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# HR8500 level & temperature integrated transmitter

## Overview

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HR8500 intelligence water level & temperature transmitter is a submersible meter, with full stainless steel sealed construction to measure static water level pressure and media temperature.

Rich product line, they are widely used in industries such as industrial processes, mining, hydrology, water conservancy, geological exploration and other industries.

## Features

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- High quality sensing elements;
- Integral measurement of level and temperature;
- Standard 4 ~ 20mA current;
- Reverse power protection, over voltage protection;
- Anti-surge, electromagnetic interference;
- Full stainless steel sealed construction, IP68 protection.

## Specification

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Main Specification	
Water level accuracy	$< \pm 0.5\% \text{ F}\cdot\text{S}$
Range	0~10 mH <sub>2</sub> O...300 mH <sub>2</sub> O
Long-term stability	0.2%F·S/year (>20m)
	0.1%F·S/year (≤20m)

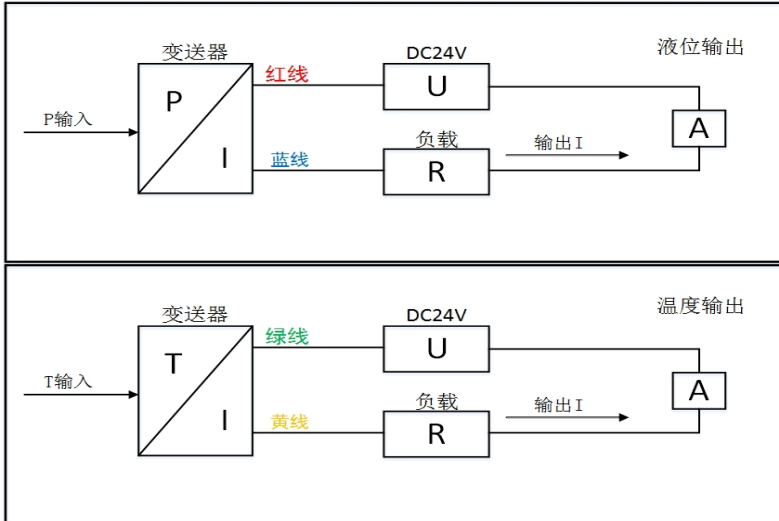
Overload capability	2X F·S	
Temp. Accuracy	$\pm 0.5^{\circ}\text{C}$ (-40 ~ 100 $^{\circ}\text{C}$ )	
Temp. Resolution	0.01 $^{\circ}\text{C}$	
<b>Temperature characteristics</b>		
Compensation temp.	-40 ~ 100 $^{\circ}\text{C}$	
Operating temp.	-40 ~ 100 $^{\circ}\text{C}$	
Drift of temp.	Zero: 0.05%F.S/ $^{\circ}\text{C}$	
	F.S: 0.05%F.S/ $^{\circ}\text{C}$	
Storage temp.	-45 ~ 125 $^{\circ}\text{C}$	
<b>Electrical characteristics</b>		
Power Supply	DC12~30V	
Power Protection	Anti-reverse connection, over voltage protection	
Output method	4 ~ 20mA Signal	Water level: 4 ~ 20mA Temp: 4 ~ 20mA Load capacity: (U-12)/0.02 ( $\Omega$ )
<b>Structural characteristics</b>		
Measuring medium	Compatible with stainless steel and fluoro rubber	
Housing material	Stainless steel 316L	
Cable material	Polyurethane or PVC optional	
Cable	$\Phi 7.6\text{mm}$ , with Shielding layer and guide hole	
<b>Environmental characteristics</b>		
Protection level	IP68	
Insulation	100M $\Omega$ @50V	
Vibration	20g, 20 ~ 5000Hz	

Shock	20g, 11ms
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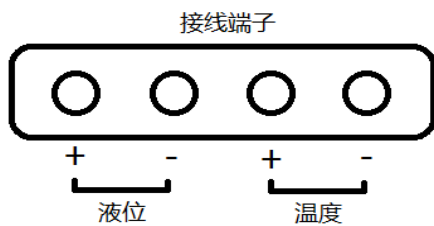
### Electrical connections

NO.	Color	Definition
1	Red	Water level24V+
2	Blue	Water level24V- (Output)
3	Green	Temp.24V+
4	Yellow	Temp.24V- (Output)

### Typical application



### Electrical connections



## Order Guide

HR8500	water level & temperature transmitter						
	Range	0 ~ 300 mH <sub>2</sub> O					
	[0~X] mH <sub>2</sub> O L	X-water level range, L-cable length					
		Code	Output signal				
		Q	RS485-RTU				
		T	Customized				
			Code	Construction Material			
				Housing	Diaphragm	Process Connection	
			S1	SS	316L	SS	
			S2	316L	316L	316L	
			S3	316L	Ta	316L	
					Code	Others	
					C1	M20*1.5 male, face type seal	
	C2	M20×1.5 male, waterline seal					
	C3	G1/2 male					
		F	Fixed flange				
		LM	Limit current protection				
HR8500	[0 ~ 8] mH <sub>2</sub> O 8	Q	S2	F	Full model example		