3x65203 4x65203 I:65202	4352,0x1100 B:11 00			UINT16 R/O	
		SW VERSION:1.1.0				
This is the cuirrent software version of the firmware						
SW_AUTHOR	3x65204 4x65204 I:65203	18771,0x4953 B:49 53			UINT16 R/O	
This is the cuirrent software author of the firmware						
MODBUS SETTINGS						
UNIT_ID	3x65222 4x65222 I:65221	65535,0xFFFF B:FF FF		N/A:NO CHANGE	UINT16 R/W	NO
		UNIT ID:255				

f the host reads this register, the current programmed unit ID is returned. All values above unit ID 255 define also the unit ID 255.
If the host write a new value into this register, the new value will be stored in the FLASH as the new unit ID. The new unit ID is activated after a power off/power on cycle or a software reboot of the module.
The host can execute a reboot in writing to the register RESET SYSTEM.
NOTE:DIP switch 4 must set to OFF to activate this unit ID, otherwise the unit ID is 255.

HINT:This settings will be active after you repower or reset your device !!

BAUD_RATE	3x65223 4x65223 I:65222	4294967295,0xFFFFFFFF B:FF FF FF FF	38400	38400	UINT32 R/W	NO
		57600Bd		ENTER BAUD RATE		

This is the current configured baud rate for DIP switch mode DIP1=ON, DIP2=ON (default is 57600bd)
DIP switch settings:
DIP1-DIP2
OFF-OFF:9600bd
ON-OFF:19200bd
OFF-ON:38400bd
ON-ON:default 57600bd or the defined baud rate

Valid baud rates are:
300bd
600bd
1200bd
2400bd
4800bd
9600bd
19200bd
38400bd
all other:57600bd

HINT:This settings will be active after you repower or reset your device !!

PARITY	3x65225 4x65225 I:65224	65535,0xFFFF B:FF FF		N/A:NO CHANGE	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	3x65226 4x65226 I:65225	65535,0xFFFF B:FF FF		N/A:NO CHANGE	UINT16 R/W	NO
		ONE STOPBIT		SELECT STOPBITS		

f 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

GET VERSION	**ASCII READ COMMAND**	#VERSION<CR> #VER<CR> Result: #VERSION:<VersionHi>,<VersionMed>,<VersionLo><CR>	ASCII	
	TX	#VERSION<CR>		
	RX	#255,VERSION:1.1.0<CR>		
		Current SW version:1.1.0		
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> #TYP<CR> Result: #TYPE:<Type><CR>	ASCII	
	TX	#TYPE<CR>		
	RX	#255,TYPE:RESI-2RO-SIO<CR>		
		Current module type:RESI-2RO-SIO		
Returns the current module type				
GET OWNER	**ASCII READ COMMAND**	#OWNER<CR> #OWN<CR> Result: #OWNER:<Owner><CR>	ASCII	
	TX	#OWNER<CR>		
	RX	#255,OWNER:RESI<CR>		
		Current owner:RESI		
Returns the current owner of the module				
GET CREATOR	**ASCII READ COMMAND**	#CREATOR<CR> #CRE<CR> Result: #CREATOR:<Creator><CR>	ASCII	
	TX	#CREATOR<CR>		
	RX	#255,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> #COPY<CR> Result: #COPYRIGHT:<Copyright><CR>	ASCII	
	TX	#COPYRIGHT<CR>		
	RX	#255,COPYRIGHT:2016,2020 BY RESI AND DI HC SIGL,MSC WWW.RESI.CC<CR>		
		Current copyright:2016,2020 BY RESI AND DI HC SIGL,MSC WWW.RESI.CC		
Returns the current copyright of the module				

GET DIP SWITCH	**ASCII READ COMMAND**	#GET DIP<CR> #GDIP<CR> Result: #GDIP:<DIPSwitchDec>,<DIPSwitchHex><CR>	ASCII	
	TX	#GET DIP<CR>		
	RX	#255,GDIP:15,0xF<CR>		
		Current DIP SWITCH settings:1111		
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)				
ASCII COMMANDS				
SET MODBUS ADDRESS	**ASCII WRITE COMMAND**	#SET MODBUS ADDRESS:<UNITID><CR> #SETMBADR:<UNITID><CR> Result: #OK<CR>	ASCII	NO
	UNITID	1		
	TX	#SET MODBUS ADDRESS:1<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**	#SET MODBUS BAUDRATE:<BAUD><CR> #SETMBBAUD:<BAUD><CR> Result: #OK<CR>	ASCII	NO
	BAUD	57600:57600BD		
	TX	#SET MODBUS BAUDRATE:57600<CR>		
	RX	N/A		
Sets a new baudrate for the serial interface, if DIP Switches DIP1=ON and DIP2=ON. The following baudrates are allowed: 300bd 600bd 1200bd 2400bd 4800bd 9600bd 19200bd 38400bd all others are interpreted as 57600bd HINT: The new setup parameters will be active after a restart of the module.				

SET MODBUS PARITY	**ASCII WRITE COMMAND**	#SET MODBUS PARITY:<PARITY><CR> #SETMBPAR:<PARITY><CR> Result: #OK<CR>	ASCII	NO
	PARITY	NONE:NO PARITY		
	TX	#SET MODBUS PARITY:NONE<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**	#SET MODBUS STOP:<STOPBIT><CR> #SETMBSTOP:<STOPBIT><CR> Result: #OK<CR>	ASCII	NO
	STOPBIT	ONE:ONE STOPBIT		
	TX	#SET MODBUS STOP:ONE<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**	#SET MODBUS PARAMS:<UNITID>,<BAUD>,<PARITY>,<STOPBIT><CR> #SETMBPARAMS:<UNITID>,<BAUD>,<PARITY>,<STOPBIT><CR> Result: #OK<CR>	ASCII	NO
	UNITID	1		
	BAUD	57600:57600BD		
	PARITY	NONE:NO PARITY		
	STOPBIT	ONE:ONE STOPBIT		
	TX	#SET MODBUS PARAMS:1,57600,NONE,ONE<CR>		
	RX	N/A		
Sets all parameters for serrial interface				
GET MODBUS ADDRESS	**ASCII READ COMMAND**	#GET MODBUS ADDRESS<CR> #GMBADR<CR> Result: #GMBADR:<MBUnitDec>,<MBFLASHDec>,<MBUnitHex>,<MBFLASHHex><CR>	ASCII	
	TX	#GET MODBUS ADDRESS<CR>		
	RX	#255,GMBADR:255,0xFF,65535,0xFFFF<CR>		
		Current MODBUS unit ID for DIP4=OFF:255,0xFF,65535,0xFFFF		

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**	#GET MODBUS BAUDRATE<CR> #GMBBAUD<CR> Result: #GMBBAUD:<BaudRate><CR>	ASCII	
	TX	#GET MODBUS BAUDRATE<CR>		
	RX	#255,GMBBAUD:57600<CR>		
		Current baudrate for DIP1+2=ON:57600		

Returns the current defined baud rate for the serial interface, if DIP switches DIP1=ON and DIP2=ON.
The following baudrates are allowed:
300bd
600bd
1200bd
2400bd
4800bd
9600bd
19200bd
38400bd
all others are interpreted as 57600bd

