3” / 4” 4-Digit LED Display for Modbus RTU, 4–20 mA, 0-10V Signals





Specifications

Power Supply	12-24 VDC
Power Consumption	≤ 5W
Insulation	≥ 100 MΩ
Signal Input	4-20mA (500Ω max)
Alarm Output	1 SPDT, 230VAC 3A (AC1)
Number of Digits	4
Number of Decimal Points	0, 1, 2, 3
Upper Scale	0000 ~ 9999
Lower SCale	-999 ~ 9999
Dimensions (mm)	410L x 160H x 60D (4”LED) 310L x 126H x41D (3” LED)
Operating Conditions	-10 ~ 50 °C, ≥ 70%RH (non condensing)

The 4-Digit Large LED Process Display is an industrial digital indicator designed to accept a standard 4–20 mA analog input and convert it into a clear, scalable process value display. It is ideal for monitoring temperature, pressure, flow, level, and other physical measurements, with a high-visibility LED readout for easy viewing from a distance. The unit features one built-in alarm relay output for process alert or control functions and supports flexible installation via wall or suspended mounting.

Available in 3” LED (model: **ZR30001-3**) or
4” LED (model: **ZR30001-4**)

Model Selection

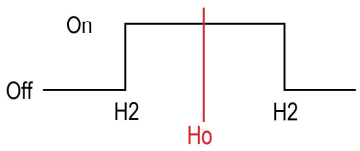
3” LED	**Input Signals**
ZR30001-A-3 ZR30001-V-3 ZR30001-M-3 (custom)	4-20mA 0-10V Modbus RTU
4” LED	
ZR30001-A-4 ZR30001-V-4 ZR30001-M-4 (custom)	4-20mA 0-10V Modbus RTU

■ Function Code

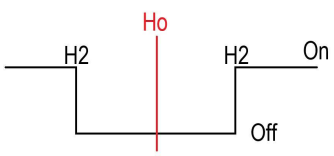
For alarm setpoint Ho: Press Menu to access the setting, adjust as needed, then press Menu again to confirm and save.
For H1-H6 and Add: Press and hold Menu for 3 seconds until “Lc” appears, then enter code 11. Use the Menu button to navigate between function codes.

Function Code	Function	Setting Range	Default Value	Function description
Ho	Alarm Setpoint	-999 ~ 9999	0	Alarm setpoint
H1	Relay Output Type	0 1 2 3	0	0: Upper Limit Alarm 1: Lower Limit Alarm 2: Inside Zone Alarm 3: Outside Zone Alarm
H2	Zone Alarm Span	0 ~ 9999	0	Sets the offset limits for the zone alarm range. For instance, with Ho at 50 and H2 at 10, the alarm zone spans from 40 to 60 (Ho ± H2)
H3	Decimal Point	0 1 2 3	1	0: No decimal point 1: One decimal place 2: Two decimal place 3: Three decimal place
H4	Display Value Offset	-99 ~ 999	000	Apply offset to display value
H5	Upper Scale Value	0000 ~ 9999	100.0	Sets the upper limit of the scale for the highest input signal
H6	Lower Scale Value	-999 ~ 9999	000.0	Sets the lower limit of the scale for the lowest input signal
Add	Modbus Slave Address	000 ~ 999	255	RS485 communication address (for Modbus model only)

■ Zone Alarm

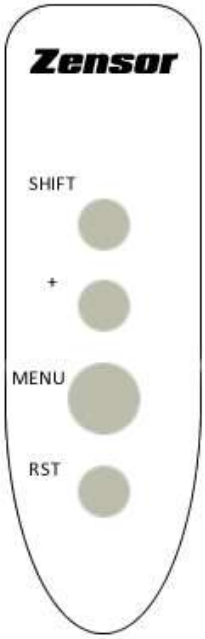


Inside Zone Alarm Action



Outside Zone Alarm Action

■ Remote Module Nomaclature



Buttons

SHIFT: Move between the 4 digits

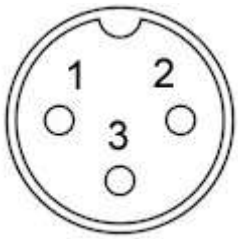
+: Increase the value of the flashing digit

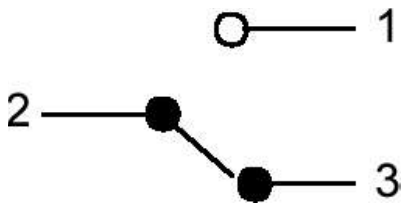
Menu: Entry to alarm setpoint and function parameter settings (press and hold for 3s)

RST: Exit from setting.

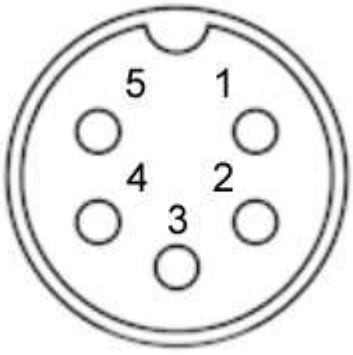
■ Pinout Diagram

Alarm Relay Output





3A 230VAC (AC1)



Signal Pinout

1: GND
2: DC OUT
3: Signal + (input)
4: Signal - (input)