Multi-Parameter Analyzer

Introduction

Multi-parameter online analyzer: suitable for long-term on-line online monitoring, measuring up to 8 parameters simultaneously, including: Temperature, Depth, pH, ORP, Conductivity & Salinity & TDS, Turbidity, DO, Chlorophyll, Blue-green algae, Ammonia nitrogen, Nitrate, Chloride, Fluoride. Optional accessories such as bluetooth module, battery pack, and handheld communicator are also available for easy portable measurement.



Features

- The host can flexibly set the sampling interval, optimize the working/sleep time, and reduce the overall power consumption. It can be applied to battery power, solar power, and mains power supply.
- SensorRS485 A/B terminal is connected to power supply protection.
- The host can select bluetooth communication function to realize data transmission via bluetooth.
- The host has a data storage function, and the amount of stored data is 100,000.
- Self-cleaning system allows the product to obtain accurate data for a long time.
- The electrode can be replaced directly in the field, and the maintenance is simple and fast
- Sensor power supply positive and negative reverse connection protection.
- The host has LED lights to display the current running status of the host and the working status of bluetooth.
- Standard ModbusRS-485 digital signal output, can be connected with third-party data loggers or remote devices for integration and networking;With built-in battery, optional battery to achieve battery power in a short time; purchase in your local market.

Software Functions

- Operation software of Windows interface has the function of settings,online monitoring,calibration and Historical data download,convenient and efficient parameters settings.Convenient and efficient calibration functions.
- Real-time data and curve display can help users intuitively obtain the data of measured water bodies.
- Intuitively and accurately understanding and tracking the parameters' changes of the measured water bodies in a certain period through the Historical data download and curve display.

Application

- Multi-Parameter water quality online monitoring of rivers, lakes and reservoirs.
- Water quality online monitoring of drinking water source, ground water and sea water.

Mainframe Physical Indicators

Power Supply	9-36VDC	**Measuring Temperature**	0-40℃ (non-freezing)
Power Dissipation	3W	**Storage Temperature**	0-50℃ (non-freezing)
Communication protocol	MODBUS RS485	**Protection Class**	IP68
Size	Diameter 90*Length 635mm	**Weight**	5KG
Maximum withstand pressure depth	30m(With ion selective elect rode: 10 m)	**Battery capacity**	8 sections, 3.6V lithium sub-battery

Standard Electrode Parameters

pH Sensor :		Temperature:	
Principle	Glass electrode method	Principle	Thermistor method
Range	0-14 pH (With ion electrode:5-10 pH)	Range	0℃-60℃ (Mainframe's work temp. 0-40℃)
Resolution	0.01 pH	Resolution	0.1℃
Accuracy	±0.1 pH	Accuracy	±0.5℃
Conductivity sensor:		ORP Sensor:	
Principle	Conductivity cell method	Principle	Glass electrode method
Range	10us/cm-200ms/cm	Range	-1000mV -+1000mV
Resolution	0.1us/cm-0.01ms/cm(Depending on the range)	Resolution	1mV
Accuracy	±1% or 1uS/cmL, the bigger one	Accuracy	±5mV
DO sensor:		Turbidity sensor:	
Principle	Fluorescence	Principle	Light scattering method
Range	0-20 mg/L;0-20 ppm;0-200%	Range	0-1000NTU
Resolution	0.1%/0.01mg/l	Resolution	0.1NTU
Accuracy	±3% or ±0.3 mg/L, whichever is greater	Accuracy	± 5% or 0.3NTU, whichever is greater
Chlorophyll sensor:		Blue-green algae sensor:	
Principle	Fluorescence	Principle	Fluorescence
Range	0-500 ug/L	Range	0-300,000cells/mL
Resolution	0.01 ug/L-0.1 ug/L, Depending on range	Resolution	20cells/mL
Accuracy	±5% of the signal level corresponding value of 1ppb Rhodamine B Dye	Accuracy	±10% of the signal level corresponding value of 1ppb Rhodamine B Dye
Ammonia Sensor:		Nitrate Sensor:	
Principle	Ion selection	Principle	Ion selection
Range	0.1-3000mg/L-N	Range	0.5-3000mg/L-N
Resolution	0.01mg/L-N	Resolution	0.01mg/L-N
Accuracy	±5% or ±0.2mg/L	Accuracy	±10% or ±0.2mg/L
Chloride Sensor:		Fluoride Sensor:	
Principle	Ion selection	Principle	Ion selection
Range	3-3500mg/L	Range	0.5-10000mg/L
Resolution	0.01mg/L	Resolution	0.01mg/L
Accuracy	±10% or ±0.2mg/L	Accuracy	±10% or ±0.2mg/L
Depth (Pressure):		Potassium ion sensor	
Principle	Pressure-sensitive Method	Principle	Ion selection
Range	0-61m(Maximum withstand pressure depth:30M)	Range	0.5-5000 mg/L
Resolution	2cm	Resolution	0.01mg/L
Accuracy	±0.3%	Accuracy	±10% or ±0.2mg/L