GET MODBUS PARITY	**ASCII READ COMMAND**	#GET MODBUS PARITY<CR> #GMBPAR<CR> Result: #GMBPAR:<MBParity><CR>	ASCII	
	TX	#GET MODBUS PARITY<CR>		
	RX	#255,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**	#GET MODBUS STOP<CR> #GMBSTOP<CR> Result: #GMBSTOP:<MBStop><CR>	ASCII	
	TX	#GET MODBUS STOP<CR>		
	RX	#255,GMBSTOP:ONE<CR>		
		Current stopbit(s):ONE		

Returns the current configured amount of stop bits for the serial interface.
MBStops
ONE: one stop bit
TWO: two stop bits

GET MODBUS PARAMS	**ASCII READ COMMAND**	#GET MODBUS PARAMS<CR> #GMBPARAMS<CR> Result: #GMBPARAMS:<MBUnitDec>,<MBFLASHDec>,<MBUnitHex>,<MBFLASHHex>, <MBBaudrateDec>,<MBBaudrateHex>,<MBParity>,<MBStops><CR>	ASCII	
	TX	#GET MODBUS PARAMS<CR>		
	RX	#255,GMBPARAMS:255,0xFF,65535,0xFFFF,57600,0xE100,NONE,ONE<CR>		
		Current MODBUS unit ID used:255		
		Current MODBUS unit ID in FLASH:65535		
		Current baudrate in FLASH:57600		
		Current parity in FLASH:NONE		
		Current stopbit(s) in FLASH:ONE		
Returns the complete settings for serial interface				
ASCII COMMANDS				
RESET	**ASCII WRITE COMMAND**	#RESET<CR> #RST<CR> Result: #OK<CR>	ASCII	NO
	TX	#RESET<CR>		
	RX	N/A		
Executes a software reset (Reboot) of the module.				
FACTORY RESET	**ASCII WRITE COMMAND**	#FACTORY RESET<CR> #FRST<CR> Result: #OK<CR>	ASCII	NO
	TX	#FACTORY RESET<CR>		
	RX	N/A		
Executes a factory reset of all parameters to default values within the module and reboots the module				

OUTPUT DO1	1x00001 2x00001 I:0	0,0x00 B:00		0:OUTPUT is OFF	BIT R/W	NO
		Current status of digital output 1:0->OFF				
Current state of the digital output DO1 =0:DO is OFF, =1:DO is ON If you write to this register, you will change the current state of the digital output 1 to the new value =0:Switch off DO, =1:Switch on DO						
OUTPUT DO2	1x00002 2x00002 I:1	0,0x00 B:00		0:OUTPUT is OFF	BIT R/W	NO
		Current status of digital output 2:0->OFF				
Current state of the digital output DO2 =0:DO is OFF, =1:DO is ON If you write to this register, you will change the current state of the digital output 2 to the new value =0:Switch off DO, =1:Switch on DO						
NEG OUTPUT DO1	1x00003 2x00003 I:2	1,0x01 B:01			BIT R/O	
		Current negated status of digital output 1:1->OFF				
Current negated state of the digital output DO1 =0:DO is ON, =1:DO is OFF						
NEG OUTPUT DO2	1x00004 2x00004 I:3	1,0x01 B:01			BIT R/O	
		Current negated status of digital output 2:1->OFF				
Current negated state of the digital output DO2 =0:DO is ON, =1:DO is OFF						
REAL OUTPUT DO1	1x00005 2x00005 I:4	0,0x00 B:00			BIT R/O	
		Current real status of digital output 1:0->OFF				
Current state of the true digital output DO1 =0:DO is OFF, =1:DO is ON						
REAL OUTPUT DO2	1x00006 2x00006 I:5	0,0x00 B:00			BIT R/O	
		Current real status of digital output 2:0->OFF				
Current state of the true digital output DO2 =0:DO is OFF, =1:DO is ON						
NEG REAL OUTPUT DO1	1x00007 2x00007 I:6	1,0x01 B:01			BIT R/O	
		Current negated real status of digital output 1:1->OFF				
Current negated state of the true digital output DO1 =0:DO is ON, =1:DO is OFF						
NEG REAL OUTPUT DO2	1x00008 2x00008 I:7	1,0x01 B:01			BIT R/O	

		Current negated real status of digital output 2:1->OFF				
Current negated state of the true digital output DO2 =0:DO is ON, =1:DO is OFF						
OFFDELAY TIMER DO1	1x00009 2x00009 I:8	0,0x00 B:00			BIT R/O	
		Current state of off-delay timer for output 1:0->STOPPED				
Current state of the Offdelay timer for digital output DO1 =0:Offdelay timer is OFF (Finished), =1:Offdelay timer is ON (Running)						
OFFDELAY TIMER DO2	1x00010 2x00010 I:9	0,0x00 B:00			BIT R/O	
		Current state of off-delay timer for output 2:0->STOPPED				
Current state of the Offdelay timer for digital output DO2 =0:Offdelay timer is OFF (Finished), =1:Offdelay timer is ON (Running)						
BLINK TIMER DO1	1x00011 2x00011 I:10	0,0x00 B:00			BIT R/O	
		Current state of blink timer for output 1:0->STOPPED				
Current state of the blink timer for digital output DO1 =0:blink timer is OFF (deactivated), =1:blink timer is ON (Running)						
BLINK TIMER DO2	1x00012 2x00012 I:11	0,0x00 B:00			BIT R/O	
		Current state of blink timer for output 2:0->STOPPED				
Current state of the blink timer for digital output DO2 =0:blink timer is OFF (deactivated), =1:blink timer is ON (Running)						
FLASH TIMER DO1	1x00013 2x00013 I:12	0,0x00 B:00			BIT R/O	
		Current state of flash timer for output 2:0->STOPPED				
Current state of the flash timer for digital output DO1 =0:flash timer is OFF (deactivated), =1:flash timer is ON (Running)						
FLASH TIMER DO2	1x00014 2x00014 I:13	0,0x00 B:00			BIT R/O	
		Current state of flash timer for output 2:0->STOPPED				
Current state of the flash timer for digital output DO2 =0:flash timer is OFF (deactivated), =1:flash timer is ON (Running)						
PWM TIMER DO1	1x00015 2x00015 I:14	0,0x00 B:00			BIT R/O	
		Current state of PWM timer for output 1:0->STOPPED				
Current state of the PWM timer for digital output DO1 =0:PWM timer is OFF (deactivated), =1:PWM timer is ON (Running)						
PWM TIMER DO2	1x00016 2x00016 I:15	0,0x00 B:00			BIT R/O	
		Current state of PWM timer for output 2:0->STOPPED				

