



GREYSTONE
ENERGY SYSTEMS INC

GH Series

Horticulture Sensor

SETUP GUIDE Modbus COMMUNICATION



ModBus Protocol

The device has ModBus registers to read the sensor values, calibrate the sensors, configure the alarms, etc. There are several supported registers as shown below.

Modbus Address	Typical Offset	Units	Data Type	Access	Notes
40001	+0	°C / °F	Word	Read	16-bit integer, Temperature Value x 10 (multiplier = 10) 0 to 500 for 0.0 to 50.0 °C, 320 to 1220 for 32.0 to 122.0 °F
40002	+1	%RH	Word	Read	16-bit integer, RH Value x 10 (multiplier = 10) 0 to 1000 for 0.0 to 100.0 %RH
40003	+2	ppm	Word	Read	16-bit integer, CO2 Value 0 to 5000 ppm
40004	+3		Word	Read	16-bit integer, Alarm 1 Status 0 = Normal, 1 = Alarm
40005	+4		Word	Read	16-bit integer, Alarm 2 Status 0 = Normal, 1 = Alarm
40006	+5	°C / °F	Word	R/W	16-bit integer, Temperature Offset (Resolution = 1) -5 to 5 °C, -10 to 10 °F, Default = 0 °C/°F
40007	+6	%RH	Word	R/W	16-bit integer, RH Offset (Resolution = 1) -10 to 10 %RH, Default = 0 %RH
40008	+7	ppm	Word	R/W	16-bit integer, CO2 Offset (Resolution = 50) -300 to 300 ppm, Default = 0 ppm
40009	+8	ppm	Word	R/W	16-bit integer, CO2 High Alarm 1 Setpoint (600 to 4000 ppm) Resolution = 100, Default = 1500 ppm
		ppm	Word	R/W	16-bit integer, CO2 Low Alarm 1 Setpoint (600 to 4000 ppm) Resolution = 100, Default = 800 ppm
		°C / °F	Word	R/W	16-bit integer, Temp High Alarm 1 Setpoint (10 to 40°C / 50 to 104°F) Resolution = 1, Default = 30°C / 86°F
		°C / °F	Word	R/W	16-bit integer, Temp Low Alarm 1 Setpoint (10 to 40°C / 50 to 104°F) Resolution = 1, Default = 15°C / 59°F
		%RH	Word	R/W	16-bit integer, RH High Alarm 1 Setpoint (20 to 90 %RH) Resolution = 5, Default = 70 %RH
		%RH	Word	R/W	16-bit integer, RH Low Alarm 1 Setpoint (20 to 90 %RH) Resolution = 5, Default = 40 %RH
40010	+9	ppm	Word	R/W	16-bit integer, CO2 High or Low Alarm 1 Hysteresis (30 to 250 ppm) Resolution = 10, Default = 100 ppm
		°C / °F	Word	R/W	16-bit integer, Temp High or Low Alarm 1 Hyst (1 to 5°C / 2 to 10 °F) Resolution = 1, Default = 2°C / 4°F
		%RH	Word	R/W	16-bit integer, RH High or Low Alarm 1 Hysteresis (5 to 20 %RH) Resolution = 1, Default = 10 %RH
40011	+10	seconds	Word	R/W	16-bit integer, Alarm 1 Delay (0 to 255 seconds) Resolution = 1, Default = 15 seconds

