

Modbus Functionality



Registers

DATA	
Function code (f)	03 (Read Holding Register)
Start address	0 (40001)
Number of register (coil)	30
Data format	16-bit Signed Integer number reg.: 0(40001) , 20(40021) 16-bit Unsigned Integer number reg.: 1 (40002) to 32 (40033)

Modbus RTU: Read Register

Description	Modbus value	address	f
H2 gas concentration %VOL	%VOL, scaled to divide by 10 11 = 1.1	0 (40001)	03
Temperature	°F	1 (40002)	03
Temperature	°C (scaled/10)	2 (40003)	
Humidity	%RH	3 (40004)	03
Analogue OUT 1 V	V (scaled/10)	4 (40005)	03
Analogue OUT 2 V	V (scaled/10)	5 (40006)	03
Analogue OUT 1 mA	mA (scaled/10)	6 (40007)	03
Analogue OUT 2 mA	mA (scaled/10)	7 (40008)	03
Not used	-	8 (40009)	03
Not used	-	9 (40010)	03
Pre Alarm Relay current status	0 = OFF, 1 = ON	10 (40011)	03
Alarm Relay current status	0 = OFF, 1 = ON	11 (40012)	03
Fire Alarm Relay current status	0 = OFF, 1 = ON	12 (40013)	03
Strobe output status	0 = OFF, 1 = ON	13 (40014)	03
Buzzer status	0 = OFF, 1 = ON	14 (40015)	03
Not used	-	15 (40016)	03
Not used	-	16 (40017)	03
ZERO calibration value	ADC	17 (40018)	03
SPAN calibration value	ADC	18 (40019)	03
RAW ADC	ADC	19 (40020)	03
RAW H2 gas concentration %VOL (ignored deadband)	%VOL, (scaled/10)	20 (40021)	03
Not used	-	21 (40022)	03
Not used	-	22 (40023)	03
Not used	-	23 (40024)	03
Not used	-	24 (40025)	03
Not used	-	25 (40026)	03
Not used	-	26 (40027)	03
GDM working days		27 (40028)	03
HGD sw version	Scale to divide by 10 10 = 1v0 or 1.0	28 (40029)	03
GDM sw version	Scale to divide by 10 10 = 1v0 or 1.0	29 (40030)	03

Modbus RTU: Read/Write Register

DATA	
Function code (f)	03 (Read Holding Register) 06 (Write Single Holding Register)
Start address	30 (40031)
Data format	16-bit Unsigned Integer number

FUNCTION	OPTION	Description	Modbus value	address	f
Minimum value for analogue OUT1	- 0 - 1	0 = 0V or 0mA 1= 2V or 4mA	0 or 1	30 (40031)	03/06
Minimum value for analogue OUT2	- 0 - 1	0 = 0V or 0mA 1= 2V or 4mA	0 or 1	31 (40032)	03/06
Pre alarm Relay Delay	- 0-15	Delay to switch pre alarm relay, (seconds)	0-15	32 (40033)	03/06
Alarm Relay Delay	- 0-15	Delay to switch alarm relay, (seconds)	0-15	33 (40034)	03/06
Deadband	- 0 - 1	Enable or disable.	0 or 1	34 (40035)	03/06

Save Changes	Confirmation to save the changes to the memory	99 = SAVE	99 (40100)	06
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Rev 02 10/01/2024 MG

- Added Temperature in °C reg 2
- RAW H2 gas concentration %VOL reg 20
- Deadband R/W reg 34