PWQ-1000 Pipe Network Water Quality Monitoring System

Introduction



The pipe network water quality monitoring system is a product developed for drinking water quality online monitoring applications with small size, light weight and convenient on-site installation.

The product integrates water quality analysis sensor, data acquisition and processing unit, internal water flow pipeline unit, which can continuously measure temperature, PH, ORP,turbidity, conductivity parameters.

The system can be externally expanded to access any brand of standard MODBUS RS485 output meter, such as flow, pressure and other parameters.

Features

- The internal wiring and waterway integration is high, the user only needs to switch on the power supply and access to water, and the equipment is convenient to install on site;
- 2) The internal waterway design can ensure the stability of water flow in the measurement process of the equipment as far as possible to ensure the accuracy of monitoring data;
- 3) With automatic fault diagnosis function, with abnormal information record, upload function, such as parts failure, over-range alarm, alarm and other information;
- 4) Three-level password permission management;
- 5) With data storage function, data can be displayed in tables and curves.
- 6) Can support customers to upgrade the program through the U disk on site.

Applications

- Water quality monitoring of tap water plants, water supply networks, secondary water supply, rural tap water and other occasions;
- Real-time water quality monitoring of swimming pool, SPA, etc.

Technical Specifications

Display	7 inch touch screen, simple operation interface
Power	Ac power supply: 85-500VAC; Dc power supply: 9-36VDC
Output	8-channel 4-20mA analog output (optional)
Relay	Four-way relay, program setting response parameters and response values(optional)
Communication protocol	Standard MODBUS RS485 communication function, real-time transmission of measured values. Optional wireless communication method: 4G: UDP / TCP NB: UDP
Pipe fittings	Water inlet: Straight to a hard tube ⌀ 8 Water outlet: Connect straight to a hard tube ⌀ 12
Water sample flow	200-600ml/min （200~400 ml/min best range）
Storage temp.	0-45℃
Operating temp.	0-40℃
Class of protection	IP54
Dimension	350*270*550mm

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Monitoring parameter index

Residual Chlorine/Chlorine Dioxide	**Principle**	electrode method
	Range	0-2 mg/L、0-5 mg/L
	Resolution	0.01ppm
pH	**Principle**	Glass electrode method
	Range	0-14 pH
	Resolution	0.01 pH
	Accuracy	±0.1 pH
ORP	**Principle**	Glass electrode method
	Range	-2000mV-2000mV
	Resolution	1mV
	Accuracy	±5mV
Dissolved Oxygen	**Principle**	Fluorescence
	Range	0-20 mg/L；0-200% Saturation
	Resolution	0.01mg/L
	Accuracy	±3% or ±0.3 mg/L, whichever is greater
Conductivity	**Principle**	Conductance cell method
	Range	10-5000 us/cm（K=1）
	Resolution	0.1uS/cm-0.01mS/cm（ Depends on the range ）
	Accuracy	±3% or 3us/cm，bigger one
Low-range Turbidity	**Principle**	Light scattering
	Range	0-100NTU
	Resolution	0.001-0.1NTU,Depends on the range
	Accuracy	0.001-40NTU: ±2%or±0.015NTU,Bigger one, 40-100NTU: ±5%
Color	**Principle**	Absorbance spectrophotometry
	Range	0-100 degree
	Resolution	0.1 degree
	Accuracy	±10% or±1degree, whichever is greater
Temp.	**Principle**	Thermistor method
	Range	0℃-40℃
	Resolution	0.1℃
	Accuracy	±0.5℃

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