40012	+11	ppm	Word	R/W	16-bit integer, CO2 High Alarm 2 Setpoint (600 to 4000 ppm) Resolution = 100, Default = 1800 ppm
		ppm	Word	R/W	16-bit integer, CO2 Low Alarm 2 Setpoint (600 to 4000 ppm) Resolution = 100, Default = 800 ppm
		°C / °F	Word	R/W	16-bit integer, Temp High Alarm 2 Setpoint (10 to 40°C / 50 to 104°F) Resolution = 1, Default = 30°C / 86°F
		°C / °F	Word	R/W	16-bit integer, Temp Low Alarm 2 Setpoint (10 to 40°C / 50 to 104°F) Resolution = 1, Default = 15°C / 59°F
		%RH	Word	R/W	16-bit integer, RH High Alarm 2 Setpoint (20 to 90 %RH) Resolution = 5, Default = 70 %RH
		%RH	Word	R/W	16-bit integer, RH Low Alarm 2 Setpoint (20 to 90 %RH) Resolution = 5, Default = 40 %RH
40013	+12	ppm	Word	R/W	16-bit integer, CO2 High or Low Alarm 2 Hysteresis (30 to 250 ppm) Resolution = 10, Default = 100 ppm
		°C / °F	Word	R/W	16-bit integer, Temp High or Low Alarm 2 Hyst (1 to 5°C / 2 to 10 °F) Resolution = 1, Default = 2°C / 4°F
		%RH	Word	R/W	16-bit integer, RH High or Low Alarm 2 Hysteresis (5 to 20 %RH) Resolution = 1, Default = 10 %RH
40014	+13	seconds	Word	R/W	16-bit integer, Alarm 2 Delay (0 to 255 seconds) Resolution = 1, Default = 15 seconds
40015	+14		Word	R/W	16-bit integer, Temperature Units 0 = °C, 1 = °F, Default = °C
40016	+15		Word	R/W	16-bit integer, Relay 1 Test 0 = Normal, 1 = Test
40017	+16		Word	R/W	16-bit integer, Relay 2 Test 0 = Normal, 1 = Test
40018	+17		Word	R/W	16-bit integer, LCD Backlight Mode 1 = Auto, 2 = Off, 3 = On, Default = 1
40019	+18		Word	R/W	16-bit integer, LCD Display Mode 1 = All, 2 = RH, 3 = Temp, 4 = CO2, 5 = RH/Temp 6 = RH/CO2, 7 = Temp/CO2, 8 = None, Default = 1
40020	+19		Word	R/W	16-bit integer, Alarm 1 Assignment 1 = CO2 High, 2 = CO2 Low, 3 = Temp High, 4 = Temp Low 5 = RH High, 6 = RH Low, Default = 1
40021	+20		Word	R/W	16-bit integer, Alarm 2 Assignment 1 = CO2 High, 2 = CO2 Low, 3 = Temp High, 4 = Temp Low 5 = RH High, 6 = RH Low, Default = 1

This section describes the implementation of the Modbus protocol. This device communicates on standard Modbus networks using RTU mode transmission. It operates as a slave device (address from 1 to 255) and expects a Modbus master device to transmit queries, which it will answer.

RTU Message Format

Modbus Framing	8 bit binary
Data Bits	start bits --- 1, data bits --- 8, parity bits --- none, odd or even, stop bits --- 1 or 2
Baud Rate	9600, 19200, 38400, 57600, 76800 or 115200
Duplex	Half duplex
Error Checking	Cyclical Redundancy Check (CRC) CRC-16 --- polynomial $x^{16}+x^{15}+x^2+x^0$ 0x8005 or reversed version 0xA001 or CRC-CITT --- polynomial $x^{16}+x^{12}+x^5+x^0$ 0x1021 or reversed version 0x8408
Latency	More than 3.5 characters --- minimum, 50, 100, 150, 200, 250, 300 or 350 mS

RTU Framing Support and Bit Sequences

Start	1	2	3	4	5	6	7	8	Stop	
Start	1	2	3	4	5	6	7	8	Stop	Stop
Start	1	2	3	4	5	6	7	8	Odd	Stop
Start	1	2	3	4	5	6	7	8	Even	Stop

RTU Function Codes

0x03 --- Read holding registers

Query

Slave address (0x01 to 0xFF)	Function code (0x03)	Starting address MSB	Starting address LSB	Quantity of registers MSB	Quantity of registers LSB	CRC LSB	CRC MSB
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* Starting address = 0x0000 to 0xFFFF, Quantity of registers = 0x0000 to 0x007D

Response

Slave address (0x01 to 0xFF)	Function code (0x03)	Byte count 2N	Register value MSB	Register value LSB	...	CRC LSB	CRC MSB
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* N= Quantity of registers

0x06 --- Write single register

Query

Slave address (0x01 to 0xFF)	Function code 0x06	Register address MSB	Register address LSB	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	Function code 0x06	Register address MSB	Register address LSB	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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* Register address = 0x0000 to 0xFFFF, Registers value = 0x0000 to 0xFFFF

Exception response

Slave address (0x01 to 0xFF)	Function code + 0x80	Exception code 0x01, 0x02 or 0x03	CRC LSB	CRC MSB
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* An exception response is only returned if the CRC is correct
Exception code 01 --- illegal function, 02 --- illegal address, 03 --- illegal data value

Note that the registers may be read individually or multiple registers may be read at the same time by changing the query as shown below.

To read several registers with one query...

