

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	8336,0x2090 B:20 90			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 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	65535,0xFFFF B:FF FF		N/A:NO CHANGE	UINT16 R/W	NO
		UNIT ID:255				

If 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 writes 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 be 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		

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

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-1S0-SIO<CR>		
		Current module type:RESI-1S0-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> #SMBADR:<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> #SMBBAUD:<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> #SMBPAR:<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> #SMBPARAMS:<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 serial 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.

MUnitDec,MUnitHex

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		

OUTPUT DO1	1x00001 2x00001 I:0	0,0x00 B:00		0:OUTPUT is OFF	BIT R/W	YES
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						
NEG OUTPUT DO1	1x00002 2x00002 I:1	0,0x00 B:00			BIT R/O	
Current negated status of digital output 1:0->ON						
Current negated state of the digital output DO1 =0:DO is ON, =1:DO is OFF						
REAL OUTPUT DO1	1x00003 2x00003 I:2	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						
NEG REAL OUTPUT DO1	1x00004 2x00004 I:3	0,0x00 B:00			BIT R/O	
Current negated real status of digital output 1:0->ON						
Current negated state of the true digital output DO1 =0:DO is ON, =1:DO is OFF						
OFFDELAY TIMER DO1	1x00005 2x00005 I:4	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)						
BLINK TIMER DO1	1x00006 2x00006 I:5	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)						
FLASH TIMER DO1	1x00007 2x00007 I:6	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)						
PWM TIMER DO1	1x00008 2x00008 I:7	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)

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						
NEG OUTPUT DO1	3x00002 4x00002 I:1	9,0x0009 B:00 09			UINT16 R/O	
		Current negated status of digital output 1:9->N/A				
Current negated state of the digital output DO1 =0:DO is ON, =1:DO is OFF						
REAL OUTPUT DO1	3x00003 4x00003 I:2	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						
NEG REAL OUTPUT DO1	3x00004 4x00004 I:3	10,0x000A B:00 0A			UINT16 R/O	
		Current negated real status of digital output 1:10->N/A				
Current negated state of the true digital output DO1 =0:DO is ON, =1:DO is OFF						
OFFDELAY TIMER DO1	3x00005 4x00005 I:4	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.						
BLINK TIMER DO1	3x00006 4x00006 I:5	1000,0x03E8 B:03 E8	0	0,0	UINT16 R/W	NO
		Current time span for blink timer for digital output 1:1000->100s				
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.						
FLASH TIMER ON DO1	3x00007 4x00007 I:6	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	3x00008 4x00008 I:7	9000,0x2328 B:23 28	0	0,0	UINT16 R/W	NO
Current OFF time span for flash timer for digital output 1:9000->900s						

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.

PWM MAXIMUM TIME DO1	3x00009 4x00009 I:8	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	3x00010 4x00010 I:9	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	3x00011 4x00011 I:10	9,0x0009 B:00 09	25	2,5	UINT16 R/W	NO
Current duty cycle for PWM on digital output 1:9->0,9s						

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.

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				
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 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 off delay 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 NEGATED DO1	ASCII READ COMMAND	#GET NEG DO1<CR> #GND01<CR> Result: #GND01:<NDO1Dec>,<NDO1Hex><CR>	ASCII	
	TX	#GET NEG DO1<CR>		
	RX	#255,GND01:1,0x01<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 DOS	ASCII READ COMMAND	#GET NEG DOS<CR> #GNDOS<CR> Result: #GNDOS:<NDOSDec>,<NDOSHex><CR>	ASCII	
	TX	#GET NEG DOS<CR>		
	RX	#255,GNDOS:3,0x3<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 1:0->ON		
		Current negated real status of digital output 2:0->ON		
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> #SOFFDL1:<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.

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.

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.

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.

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.

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.

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,GPWMP1:5045,0x13B5<CR>		
		Current PWM percent for digital output 1:5045->50,45%		
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,GPWMC1:50,0x32<CR>		
		Current PWM on time for digital output 1:50->5,0s		
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				