Current state of the PWM timer for digital output DO2 =0:PWM timer is OFF (deactivated), =1:PWM timer is ON (Running)						
DIGITAL OUTPUTS						
DIGITAL OUTPUT DO1	3x00001 4x00001 I:0	0,0x0000 B:00 00		0:OUTPUT is OFF	UINT16 R/W	NO
		Current status of digital output 1:0->OFF				
Current state of the digital output DO1 =0:DO is OFF, =1:DO is ON If you write to this register, you will change the current state of the digital output 1 to the new value =0:Switch off DO, =1:Switch on DO						
DIGITAL OUTPUT DO2	3x00002 4x00002 I:1	0,0x0000 B:00 00		0:OUTPUT is OFF	UINT16 R/W	NO
		Current status of digital output 2:0->OFF				
Current state of the digital output DO2 =0:DO is OFF, =1:DO is ON If you write to this register, you will change the current state of the digital output 2 to the new value =0:Switch off DO, =1:Switch on DO						
NEG OUTPUT DO1	3x00003 4x00003 I:2	1,0x0001 B:00 01			UINT16 R/O	
		Current negated status of digital output 1:1->OFF				
Current negated state of the digital output DO1 =0:DO is ON, =1:DO is OFF						
NEG OUTPUT DO2	3x00004 4x00004 I:3	1,0x0001 B:00 01			UINT16 R/O	
		Current negated status of digital output 2:1->OFF				
Current negated state of the digital output DO2 =0:DO is ON, =1:DO is OFF						
REAL OUTPUT DO1	3x00005 4x00005 I:4	0,0x0000 B:00 00			UINT16 R/O	
		Current real status of digital output 1:0->OFF				
Current state of the true digital output DO1 =0:DO is OFF, =1:DO is ON						
REAL OUTPUT DO2	3x00006 4x00006 I:5	0,0x0000 B:00 00			UINT16 R/O	
		Current real status of digital output 2:0->OFF				
Current state of the true digital output DO2 =0:DO is OFF, =1:DO is ON						
NEG REAL OUTPUT DO1	3x00007 4x00007 I:6	1,0x0001 B:00 01			UINT16 R/O	
		Current negated real status of digital output 1:1->OFF				
Current negated state of the true digital output DO1 =0:DO is ON, =1:DO is OFF						

NEG REAL OUTPUT DO2	3x00008 4x00008 I:7	1,0x0001 B:00 01			UINT16 R/O	
		Current negated real status of digital output 2:1->OFF				
Current negated state of the true digital output DO2 =0:DO is ON, =1:DO is OFF						
OFFDELAY TIMER DO1	3x00009 4x00009 I:8	0,0x0000 B:00 00	5000	5,000	UINT16 R/W	NO
		Current remaining time of off-delay timer for digital output 1:0->0s				
Current remaining time of the offdelay timer function in milliseconds for digital output DO1 Remaining time of the offdelay timer If you write to this register, you will trigger the offdelay timer with the give value in milliseconds. A timeout between 0 and 65.535 seconds is configurable.						
OFFDELAY TIMER DO2	3x00010 4x00010 I:9	0,0x0000 B:00 00	5000	5,000	UINT16 R/W	NO
		Current remaining time of off-delay timer for digital output 2:0->0s				
Current remaining time of the offdelay timer function in milliseconds for digital output DO2 Remaining time of the offdelay timer If you write to this register, you will trigger the offdelay timer with the give value in milliseconds. A timeout between 0 and 65.535 seconds is configurable.						
BLINK TIMER DO1	3x00011 4x00011 I:10	0,0x0000 B:00 00	0	0,0	UINT16 R/W	NO
		Current time span for blink timer for digital output 1:0->0s				
Returns the current setup time span for blink timer in 100ms for digital output DO1 If you write to this register, you will start the blink timer function on the digital output 1. A blink time span between 0 and 6553.5 seconds is configurable. =0:the blink function is not used.						
BLINK TIMER DO2	3x00012 4x00012 I:11	0,0x0000 B:00 00	0	0,0	UINT16 R/W	NO
		Current time span for blink timer for digital output 2:0->0s				
Returns the current setup time span for blink timer in 100ms for digital output DO2 If you write to this register, you will start the blink timer function on the digital output 1. A blink time span between 0 and 6553.5 seconds is configurable. =0:the blink function is not used.						
FLASH TIMER ON DO1	3x00013 4x00013 I:12	0,0x0000 B:00 00	0	0,0	UINT16 R/W	NO
		Current ON time span for flash timer for digital output 1:0->0s				
Returns the current setup time span for the ON time span of the flash timer in 100ms for digital output DO1 If you write to this register, you will start the flash timer function on the digital output 1. An ON time span between 0 and 6553.5 seconds is configurable. FLASH_TIMER_ON=0 AND FLASHTIMER_OFF=0:the flash function is not used.						
FLASH TIMER OFF DO1	3x00014 4x00014 I:13	0,0x0000 B:00 00	0	0,0	UINT16 R/W	NO
		Current OFF time span for flash timer for digital output 1:0->0s				

Returns the current setup time span for the OFF time span of the flash timer in 100ms for digital output DO1 If you write to this register, you will start the flash timer function on the digital output 1. An OFF time span between 0 and 6553.5 seconds is configurable. FLASH_TIMER_ON=0 AND FLASHTIMER_OFF=0:the flash function is not used.						
FLASH TIMER ON DO2	3x00015 4x00015 I:14	0,0x0000 B:00 00	0	0,0	UINT16 R/W	NO
		Current ON time span for flash timer for digital output 2:0->0s				
Returns the current setup time span for the ON time span of the flash timer in 100ms for digital output DO1 If you write to this register, you will start the flash timer function on the digital output 1. An ON time span between 0 and 6553.5 seconds is configurable. FLASH_TIMER_ON=0 AND FLASHTIMER_OFF=0:the flash function is not used.						
FLASH TIMER OFF DO2	3x00016 4x00016 I:15	0,0x0000 B:00 00	0	0,0	UINT16 R/W	NO
		Current OFF time span for flash timer for digital output 2:0->0s				
Returns the current setup time span for the OFF time span of the flash timer in 100ms for digital output DO2 If you write to this register, you will start the flash timer function on the digital output 2. An OFF time span between 0 and 6553.5 seconds is configurable. FLASH_TIMER_ON=0 AND FLASHTIMER_OFF=0:the flash function is not used.						
PWM MAXIMUM TIME DO1	3x00017 4x00017 I:16	0,0x0000 B:00 00	50	5,0	UINT16 R/W	NO
		Current OFF time span for flash timer for digital output 2:0->0s				
Returns the current PWM time span in 100ms units for digital output DO1 If you write to this register, you will start the PWM timer function on the digital output 1. An time span between 0 and 6553.5 seconds is configurable. =0:the PWM function is not used.						
PWM PERCENT DO1	3x00018 4x00018 I:17	0,0x0000 B:00 00	5000	50,00	UINT16 R/W	NO
		Current duty cycle for PWM on digital output 1:0->0%				
Returns the current percent for the duty cycle of then PWM in percent. If you write to this register, you will set a new duty cycle for the PWM function on the digital output DO1. A value between 0..10000 defines a percent value between 0% and 100.00%.						
PWM CURRENT DO1	3x00019 4x00019 I:18	0,0x0000 B:00 00	25	2,5	UINT16 R/W	NO
		Current duty cycle for PWM on digital output 1:0->0s				
Returns the current time span for the duty cycle of then PWM in 100ms units. If you write to this register, you will set a new duty cycle for the PWM function on the digital output DO1. A value between 0 and PWM_MAXIMUM1 is allowed.						
PWM MAXIMUM TIME DO2	3x00020 4x00020 I:19	0,0x0000 B:00 00	50	5,0	UINT16 R/W	NO
		Current OFF time span for flash timer for digital output 1:0->0s				
Returns the current PWM time span in 100ms units for digital output DO2 If you write to this register, you will start the PWM timer function on the digital output 2. An time span between 0 and 6553.5 seconds is configurable. =0:the PWM function is not used.						