0x03 --- Read ALL REGISTERS

Query

Slave address (0x01 to 0xFF)	0x03	0x00	0x00 (Note 1)	0x00	0x05 (Note2)	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x03	0x0A (Note 3)	Register value MSB	Register value LSB	...	CRC LSB	CRC MSB
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Note 1: The starting address (A) may be 0x0000 to 0x0014. The read multiple feature will read all registers from the starting address forward. If the starting address is 0x0000 then registers 40001 to 40021 can be read. If the starting address is 0x0012 then registers 40019 to 40021 can be read.

Note 2: The quantity of registers (N) may be 0x0001 to 0x0015, but must be limited to 21 – A. If the starting address (A) is set to 0x0000 then N may be 0x0001 to 0x0015. If the starting address is set to 0x0013 then N may be 0x0001 to 0x0002.

Note 3: The byte count (B) will always be 2N. If the quantity of registers (N) is 0x0001 then B will be 0x02. If N is 0x0005 then B will be 0x0A.

The RTU function codes supported are shown below.

0x03 --- Read Temperature Value

Query

Slave address (0x01 to 0xFF)	0x03	0x00	0x00	0x00	0x01	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x03	0x02	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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* Register value = 0x0000 to 0x01F4, corresponding to 0.0 to 50.0 °C (multiplier = 10)
or = 0x0140 to 0x04C4, corresponding to 32.0 to 122.0 °F (multiplier = 10)

The temperature value is either in °C (default) or °F depending on the value of the Temperature Units register. This register has a multiplier of 10, the application must divide by 10 to obtain the correct value.

0x03 --- Read RH Value

Query

Slave address (0x01 to 0xFF)	0x03	0x00	0x01	0x00	0x01	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x03	0x02	Register value MSB *	Register value LSB *	CRC LSB	CRC MSB
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* Register value = 0x0000 to 0x03E8, corresponding to 0 to 100 %RH (multiplier = 10)

This register has a multiplier of 10, the application must divide by 10 to obtain the correct value.

0x03 --- Read CO2 Value

Query

Slave address (0x01 to 0xFF)	0x03	0x00	0x02	0x00	0x01	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x03	0x02	Register value MSB *	Register value LSB *	CRC LSB	CRC MSB
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* Register value = 0x0000 to 0x1388, corresponding to 0 to 5000 ppm

0x03 --- Read Alarm 1 Status

Query

Slave address (0x01 to 0xFF)	0x03	0x00	0x03	0x00	0x01	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x03	0x02	Register value 0x00	Register value LSB	CRC LSB	CRC MSB
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* Register value = 0x0000 corresponding to normal status
 = 0x0001 corresponding to alarm status

0x03 --- Read Alarm 2 Status

Query

Slave address (0x01 to 0xFF)	0x03	0x00	0x04	0x00	0x01	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x03	0x02	Register value 0x00	Register value LSB	CRC LSB	CRC MSB
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* Register value = 0x0000 corresponding to normal status
 = 0x0001 corresponding to alarm status

0x03 --- Read Temperature Offset

Query

Slave address (0x01 to 0xFF)	0x03	0x00	0x05	0x00	0x01	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x03	0x02	Register value 0x00	Register value LSB	CRC LSB	CRC MSB
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* This register is used to add or subtract an offset to the temperature value if necessary to conform to a local reference
 For °C operation, Register value = 0xFFFFB to 0x0005 for -5 to 5 °C
 For °F operation, Register value = 0xFFFF6 to 0x000A for -10 to 10 °F (resolution is 1°)

NOTE: All registers may be read in the same manner as shown above.

0x06 --- Write Temperature Offset

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x05	Register value MSB *	Register value LSB *	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x05	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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* This register is used to add or subtract an offset to the temperature value if necessary to conform to a local reference
 For °C operation, Register value = 0xFFFFB to 0x0005 for -5 to 5 °C
 For °F operation, Register value = 0xFFFF6 to 0x000A for -10 to 10 °F (resolution is 1°)

The Temperature Units (°C or °F) for the device should be selected first, and then add any offset if necessary

0x06 --- Write RH Offset

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x06	Register value MSB *	Register value LSB *	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x06	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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* This register is used to add or subtract an offset to the RH value if necessary to conform to a local reference
Register value = 0xFFF6 to 0x000A for -10 to 10 %RH.

0x06 --- Write CO2 Offset

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x07	Register value MSB *	Register value LSB *	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x07	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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* This register is used to add or subtract an offset to the CO2 value if necessary to conform to a local reference
Register value = 0xFED4 to 0x012C for -300 to 300 ppm.

