

PG9202 Hydrogen Sensor

- Built-in Display
- Built-in Buzzer & Relay
- Configurable Alarm Threshold
- Modbus RTU Protocol via 2-Wire RS485 Bus
- Easy Configurable Modbus Parameters
(Slave Address, Baud Rate, Parity, Stop Bit)



Specification

Technical Data

Hydrogen Sensing Range: 200-10000 ppm
Wiring: 2-Wire RS485
Protocol: Modbus RTU

Communication Parameters

Data Bits: 8
Stop Bits: 1, 2
Parity: None, Even, Odd
Baud Rate: 2400 to 115200 kbps

Physical Characteristics

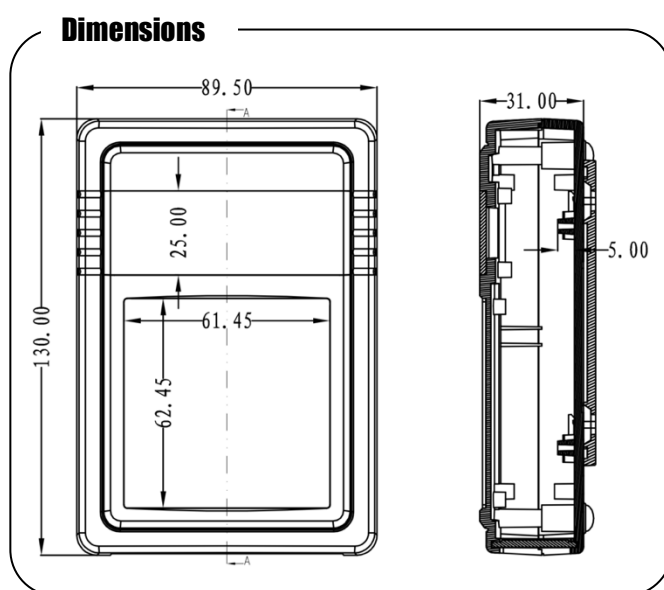
Housing: ABS, IP30
Weight: 200 g
Dimensions: 89.5×130.0 ×31.0 mm (W×H×D)

Environments

Operating Temperature: 0 to 60°C
Storage Temperature: -20 to 70°C
Ambient Relative Humidity: 5 to 95%
(non-condensing)

Power

Input Voltage: 12-24 VDC
Input Current: 50 mA @ 24 VDC
Relay Max. Current: 5A/24VDC, 3A/240 VAC



Location on Map

Address: **PGTOSAN**, No.38, Mobini Alley, Sabounchi St., Beheshti St., Tehran, IRAN

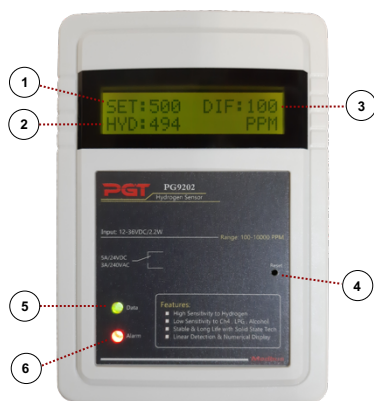
Tel: 021-88767698

Postal Code: 15336-63885

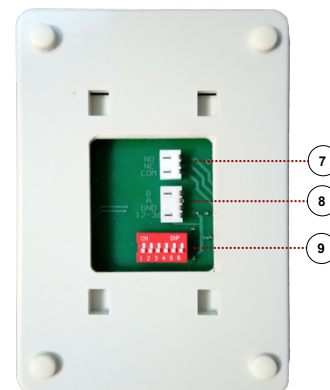


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Manual



- ① Alarm Threshold Set
- ② H_2 Value in ppm
- ③ Difference value
- ④ Reset Button
- ⑤ Data LED
- ⑥ Alarm LED
- ⑦ Output Relay Socket (COM, NO, NC)
- ⑧ Modbus RTU & Input Power (A, B, GND, +12~24 VDC)
- ⑨ Dip Switches



Reset to factory

Power on the sensor while holding the *Reset Button* until the status *green LED* blinks three times (about 1s). Then release the reset button. The sensor is restarted and factory reset is completed

Dip Switch Setting

Alarm Threshold				Differential		Buzzer Enable/Disable	
H2 ppm	SW1	SW2	SW3	Value	SW4	Status	SW5
500	Default 0	0	0	0	0	Disable	0
1000	0	0	1	Default 100	1	Default Enable	1
1500	0	1	0				
2000	0	1	1				
2500	1	0	0				
3000	1	0	1				
3500	1	1	0				
4000	1	1	1				

* The alarm (plus Relay & Buzzer) is activated when the h_2 ppm reaches to threshold and it's resolved when the h_2 ppm falls below " h_2 ppm threshold - differential value".



Modbus Registers

Configuration Registers

Name	Function	F.C	Register		Type	Default	Options	Request Type
			Protocol Addresses (Base 0)	PLC Addresses (Base 1)				
Part Number	Read Holding Registers (4x)	03	4000	4001	R	9202	-	Single/Multi
Slave Address	Read Holding Registers (4x)	03	4001	4002	R/W	254	1 ~ 254	
Baud Rate	Read Holding Registers (4x)	03	4002	4003	R/W	96 (9600 bps)	48, 96, 144, 192, 288, 384, 576, 768, 1152	
Parity	Read Holding Registers (4x)	03	4003	4004	R/W	0 (None)	0 (None) 1 (Odd) 2 (Even)	
Stop Bit	Read Holding Registers (4x)	03	4004	4005	R/W	1	1, 2	

Status Registers

Name	Function	F.C	Register		Type	Default	Range	Request Type
			Protocol Addresses (Base 0)	PLC Addresses (Base 1)				
Alarm Threshold	Read Holding Registers (4x)	03	01	02	R	500	500 ~ 4000	Single/Multi
Differential	Read Holding Registers (4x)	03	02	03	R	100	0, 100	
H ₂ Value	Read Holding Registers (4x)	03	03	04	R	-	200 ~ 10000	
Alarm Status	Read Holding Registers (4x)	03	04	05	R	-	0 (OFF) 1 (ON)	