PWM PERCENT DO2	3x00021 4x00021 I:20	0,0x0000 B:00 00	5000	50,00	UINT16 R/W	NO
		Current duty cycle for PWM on digital output 2:0->0%				
Returns the current percent for the duty cycle of then PWM in percent. If you write to this register, you will set a new duty cycle for the PWM function on the digital output DO2. A value between 0..10000 defines a percent value between 0% and 100.00%.						
PWM CURRENT DO2	3x00022 4x00022 I:21	0,0x0000 B:00 00	15	1,5	UINT16 R/W	NO
		Current duty cycle for PWM on digital output 2:0->0s				
Returns the current time span for the duty cycle of then PWM in 100ms units. If you write to this register, you will set a new duty cycle for the PWM function on the digital output DO2. A value between 0 and PWM_MAXIMUM1 is allowed.						
DO12 MODE	3x00023 4x00023 I:22	0,0x0000 B:00 00		0:DISABLED	UINT16 R/W	YES
		Current mode for DO1+2:0->DISABLED				
Sets the mode for digital outputs 1+2. The following modes are available: 0=FUNCTION is deactivated 10=Set DO1=OFF, DO2=OFF immediately 11=Set DO1=ON, DO2=OFF immediately 12=Set DO1=OFF, DO2=ON immediately 20=Set DO1=ON, DO2=ON immediately 21=Set DO1=OFF, DO2=ON immediately 22=Set DO1=ON, DO2=OFF immediately 30=Set DO1=OFF, DO2=OFF; but keep pause of DO12_TIME_PAUSE between the switching of the outputs 31=Set DO1=ON, DO2=OFF; but keep pause of DO12_TIME_PAUSE between the switching of the outputs 32=Set DO1=OFF, DO2=ON; but keep pause of DO12_TIME_PAUSE between the switching of the outputs 40=Set DO1=ON, DO2=ON; but keep pause of DO12_TIME_PAUSE between the switching of the outputs 41=Set DO1=OFF, DO2=ON; but keep pause of DO12_TIME_PAUSE between the switching of the outputs 42=Set DO1=ON, DO2=OFF; but keep pause of DO12_TIME_PAUSE between the switching of the outputs						
The follwing function keep the pause between output switching configured with DO12_TIME_PAUSE and the outputs are time limited by DO12_TIME_DO1_MAX and DO12_TIME_DO2_MAX 50=Set DO1=OFF, DO2=OFF 51=Set DO1=ON, DO2=OFF 52=Set DO1=OFF, DO2=ON 60=Set DO1=ON, DO2=ON 61=Set DO1=OFF, DO2=ON 62=Set DO1=ON, DO2=OFF						
DO12 MAXIMUM TIME DO1	3x00024 4x00024 I:23	0,0x0000 B:00 00	100	10,0	UINT16 R/W	NO
		Maximum on time for digital output 1:0->0s				
Sets and returns the maximum on time for DO1 in 100ms units.						
DO12 MAXIMUM TIME DO2	3x00025 4x00025 I:24	0,0x0000 B:00 00	100	10,0	UINT16 R/W	NO
		Maximum on time for digital output 2:0->0s				

Sets and returns the maximum on time for DO2 in 100ms units.						
DO12 PAUSE TIME	3x00026 4x00026 I:25	0,0x0000 B:00 00	100	10,0	UINT16 R/W	NO
		Pause time between switching DO1+DO2:0->0s				
Sets and returns the pause time between output switching in 100ms units.						
DO12 STATE	3x00027 4x00027 I:26	0,0x0000 B:00 00			UINT16 R/O	
		Current state for DO1+DO2:0				
Returns the current state for the DO12 handling						
DO12 COUNTER	3x00028 4x00028 I:27	0,0x0000 B:00 00			UINT16 R/O	
		Current counter for DO1+DO2:0->0s				
Returns the current timer of DO12 functions in 100ms						
DO12 POSITION	3x00029 4x00029 I:28	0,0x0000 B:00 00			UINT16 R/O	
		Current position of digital outputs 1+2:0->BOTH DOS OFF				
Current position of DO12: 0=OFF 1=DO1 is activated 11=DO1 is activated but DO12_TIME_DO1_MAX is finished 2=DO2 is activated 12=DO2 is activated but DO12_TIME_DO1_MAX is finished						
OUTPUTS DO1+DO2	3x00101 4x00101 I:100	0,0x0000 B:00 00		3:DO1=ON,DO2=ON	UINT16 R/W	YES
		Current status of digital output 1:0->OFF				
		Current status of digital output 2:0->OFF				
Returns the current state of all digital outputs. Each bit stands for a digital output: Bit 0: DO1 (=0:DO is OFF, =1:DO is ON) Bit 1: DO2 (=0:DO is OFF, =1:DO is ON)						
REAL OUTPUTS DO1+DO2	3x00102 4x00102 I:101	0,0x0000 B:00 00			UINT16 R/O	
		Current status of real digital output 1:0->OFF				
		Current status of real digital output 2:0->OFF				
Returns the current state of all real digital outputs. Each bit stands for a digital output: Bit 0: Real DO1 (=0:DO is OFF, =1:DO is ON) Bit 1: Real DO2 (=0:DO is OFF, =1:DO is ON)						
LOGIC+REAL OUTPUTS DO1+DO2	3x00103 4x00103 I:102	0,0x0000 B:00 00			UINT16 R/O	
		Current status of digital output 1:0->OFF				
		Current status of digital output 2:0->OFF				

		Current status of real digital output 1:0->OFF				
		Current status of real digital output 2:0->OFF				
Returns the current state of all digital outputs and real digital outputs. Each bit stands for a digital output: Bit 0: DO1 (=0:DO is OFF, =1:DO is ON) Bit 1: DO2 (=0:DO is OFF, =1:DO is ON) Bit 2: DO3 (=0:real DO is OFF, =1:real DO is ON) Bit 3: DO4 (=0:real DO is OFF, =1:real DO is ON)						
NEGATED LOGIC+REAL OUTPUTS DO1+DO2	3x00104 4x00104 I:103	15,0x000F B:00 0F			UINT16 R/O	
		Current negated status of digital output 1:1->OFF				
		Current negated status of digital output 2:1->OFF				
		Current negated status of real digital output 1:1->OFF				
		Current negated status of real digital output 2:1->OFF				
Returns the negated current state of all digital outputs and real digital outputs. Each bit stands for a digital output: Bit 0: DO1 (=0:DO is ON, =1:DO is OFF) Bit 1: DO2 (=0:DO is ON, =1:DO is OFF) Bit 2: DO3 (=0:real DO is ON, =1:real DO is OFF) Bit 3: DO4 (=0:real DO is ON, =1:real DO is OFF)						