0x06 --- Write Alarm 1 Setpoint

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x08	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x08	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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* This register is used to set the alarm 1 setpoint value
Register operation depends on the Alarm 1 Assignment

For CO2 High Alarm 1, Register value = 0x0258 to 0x0FA0, corresponding to 600 to 4000 ppm, resolution = 100
 For CO2 Low Alarm 1, Register value = 0x0258 to 0x0FA0, corresponding to 600 to 4000 ppm, resolution = 100
 For Temp High Alarm 1, Register value = 0x000A to 0x0028, corresponding to 10 to 40 °C, resolution = 1
 For Temp High Alarm 1, Register value = 0x0032 to 0x0068, corresponding to 50 to 104 °F, resolution = 1
 For Temp Low Alarm 1, Register value = 0x000A to 0x0028, corresponding to 10 to 40 °C, resolution = 1
 For Temp Low Alarm 1, Register value = 0x0032 to 0x0068, corresponding to 50 to 104 °F, resolution = 1
 For RH High Alarm 1, Register value = 0x0014 to 0x005A, corresponding to 20 to 90 %RH, resolution = 5
 For RH Low Alarm 1, Register value = 0x0014 to 0x005A, corresponding to 20 to 90 %RH, resolution = 5

0x06 --- Write Alarm_1 Hysteresis

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x09	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x09	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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* This register is used to set the alarm 1 hysteresis value
Register operation depends on the Alarm 1 Assignment

For CO2 High Alarm 1, Register value = 0x001E to 0x00FA, corresponding to 30 to 250 ppm, resolution = 10
 For CO2 Low Alarm 1, Register value = 0x001E to 0x00FA, corresponding to 30 to 250 ppm, resolution = 10
 For Temp High Alarm 1, Register value = 0x0001 to 0x0005, corresponding to 1 to 5 °C, resolution = 1
 For Temp High Alarm 1, Register value = 0x0002 to 0x000A, corresponding to 2 to 10 °F, resolution = 1
 For Temp Low Alarm 1, Register value = 0x0001 to 0x0005, corresponding to 1 to 5 °C, resolution = 1
 For Temp Low Alarm 1, Register value = 0x0002 to 0x000A, corresponding to 2 to 10 °F, resolution = 1
 For RH High Alarm 1, Register value = 0x0005 to 0x0014, corresponding to 5 to 20 %RH, resolution = 1
 For RH Low Alarm 1, Register value = 0x0005 to 0x0014, corresponding to 5 to 20 %RH, resolution = 1

0x06 --- Write Alarm 1 Delay

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x0A	0x00	Register value LSB	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x0A	0x00	Register value LSB	CRC LSB	CRC MSB
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* This register is used to set the alarm 1 delay value

Register value = 0x0000 to 0x00FF, corresponding to 0 to 255 seconds, resolution = 1

0x06 --- Write Alarm 2 Setpoint

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x0B	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x0B	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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* This register is used to set the alarm 2 setpoint value
Register operation depends on the Alarm 2 Assignment

For CO2 High Alarm 2, Register value = 0x0258 to 0x0FA0, corresponding to 600 to 4000 ppm, resolution = 100
 For CO2 Low Alarm 2, Register value = 0x0258 to 0x0FA0, corresponding to 600 to 4000 ppm, resolution = 100
 For Temp High Alarm 2, Register value = 0x000A to 0x0028, corresponding to 10 to 40 °C, resolution = 1
 For Temp High Alarm 2, Register value = 0x0032 to 0x0068, corresponding to 50 to 104 °F, resolution = 1
 For Temp Low Alarm 2, Register value = 0x000A to 0x0028, corresponding to 10 to 40 °C, resolution = 1
 For Temp Low Alarm 2, Register value = 0x0032 to 0x0068, corresponding to 50 to 104 °F, resolution = 1

For RH High Alarm 2, Register value = 0x0014 to 0x005A, corresponding to 20 to 90 %RH, resolution = 5
 For RH Low Alarm 2, Register value = 0x0014 to 0x005A, corresponding to 20 to 90 %RH, resolution = 5

0x06 --- Write Alarm_2 Hysteresis

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x0C	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x0C	Register value MSB	Register value LSB	CRC LSB	CRC MSB
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* This register is used to set the alarm 2 hysteresis value
 Register operation depends on the Alarm 2 Assignment

