

HR8003 Water Level Transmitter

General

HR8003 water level transmitter is one kind of pressure water level gauge which is used for measuring water level and temperature. With mixed signal processing technology, it overcomes the shortage of the traditional analog circuit modules, realizes F S digital linearity correction, full temperature digital temperature compensation, compensation data stored in nonvolatile memory, multiple safety protection system to avoid the products cannot be used due to correction data lost; Circuit part with power and watchdog monitor, which improve the reliability of the transmitter.

Rich product line, it is widely used in water level and temperature measurement of industrial processes, mining, hydrology, water conservancy, geological exploration and other industries.

Features

- High quality and stability sensing elements;
- Integral measurement of level and temperature;
- FS digital calibration and temperature compensation ;
- RS485 interface and MODBUS-RTU standard protocol;
- Reverse power protection, over voltage protection
- Anti-surge, electromagnetic interference
- Full stainless steel sealed construction, IP68 protection

Specification

Main performance specification	
Accuracy	$< \pm 0.05\% \text{ F}\cdot\text{S}$
Range	0~10 mH ₂ O···200 mH ₂ O
Long-term stability	$< 0.05\% \text{ F}\cdot\text{S}/\text{year}$
Overload capability	2X F·S

Temp. Accuracy	±0.2 °C (0 ~ 70 °C)
Temp. Resolution	0.01 °C
Temperature characteristics	
Compensation temp.	0 ~ 50 °C
Operating temp.	-10 ~ 80 °C
Drift of temp	Zero: <0.005%F.S/°C
	F.S: <0.005%F.S/°C
Storage temp.	-40 ~ 125 °C
Electrical characteristics	
Power Supply	DC3.8 ~ 30V (typ.24V)
Power Protection	Anti-reverse connection, over voltage protection
Output method	RS485/MODBUS-RTU protocol Load capacity: 128nodes
Structural characteristics	
Measuring medium	Compatible with stainless steel and fluoro rubber
Housing material	stainless steel 316L
Cable material	Polyurethane or PVC optional
Cable	Φ 7.6mm , with Shielding layer and guide hole, length customized
Environmental characteristics	
Protection level	IP68
Insulation	100MΩ@50V

Electrical connections

NO.	Color	Definition
1	Red	24V+
2	Blue	RS485+
3	Green	RS485-
4	Yellow	GND

Outline Construction: (Unit:mm)