SET DO1	**ASCII WRITE COMMAND**	#SET DO1:<DO1><CR> #SDO1:<DO1><CR> Result: #OK<CR>	ASCII	NO
	DO1	1:ON		
	TX	#SET DO1:1<CR>		
	RX	N/A		
Sets a new state for the digital output DOx of the module: =0:digital output is OFF =1:digital output is ON				
SET DO2	**ASCII WRITE COMMAND**	#SET DO2:<DO2><CR> #SDO2:<DO2><CR> Result: #OK<CR>	ASCII	NO
	DO2	1:ON		
	TX	#SET DO2:1<CR>		
	RX	N/A		
Sets a new state for the digital output DOx of the module: =0:digital output is OFF =1:digital output is ON				
GET DO1	**ASCII READ COMMAND**	#GET DO1<CR> #GDO1<CR> Result: #GDO1:<DO1Dec>,<DO1Hex><CR>	ASCII	
	TX	#GET DO1<CR>		
	RX	#255,GDO1:0,0x00<CR>		
		Current status of digital output DO1:0->OFF		
Returns the current state of the digital output DOx of the module as decimal and hexadecimal number DO1: The current state of the digital output 1: =0:digital output is OFF =1:digital output is ON				
GET DO2	**ASCII READ COMMAND**	#GET DO2<CR> #GDO2<CR> Result: #GDO2:<DO2Dec>,<DO2Hex><CR>	ASCII	
	TX	#GET DO2<CR>		
	RX	#255,GDO2:0,0x00<CR>		
		Current status of digital output DO2:0->OFF		

Returns the current state of the digital output DOx of the module as decimal and hexadecimal number DO2: The current state of the digital output 2: =0:digital output is OFF =1:digital output is ON				
GET DOS	**ASCII READ COMMAND**	#GET DOS<CR> #GDOS<CR> Result: #GDOS:<DOSDec>,<DOSHex><CR>	ASCII	
	TX	#GET DOS<CR>		
	RX	#255,GDOS:0,0x0<CR>		
		Current status of digital output 1:0->OFF		
		Current status of digital output 2:0->OFF		
		Current real status of digital output 1:0->OFF		
		Current real status of digital output 2:0->OFF		
Returns the current state of all digital outputs as decimal and hexadecimal number DOS: The current state of all digital outputs: Bit 0: State of digital output DO1 (=0:OFF, =1:ON) Bit 1: State of digital output DO2 (=0:OFF, =1:ON) Bit 2: State of the real digital output DO1 (=0:OFF, =1:ON) Bit 3: State of the real digital output DO2 (=0:OFF, =1:ON) The real digital output state is the current state of the output including offdelay timers or blinking timers in the module.				
GET TRUE DO1	**ASCII READ COMMAND**	#GET TRUE DO1<CR> #GTDO1<CR> Result: #GTDO1:<TDO1Dec>,<TDO1Hex><CR>	ASCII	
	TX	#GET TRUE DO1<CR>		
	RX	#255,GTDO1:0,0x00<CR>		
		Current real status of digital output DO1:0->OFF		
Returns the true state of the real digital output DOx of the module as decimal and hexadecimal number. This function includes all offdelay timers or internal timings of the output. TDO1: The current state of the real digital output 1: =0:digital output is OFF =1:digital output is ON				
GET TRUE DO2	**ASCII READ COMMAND**	#GET TRUE DO2<CR> #GTDO2<CR> Result: #GTDO2:<TDO2Dec>,<TDO2Hex><CR>	ASCII	
	TX	#GET TRUE DO2<CR>		
	RX	#255,GTDO2:0,0x00<CR>		
		Current real status of digital output DO2:0->OFF		
Returns the true state of the real digital output DOx of the module as decimal and hexadecimal number. This function includes all offdelay timers or internal timings of the output. TDO2: The current state of the real digital output 2: =0:digital output is OFF =1:digital output is ON				

GET NEGATED DO1	**ASCII READ COMMAND**	#GET NEG DO1<CR> #GNDO1<CR> Result: #GNDO1:<NDO1Dec>,<NDO1Hex><CR>	ASCII	
	TX	#GET NEG DO1<CR>		
	RX	#255,GNDO1:1,0x01<CR>		
		Current negated status of digital output DO1:1->OFF		
Returns the current negated state of the digital output DO as decimal and hexadecimal number NDO1: The current negated state of the digital output 1: =0:digital output is OFF =1:digital output is ON				
GET NEGATED DO2	**ASCII READ COMMAND**	#GET NEG DO1<CR> #GNDO1<CR> Result: #GNDO1:<NDO1Dec>,<NDO1Hex><CR>	ASCII	
	TX	#GET NEG DO1<CR>		
	RX	#255,GNDO1:1,0x01<CR>		
		Current negated status of digital output DO2:1->OFF		
Returns the current negated state of the digital output DO as decimal and hexadecimal number NDO2: The current negated state of the digital output 2: =0:digital output is OFF =1:digital output is ON				
GET NEGATED DOS	**ASCII READ COMMAND**	#GET NEG DOS<CR> #GNDOS<CR> Result: #GNDOS:<NDOSDec>,<NDOSHex><CR>	ASCII	
	TX	#GET NEG DOS<CR>		
	RX	#255,GNDOS:15,0xF<CR>		
		Current negated status of digital output 1:1->OFF		
		Current negated status of digital output 2:1->OFF		
		Current negated real status of digital output 1:1->OFF		
		Current negated real status of digital output 2:1->OFF		
Returns the negated current state of all digital outputs as decimal and hexadecimal number DOS: The current state of all digital outputs: Bit 0: Negated state of digital output DO1 (=0:ON, =1:OFF) Bit 1: Negated state of digital output DO2 (=0:ON, =1:OFF) Bit 2: Negated state of the real digital output DO1 (=0:ON, =1:OFF) Bit 3: Negated state of the real digital output DO2 (=0:ON, =1:OFF) The real digital output state is the current state of the output including offdelay timers or blinking timers in the module.				
SET OFFDELAY1	**ASCII WRITE COMMAND**	#SET OFFDELAY1:<OFFDELAY><CR> #SOFFDLY1:<OFFDELAY><CR> Result: #OK<CR>	ASCII	NO
	OFFDELAY	1000		

	TX	#SET OFFDELAY1:1000<CR>		
	RX	N/A		

Sets the internal offdelay timer for digital output 1 to the timer value OFFDLY in milliseconds.

OFFDLY: The new time value for the offdelay timer function in milliseconds.

This function offers a watchdog feature: If you execute this command (e.g.: with the value 5000), the module activates the output for 5 seconds. If the module again receives this command within this 5 seconds, the internal timer is reset to the given time and the output is still on. If no command is received within 5 seconds, the module switches off the output.

SET OFFDELAY2	**ASCII WRITE COMMAND**	#SET OFFDELAY2:<OFFDELAY><CR> #SOFFDLY2:<OFFDELAY><CR> Result: #OK<CR>	ASCII	NO
	OFFDELAY	2000		
	TX	#SET OFFDELAY2:2000<CR>		
	RX	N/A		

Sets the internal offdelay timer for digital output 2 to the timer value OFFDLY in milliseconds.

OFFDLY: The new time value for the offdelay timer function in milliseconds.

This function offers a watchdog feature: If you execute this command (e.g.: with the value 5000), the module activates the output for 5 seconds. If the module again receives this command within this 5 seconds, the internal timer is reset to the given time and the output is still on. If no command is received within 5 seconds, the module switches off the output.

GET OFFDELAY1	**ASCII READ COMMAND**	#GET OFFDELAY1<CR> #GOFFDLY1<CR> Result: #GOFFDLY1:<OFFDLY1Dec>,<OFFDLY1Hex><CR>	ASCII	
	TX	#GET OFFDELAY1<CR>		
	RX	#255,GOFFDLY1:0,0x0<CR>		
		Current off-delay timer for digital output 1:0->0,000s		

Returns the current value of the offdelay timer for DO1. The value is a time in milliseconds. If this value is not zero, the output is on, If this value is 0, the output is off.

