

PH / ORP

## DIGITAL PH SENSOR - P500

Liquid Analysis

Measurement & Monitoring



### DESCRIPTION

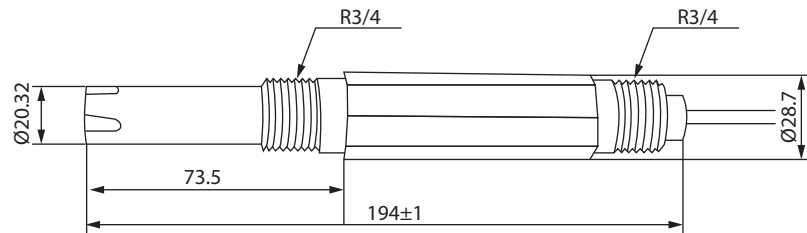
The P500 series digital pH sensor uses a composite electrode which is a combination of glass and reference electrode to measure pH value of liquid. The potential of the reference (internal) in glass combination electrode are constant regardless of pH measured in liquid. During the measurement, H<sup>+</sup> concentration changes when there is a difference between stable potential of reference and potential measured liquid. It is measured by the voltmeter and apply as a pH measurement result.

The P500 is suitable for wide range of application such as water and wastewater treatment plant, chemical and biological plant and hydrology water surface monitoring.

### FEATURES

- ✓ Digital sensor with RS485 signal output
- ✓ Strong anti-interference ability
- ✓ Comprehensive protection circuit design
- ✓ Good repeatability and stability
- ✓ Fast response time
- ✓ Low maintenance cost

### DIMENSION/DRAWING



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DIGITAL PH SENSOR - P500  
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## TECHNICAL FEATURES

### Operating Condition

**Range** 0-14 pH  
**Measuring Temperature** 0 to 80°C  
**Pressure Range** ≤0.6Mpa

### Sensor Performance

**Accuracy** ±0.01pH  
**Alkali Error** 0.2pH (1 mol/L Na + pH14) (25°C)  
**Zero Potential pH Value** 7±0.25pH (15mV)  
**Slope** ≥95%  
**Internal Resistance** ≤250MΩ  
**Response Time** ≤10 seconds (Reach 95% of the end value) (After stirring)

### Electrical

**Power Supply** 12 VDC  
**Communication** RS485 (Modbus)

### Dimension and Protection

**Dimension** Diameter 30 mm, Length 195 mm  
**Protection** IP68/NEMA 6P  
**Sensor Material** PPS  
Ag/AgCl reference gel  
**Signal Cable Length** Standard 10 meter (Maximum 100 meter)  
**Mounting Thread** 3/4" thread