For CO2 High Alarm 2, Register value = 0x001E to 0x00FA, corresponding to 30 to 250 ppm, resolution = 10
 For CO2 Low Alarm 2, Register value = 0x001E to 0x00FA, corresponding to 30 to 250 ppm, resolution = 10
 For Temp High Alarm 2, Register value = 0x0001 to 0x0005, corresponding to 1 to 5 °C, resolution = 1
 For Temp High Alarm 2, Register value = 0x0002 to 0x000A, corresponding to 2 to 10 °F, resolution = 1
 For Temp Low Alarm 2, Register value = 0x0001 to 0x0005, corresponding to 1 to 5 °C, resolution = 1
 For Temp Low Alarm 2, Register value = 0x0002 to 0x000A, corresponding to 2 to 10 °F, resolution = 1
 For RH High Alarm 2, Register value = 0x0005 to 0x0014, corresponding to 5 to 20 %RH, resolution = 1
 For RH Low Alarm 2, Register value = 0x0005 to 0x0014, corresponding to 5 to 20 %RH, resolution = 1

0x06 --- Write Alarm 2 Delay

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x0D	0x00	Register value LSB	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x0D	0x00	Register value LSB	CRC LSB	CRC MSB
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* This register is used to set the alarm 2 delay value

Register value = 0x0000 to 0x00FF, corresponding to 0 to 255 seconds, resolution = 1

0x06 --- Write Temperature Units

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x0E	0x00	Register value LSB*	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x0E	0x00	Register value LSB*	CRC LSB	CRC MSB
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* Registers value = 0x0000 to 0x0001, corresponding to 0 = °C and 1 = °F

0x06 --- Write Relay 1_Test

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x0F	0x00	Register value LSB	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x0F	0x00	Register value LSB	CRC LSB	CRC MSB
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* This register is used to initiate a relay 1 test

Register value = 0x0000 resets relay 1 to normal status
 = 0x0001 sets relay 1 to alarm status (for testing purposes)

0x06 --- Write Relay 2_Test

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x10	0x00	Register value LSB	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x10	0x00	Register value LSB	CRC LSB	CRC MSB
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* This register is used to initiate a relay 2 test

Register value = 0x0000 resets relay 2 to normal status
 = 0x0001 sets relay 2 to alarm status (for testing purposes)

0x06 --- Write LCD_Backlight Mode

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x11	0x00	Register value LSB	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x11	0x00	Register value LSB	CRC LSB	CRC MSB
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* This register is used to set the LCD backlight operating mode

Register value = 0x0001 sets the backlight mode to auto (lights during startup and menu operation only)
 = 0x0002 sets the backlight mode to off (never lights except for startup mode)
 = 0x0003 sets the backlight mode to on (always lights)

0x06 --- Write LCD Display Mode

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x12	0x00	Register value LSB	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x12	0x00	Register value LSB	CRC LSB	CRC MSB
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* This register is used to set the information to be on the LCD display

- Register value = 0x0001 corresponding to All measurement display
- = 0x0002 corresponding to RH only display
- = 0x0003 corresponding to Temperature only display
- = 0x0004 corresponding to CO2 only display
- = 0x0005 corresponding to RH / Temperature display
- = 0x0006 corresponding to RH / CO2 display
- = 0x0007 corresponding to Temperature / CO2 display
- = 0x0008 corresponding to No display

0x06 --- Write Alarm 1 Assignment

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x13	0x00	Register value LSB	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x13	0x00	Register value LSB	CRC LSB	CRC MSB
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* This register is used to assign the alarm 1 operation

- Register value = 0x0001 corresponding to CO2 High alarm
- = 0x0002 corresponding to CO2 Low alarm
- = 0x0003 corresponding to Temperature High alarm
- = 0x0004 corresponding to Temperature Low alarm
- = 0x0005 corresponding to RH High alarm
- = 0x0006 corresponding to RH Low alarm

0x06 --- Write Alarm 2 Assignment

Query

Slave address (0x01 to 0xFF)	0x06	0x00	0x14	0x00	Register value LSB	CRC LSB	CRC MSB
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Response

Slave address (0x01 to 0xFF)	0x06	0x00	0x14	0x00	Register value LSB	CRC LSB	CRC MSB
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* This register is used to assign the alarm 2 operation

- Register value = 0x0001 corresponding to CO2 High alarm
- = 0x0002 corresponding to CO2 Low alarm
- = 0x0003 corresponding to Temperature High alarm
- = 0x0004 corresponding to Temperature Low alarm
- = 0x0005 corresponding to RH High alarm
- = 0x0006 corresponding to RH Low alarm

Exception response

Slave address (0x01 to 0xFF)	Function code + 0x80	Exception code * 0x01, 0x02 or 0x03	CRC LSB	CRC MSB
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* An exception response is only returned if the CRC is correct

Exception code 01 --- illegal function

Exception code 02 --- illegal address

Exception code 03 --- illegal data value