OFFDLY1: The remaining time of the offdelay timer in milliseconds.

GET OFFDELAY2	**ASCII READ COMMAND**	#GET OFFDELAY2<CR> #GOFFDLY2<CR> Result: #GOFFDLY2:<OFFDLY2Dec>,<OFFDLY2Hex><CR>	ASCII	
	TX	#GET OFFDELAY2<CR>		
	RX	#255,GOFFDLY2:0,0x0<CR>		
		Current off-delay timer for digital output 2:0->0,000s		

Returns the current value of the offdelay timer for DO2. The value is a time in milliseconds. If this value is not zero, the output is on, If this value is 0, the output is off.

OFFDLY2: The remaining time of the offdelay timer in milliseconds.

SET BLINK TIMER1	**ASCII WRITE COMMAND**	#SET BLINK TIMER1:<BLINKTIME><CR> #SBLINK1:<BLINKTIME><CR> Result: #OK<CR>	ASCII	NO
	BLINKTIME	10		
	TX	#SET BLINK TIMER1:10<CR>		

	RX	N/A		
Activates the internal blink timer with the blink period of BLINKTIME in 100ms for digital output 1. BLINKTIME: The new period for the blink timer function in 100ms. This function offers a blink feature: the output will blink with the configured period symmetrically.				
SET BLINK TIMER2	**ASCII WRITE COMMAND**	#SET BLINK TIMER2:<BLINKTIME><CR> #SBLINK2:<BLINKTIME><CR> Result: #OK<CR>	ASCII	NO
	BLINKTIME	20		
	TX	#SET BLINK TIMER2:20<CR>		
	RX	N/A		
Activates the internal blink timer with the blink period of BLINKTIME in 100ms for digital output 2. BLINKTIME: The new period for the blink timer function in 100ms. This function offers a blink feature: the output will blink with the configured period symmetrically.				
GET BLINK TIMER1	**ASCII READ COMMAND**	#GET BLINK TIMER1<CR> #GBLINK1<CR> Result: #GBLINK1:<BLINKTIME1Dec>,<BLINKTIME1Hex><CR>	ASCII	
	TX	#GET BLINK TIMER1<CR>		
	RX	#255,GBLINK1:0,0x0<CR>		
		Current blink timer for digital output 1:0->0,0s		
Returns the current period of the blink timer for DO1. The value is a time span in 100ms units. If this value is not zero, the output will blink symmetrically, If this value is 0, the blink function is deactivated. BLINKTIME: The current time span for the blink timer in 100ms units.				
GET BLINK TIMER2	**ASCII READ COMMAND**	#GET BLINK TIMER2<CR> #GBLINK2<CR> Result: #GBLINK2:<BLINKTIME2Dec>,<BLINKTIME2Hex><CR>	ASCII	
	TX	#GET BLINK TIMER2<CR>		
	RX	#255,GBLINK2:0,0x0<CR>		
		Current blink timer for digital output 2:0->0,0s		
Returns the current period of the blink timer for DO2. The value is a time span in 100ms units. If this value is not zero, the output will blink symmetrically, If this value is 0, the blink function is deactivated. BLINKTIME: The current time span for the blink timer in 100ms units.				
SET FLASH TIMER1	**ASCII WRITE COMMAND**	#SET FLASH TIMER1:<FLASHON1>,<FLASHOFF1><CR> #SFLASH1:<FLASHON1>,<FLASHOFF1><CR> Result: #OK<CR>	ASCII	NO
	FLASHON1	10		
	FLASHOFF1	20		
	TX	#SET FLASH TIMER1:10,20<CR>		
	RX	N/A		

Activates the internal flash timer with the ON period of FLASHON1 in 100ms and the OFF period of FLASHOFF1 in 100ms for digital output 1. If FLASHON1 and FLASHOFF1 are 0, the flash timer is deactivated. FLASHON1: The new time span for the ON time of the flash timer in 100ms units. FLASHOFF1: The new time span for the OFF time of the flash timer in 100ms units. This function offers a flash feature: the output will flash with the configured ON and OFF period. So you can generate a pulse with modulated output signal.				
SET FLASH TIMER2	**ASCII WRITE COMMAND**	#SET FLASH TIMER2:<FLASHON2>,<FLASHOFF2><CR> #SFLASH2:<FLASHON2>,<FLASHOFF2><CR> Result: #OK<CR>	ASCII	NO
	FLASHON2	10		
	FLASHOFF2	20		
	TX	#SET FLASH TIMER2:10,20<CR>		
	RX	N/A		
Activates the internal flash timer with the ON period of FLASHON2 in 100ms and the OFF period of FLASHOFF2 in 100ms for digital output 2. If FLASHON2 and FLASHOFF2 are 0, the flash timer is deactivated. FLASHON2: The new time span for the ON time of the flash timer in 100ms units. FLASHOFF2: The new time span for the OFF time of the flash timer in 100ms units. This function offers a flash feature: the output will flash with the configured ON and OFF period. So you can generate a pulse with modulated output signal.				
GET FLASH TIMER1	**ASCII READ COMMAND**	#GET FLASH TIMER1<CR> #GFLASH1<CR> Result: #GFLASH1:<FLASHON1Dec>,<FLASHOFF1Dec>,<FLASHON1Hex>,<FLASHOFF1Hex><CR>	ASCII	
	TX	#GET FLASH TIMER1<CR>		
	RX	#255,GFLASH1:0,0,0x0,0x0<CR>		
		Current ON time for flash timer for digital output 1:0->0,0s		
		Current OFF time for flash timer for digital output 1:0->0,0s		
Returns the current period settings for the ON and OFF period of the flash timer for digital output 1. The values define a time span in 100ms units. If FLASHON1 or FLASHOFF1 value is not zero, the output will flash in the given ON and OFF period, If both values are 0, the flash function is deactivated. FLASHON1: The current time span for the ON time of the flash timer in 100ms units. FLASHOFF1: The current time span for the OFF time of the flash timer in 100ms units.				
GET FLASH TIMER2	**ASCII READ COMMAND**	#GET FLASH TIMER2<CR> #GFLASH2<CR> Result: #GFLASH2:<FLASHON2Dec>,<FLASHOFF2Dec>,<FLASHON2Hex>,<FLASHOFF2Hex><CR>	ASCII	
	TX	#GET FLASH TIMER2<CR>		
	RX	#255,GFLASH2:0,0,0x0,0x0<CR>		
		Current ON time for flash timer for digital output 2:0->0,0s		
		Current OFF time for flash timer for digital output 2:0->0,0s		

Returns the current period settings for the ON and OFF period of the flash timer for digital output 2. The values define a time span in 100ms units.
If FLASHON2 or FLASHOFF2 value is not zero, the output will flash in the given ON and OFF period, If both values are 0, the flash function is deactivated.

FLASHON2: The current time span for the ON time of the flash timer in 100ms units.
FLASHOFF2: The current time span for the OFF time of the flash timer in 100ms units.

SET PWM MAXIMUM1	**ASCII WRITE COMMAND**	#SET PWM MAXIMUM1:<PWMMAX1><CR> #SPWMMAX1:<PWMMAX1><CR> Result: #OK<CR>	ASCII	NO
	PWMMAX1	100		
	TX	#SET PWM MAXIMUM1:100<CR>		
	RX	N/A		

Sets the current value of the PWM cycle for digital output 1.
The value is a time in 100ms units. If this value is not zero, the PWM function is activated. If this value is 0, the PWM function is off.

PWMMAX1: The new maximum time of the PWM cycle in 100ms units.

SET PWM PERCENT1	**ASCII WRITE COMMAND**	#SET PWM PERCENT1:<PWMPERCENT1><CR> #SPWMP1:<PWMPERCENT1><CR> Result: #OK<CR>	ASCII	NO
	PWMPERCENT1	50,45		
	TX	#SET PWM PERCENT1:5045<CR>		
	RX	N/A		

Sets the current duty cycle of the PWM in percent for digital output 1.
Values between 0 and 10000 represent the duty cycle in percent as 0.00%-100.00%

PWMPERCENT1: The current duty cycle of the PWM in percent as value 0..10000 (0.00%-100.00%)

SET PWM CURRENT1	**ASCII WRITE COMMAND**	#SET PWM CURRENT1:<PWMCUR1><CR> #SPWMC1:<PWMCUR1><CR> Result: #OK<CR>	ASCII	NO
	PWMCUR1	10		
	TX	#SET PWM CURRENT1:10<CR>		
	RX	N/A		

Sets the current duty cycle of the PWM as a time span in 100ms units for digital output 1.
Values between 0 and PWMMAX1 represent the duty cycle in 100ms units.

PWMCUR1: The current duty cycle of the PWM in percent in 100ms units

GET PWM MAXIMUM1	**ASCII READ COMMAND**	#GET PWM MAXIMUM1<CR> #GPWMMAX1<CR> Result: #GPWMMAX1:<PWMMAX1Dec>,<PWMMAX1Hex><CR>	ASCII	
	TX	#GET PWM MAXIMUM1<CR>		
	RX	#255,GPWMMAX1:0,0x0<CR>		
		Current PWM maximum time for digital output 1:0->0,0s		

Returns the current value of the PWM cycle for digital output 1. The value is a time in 100ms units. If this value is not zero, the PWM function is activated. If this value is 0, the PWM function is off. PWMMAX1: The current configured maximum time of the PWM cycle in 100ms units. HINT: If this value is 0, the PWM function is deactivated				
GET PWM PERCENT1	**ASCII READ COMMAND**	#GET PWM PERCENT1<CR> #GPWMP1<CR> Result: #GPWMP1:<PWMPERCENT1Dec>,<PWMPERCENT1Hex><CR>	ASCII	
	TX	#GET PWM PERCENT1<CR>		
	RX	#255,GPWMP1:0,0x0<CR>		
		Current PWM percent for digital output 1:0->0,00%		
Returns the current duty cycle setting of the PWM in percent for digital output 1. Values between 0 and 10000 represent the duty cycle in percent as 0.00%-100.00% PWMPERCENT1: The current duty cycle of the PWM in percent as value 0..10000 (0.00%-100.00%)				
GET PWM CURRENT1	**ASCII READ COMMAND**	#GET PWM CURRENT1<CR> #GPWMC1<CR> Result: #GPWMC1:<PWMCUR1Dec>,<PWMCUR1Hex><CR>	ASCII	
	TX	#GET PWM CURRENT1<CR>		
	RX	#255,GPWMC1:0,0x0<CR>		
		Current PWM on time for digital output 1:0->0,0s		
Returns the current duty cycle setting of the PWM as a time span in 100ms units for digital output 1. Values between 0 and PWMMAX1 represent the duty cycle in 100ms units. PWMCUR1: The current duty cycle of the PWM in percent in 100ms units				
SET PWM MAXIMUM2	**ASCII WRITE COMMAND**	#SET PWM MAXIMUM2:<PWMMAX2><CR> #SPWMMAX2:<PWMMAX2><CR> Result: #OK<CR>	ASCII	NO
	PWMMAX2	200		
	TX	#SET PWM MAXIMUM2:200<CR>		
	RX	N/A		
Sets the current value of the PWM cycle for digital output 2. The value is a time in 100ms units. If this value is not zero, the PWM function is activated. If this value is 0, the PWM function is off. PWMMAX2: The new maximum time of the PWM cycle in 100ms units.				
SET PWM PERCENT2	**ASCII WRITE COMMAND**	#SET PWM PERCENT2:<PWMPERCENT2><CR> #SPWMP2:<PWMPERCENT2><CR> Result: #OK<CR>	ASCII	NO
	PWMPERCENT2	50,45		
	TX	#SET PWM PERCENT2:5045<CR>		
	RX	N/A		

Sets the current duty cycle of the PWM in percent for digital output 2.
Values between 0 and 10000 represent the duty cycle in percent as 0.00%-100.00%

PWMPERCENT2: The current duty cycle of the PWM in percent as value 0..10000 (0.00%-100.00%)

SET PWM CURRENT2	**ASCII WRITE COMMAND**	#SET PWM CURRENT2:<PWMCUR2><CR> #SPWMC1:<PWMCUR2><CR> Result: #OK<CR>	ASCII	NO
	PWMCUR2	10		
	TX	#SET PWM CURRENT2:10<CR>		
	RX	N/A		

Sets the current duty cycle of the PWM as a time span in 100ms units for digital output 2.
Values between 0 and PWMMAX2 represent the duty cycle in 100ms units.

PWMCUR2: The current duty cycle of the PWM in percent in 100ms units

GET PWM MAXIMUM2	**ASCII READ COMMAND**	#GET PWM MAXIMUM2<CR> #GPWMMAX2<CR> Result: #GPWMMAX2:<PWMMAX2Dec>,<PWMMAX2Hex><CR>	ASCII	
	TX	#GET PWM MAXIMUM2<CR>		
	RX	#255,GPWMMAX2:0,0x0<CR>		
		Current PWM maximum time for digital output 2:0->0,0s		

Returns the current value of the PWM cycle for digital output 2. The value is a time in 100ms units. If this value is not zero, the PWM function is activated.
If this value is 0, the PWM function is off.

PWMMAX2: The current configured maximum time of the PWM cycle in 100ms units.

HINT: If this value is 0, the PWM function is deactivated

GET PWM PERCENT2	**ASCII READ COMMAND**	#GET PWM PERCENT2<CR> #GPWMP2<CR> Result: #GPWMP2:<PWMPERCENT2Dec>,<PWMPERCENT2Hex><CR>	ASCII	
	TX	#GET PWM PERCENT2<CR>		
	RX	#255,GPWMP2:0,0x0<CR>		
		Current PWM percent for digital output 2:0->0,00%		

Returns the current duty cycle setting of the PWM in percent for digital output 2. Values between 0 and 10000 represent the duty cycle in percent as 0.00%-100.00%

PWMPERCENT2: The current duty cycle of the PWM in percent as value 0..10000 (0.00%-100.00%)

GET PWM CURRENT2	**ASCII READ COMMAND**	#GET PWM CURRENT2<CR> #GPWMC2<CR> Result: #GPWMC2:<PWMCUR2Dec>,<PWMCUR2Hex><CR>	ASCII	
	TX	#GET PWM CURRENT2<CR>		
	RX	#255,GPWMC2:0,0x0<CR>		
		Current PWM on time for digital output 2:0->0,0s		

Returns the current duty cycle setting of the PWM as a time span in 100ms units for digital output 2.
Values between 0 and PWMMAX2 represent the duty cycle in 100ms units.

PWMCUR2: The current duty cycle of the PWM in percent in 100ms units

SET DO12 MODE	**ASCII WRITE COMMAND**	#SET DO12 MODE:<DO12MODE><CR> #SDO12MODE:<DO12MODE><CR> Result: #OK<CR>	ASCII	YES
	DO12MODE	52		
	TX	#SET DO12 MODE:52<CR>		
	RX	N/A		
Sets the mode for digital outputs 1+2. The following modes are available: 0=FUNCTION is deactivated 10=Set DO1=OFF, DO2=OFF immediately 11=Set DO1=ON, DO2=OFF immediately 12=Set DO1=OFF, DO2=ON immediately 20=Set DO1=ON, DO2=ON immediately 21=Set DO1=OFF, DO2=ON immediately 22=Set DO1=ON, DO2=OFF immediately 30=Set DO1=OFF, DO2=OFF; but keep pause of DO12_TIME_PAUSE between the switching of the outputs 31=Set DO1=ON, DO2=OFF; but keep pause of DO12_TIME_PAUSE between the switching of the outputs 32=Set DO1=OFF, DO2=ON; but keep pause of DO12_TIME_PAUSE between the switching of the outputs 40=Set DO1=ON, DO2=ON; but keep pause of DO12_TIME_PAUSE between the switching of the outputs 41=Set DO1=OFF, DO2=ON; but keep pause of DO12_TIME_PAUSE between the switching of the outputs 42=Set DO1=ON, DO2=OFF; but keep pause of DO12_TIME_PAUSE between the switching of the outputs				
The follwing function keep the pause between output switching configured with DO12_TIME_PAUSE and the outputs are time limited by DO12_TIME_DO1_MAX and DO12_TIME_DO2_MAX 50=Set DO1=OFF, DO2=OFF 51=Set DO1=ON, DO2=OFF 52=Set DO1=OFF, DO2=ON 60=Set DO1=ON, DO2=ON 61=Set DO1=OFF, DO2=ON 62=Set DO1=ON, DO2=OFF				
GET DO12 MODE	**ASCII READ COMMAND**	#GET DO12 MODE<CR> #GDO12MODE<CR> Result: #GDO12MODE:<DO12MODEDec>,<DO12MODEHex><CR>	ASCII	
	TX	#GET DO12 MODE<CR>		
	RX	#255,GDO12MODE:0,0x0<CR>		
		Current mode for DO1+2:0->DISABLED		

Returns the mode for digital outputs 1+2. The following modes are available:
0=FUNCTION is deactivated
10=Set DO1=OFF, DO2=OFF immediately
11=Set DO1=ON, DO2=OFF immediately
12=Set DO1=OFF, DO2=ON immediately

20=Set DO1=ON, DO2=ON immediately
21=Set DO1=OFF, DO2=ON immediately
22=Set DO1=ON, DO2=OFF immediately

30=Set DO1=OFF, DO2=OFF; but keep pause of DO12_TIME_PAUSE between the switching of the outputs
31=Set DO1=ON, DO2=OFF; but keep pause of DO12_TIME_PAUSE between the switching of the outputs
32=Set DO1=OFF, DO2=ON; but keep pause of DO12_TIME_PAUSE between the switching of the outputs

40=Set DO1=ON, DO2=ON; but keep pause of DO12_TIME_PAUSE between the switching of the outputs
41=Set DO1=OFF, DO2=ON; but keep pause of DO12_TIME_PAUSE between the switching of the outputs
42=Set DO1=ON, DO2=OFF; but keep pause of DO12_TIME_PAUSE between the switching of the outputs

The follwing function keep the pause between output switching configured with DO12_TIME_PAUSE and the outputs are time limited by DO12_TIME_DO1_MAX and DO12_TIME_DO2_MAX
50=Set DO1=OFF, DO2=OFF
51=Set DO1=ON, DO2=OFF
52=Set DO1=OFF, DO2=ON

60=Set DO1=ON, DO2=ON
61=Set DO1=OFF, DO2=ON
62=Set DO1=ON, DO2=OFF

SET DO12 TIME DO1	**ASCII WRITE COMMAND**	#SET DO12 TIME DO1:<TDO1><CR> #SDO12TDO1:<TDO1><CR> Result: #OK<CR>	ASCII	YES
	TDO1	200		
	TX	#SET DO12 TIME DO1:200<CR>		
	RX	N/A		
Sets the maximum on time for DO1 in 100ms units.				
SET DO12 TIME DO2	**ASCII WRITE COMMAND**	#SET DO12 TIME DO2:<TDO2><CR> #SDO12TDO2:<TDO2><CR> Result: #OK<CR>	ASCII	YES
	TDO2	300		
	TX	#SET DO12 TIME DO2:300<CR>		
	RX	N/A		
Sets the maximum on time for DO2 in 100ms units.				
GET DO12 TIME DO1	**ASCII READ COMMAND**	#GET DO12 TIME DO1<CR> #GDO12TDO1<CR> Result: #GDO12TDO1:<TDO1Dec>,<TDO1Hex><CR>	ASCII	
	TX	#GET DO12 TIME DO1<CR>		
	RX	#255,GDO12TDO1:0,0x0<CR>		
		Current maximum time for digital output 1:0->0,0s		
Returns the maximum on time for DO1 in 100ms units.				

GET DO12 TIME DO2	**ASCII READ COMMAND**	#GET DO12 TIME DO2<CR> #GDO12TDO2<CR> Result: #GDO12TDO2:<TDO2Dec>,<TDO2Hex><CR>	ASCII	
	TX	#GET DO12 TIME DO2<CR>		
	RX	#255,GDO12TDO2:0,0x0<CR>		
		Current maximum time for digital output 2:0->0,0s		
Returns the maximum on time for DO2 in 100ms units.				
SET DO12 TIME PAUSE	**ASCII WRITE COMMAND**	#SET DO12 TIME PAUSE:<TDO12PAUSE><CR> #SDO12TPAUSE:<TDO12PAUSE><CR> Result: #OK<CR>	ASCII	YES
	TDO12PAUSE	300		
	TX	#SET DO12 TIME PAUSE:300<CR>		
	RX	N/A		
Sets the pause time between output switching in 100ms units.				
GET DO12 TIME PAUSE	**ASCII READ COMMAND**	#GET DO12 TIME PAUSE<CR> #GDO12TPAUSE<CR> Result: #GDO12TPAUSE:<TDO12PAUSEDec>,<TDO12PAUSEHex><CR>	ASCII	
	TX	#GET DO12 TIME PAUSE<CR>		
	RX	#255,GDO12TPAUSE:0,0x0<CR>		
		Current pause between output switching:0->0,0s		
Returns the pause time between output switching in 100ms units.				
GET DO12 POSITION	**ASCII READ COMMAND**	#GET DO12 POSITION<CR> #GDO12POS<CR> Result: #GDO12POS:<DO12POSDec>,<DO12POSHex><CR>	ASCII	
	TX	#GET DO12 POSITION<CR>		
	RX	#255,GDO12POS:0,0x0<CR>		
		Current position of digital outputs 1+2:0->BOTH DOS OFF		