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CATALOG

PMI800 Series Portable Water Analyzer 2
PMI800-pH Portable PH Water Analyzer 4
PMI800-PH Portable PH Water Quality Analyzer 5
PMI800-PH Portable Digital PH Water Quality Analyzer 6
PMI800-EC Portable Four-Electrode Conductivity Water Quality Analyzer 7
PMI800-EC Portable Digital Four-Electrode EC Water Quality Analyzer 9
PMI800-EC Portable Conductivity Water Analyzer 10
PMI800-ORP Portable Digital ORP Water Quality Analyzer 11
PMI800-ORP Portable ORP Water Quality Analyzer 12
PMI800-FDO Portable Dissolved Oxygen Water Analyzer 14
PMI800-FDO Portable Dissolved Oxygen Water Analyzer 15
PMI800-TU Portable Turbidity Water Quality Analyzer 17
PMI800-TU Portable Turbidity Analyzer 18
PMI800-TU Portable Turbidity Analyzer 19
PMI800-SS Portable Suspended Solids Water Quality Analyzer 20
PMI800-SS Portable Suspended Solids Quality Analyzer 21
PMI800-BA Portable Blue-Green Algae Water Analyze 22
PMI800-CH Portable Chlorophyll Water Analyzer 23
PMI800-COD AnalyzerPortable Spectrometer Organic Water Analyzer 24
PMI800-CT Portable Colority Water Quality Analyzer 26
PMI800-OIL Portable Oil-in-Water Water Quality Analyzer 27
PMI800-OIL Portable Oil-in-Water Water Quality Analyzer 28
PMI800-NH3N Portable Ammonia Nitrogen Ion Water Quality Analyzer 30
PMI800-ISE Portable Ion Water Quality Analyzer 32

PMI800 Series Portable Water Analyzer

Introduction



PMI800 when used with portable electrodes, the PMI800 portable analyzer can measure a variety of parameters such as pH, ORP, Conductivity (convertible Salinity & TDS), Dissolved oxygen, Turbidity, Suspended solids, Chlorophyll, Blue-green algae etc. The connected electrode type can be automatically identified; single channel and dual channel configurations are available. It has the advantages of comfortable operation, convenient testing and wide application.

Main features

- 3.5-inch color screen display, interface menu design is beautiful, easy to operate;
- Ergonomic curve design, suitable for hand grip, with rubber non-slip hand strap, not easy to slip in wet environment.
- With data storage function, storage space 8G, and data export through USB interface.
- Built-in rechargeable battery and charging directly via USB without disassembling the battery.
- Automatically identify the connected sensor type and the reading interface automatically adapts.
- The sensor can be parameterized and calibrated.

Selection Guide

Measurement parameters	Single channel	Dual channel
Turbidity	√	√
Suspended solids	√	√
Dissolved oxygen	√	√
Chlorophyll	√	√
Blue-green algae	√	√
Oil-in-Water	√	√
Colority	√	√
Ion((NH4N, NO3N, K^+, CL^-, and F^-)	√	√
PH	√	√
Conductivity	√	√
ORP	√	√
COD	√	√

Technical Specifications

Data storage	More than 100,000 data
Material	ABS+PC
Power supply	Built-in battery power, battery specifications: 4 3.7V rechargeable lithium battery
Protection level	IP67
Operating temperature	0-50℃(Non-freezing)
Storage temperature	-15-50℃
Size	203*100*43mm
Weight	0.5KG

Electrode Parameters

	Temp.	Principle	Thermal method
		Range	0℃-60℃
		Resolution	0.01℃
		Accuracy	±0.5℃
	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	≤±2mV(Electronic component)
	Conductivity (convertible Salinity & TDS)	Principle	Conductivity cell method
		Range	0-20000us/cm(K=1)
		Resolution	0.1uS/cm-0.01mS/cm(base on range)
		Accuracy	≤±1.0%F.S.
	Dissolved oxygen	Principle	Fluorescence method
		Measure Range	0-20 mg/L;0-20 ppm;0-200%
		Resolution	0.1%/0.01mg/l
		Accuracy	±3% or ±0.3 mg/L, the bigger one
	Turbidity	Principle	Light scattering
		Measure Range	0.1-1000NTU
		Resolution	0.01-0.1NTU,base on range
		Accuracy	±5% or 0.3NTU bigger one
	Suspended solids	Principle	Light scattering
		Measure Range	0.01-20000mg/L;0.01-45000mg/L; 0.01-120000mg/L
		Resolution	0.01-1 mg/L,base on range
		Accuracy	Not more than ±5% measured(Depends on sludge homogeneity)
	Chlorophyll	Principle	Fluorescence method
		Measure Range	0-500 ug/L
		Resolution	0.01 ug/L
		Accuracy	± 5% of the signal level of 1 ppb rhodamine B dye
		Linearity	R2 >0.999
	Blue-green algae	Principle	Fluorescence method
		Measure Range	0-300,000cells/mL
		Resolution	20 cells/mL
		Accuracy	±10% of the signal level of 1 ppb rhodamine B dye
		Linearity	R2 >0.999
	COD	Principle	UV absorption method
		Measure Range	0-500mg/l COD (5mm)
		Resolution	COD/BOD/TOC:0.01 mg/l
		Accuracy	5% (using KHP calibration)

PMI800-pH Portable PH Water Analyzer

Introduction



Portable PH analyzer consists of portable host and portable PH sensor. The sensor uses composite electrode composed of a glass indicator electrode and a reference electrode to measure PH value of water quality, Data stability and reliable performance.

Main Features

- The host with IP67 protection rating;
- 3.5-inch color screen display, interface menu design is beautiful, easy to operate;
- Ergonomic curve design, suitable for hand grip, with rubber non-slip hand strap, not easy to slip in wet environment;
- With data storage function, and data export through USB interface;
- Built-in rechargeable battery and charging directly via USB without disassembling the battery;
- Automatically identify the connected sensor type and the reading interface automatically adapts;
- The sensor can be parameterized and calibrated;

Application

- It is widely used in on-site portable monitoring of PH in aquaculture, sewage treatment, surface water, industrial and agricultural water supply and drainage, domestic water, swimming pools, scientific research universities a nd other industries and fields.

Technical Specifications

Measurement range	pH：0-14, Temperature：0-45℃
Resolution	pH：0.01PH, Temperature：0.01℃
Accuracy	pH：±0.1PH, Temperature：±0.5℃
Display	3.5-inch color display screen with adjustable backlight
Power supply	Built-in battery power, battery specifications: 4 3.7V rechargeable lithium battery
Data storage	More than 100,000 data
Material	Mainframe:ABS+PC；Sensor:PC
Protection level	Mainframe: IP67,sensor: IP68/NEMA6P
Operating temp.	0-50℃（Non-freezing）
Storage temperature	-15-50℃
Size&Weight	Mainframe:203*100*43mm,0.5KG sensor: Dia 34mm*Length 252mm,<0.5KG
Cable length	Standard: 3 m(The cable can be extendable)

PMI800-PH Portable PH Water Quality Analyzer

Introduction



The PMI800 portable pH analyzer consists of a PMI-800 host and a digital PPH-300 portable pH sensor.Portable PH analyzer consists of portable host and portable PH sensor. The sensor uses composite electrode composed of a glass indicator electrode and a reference electrode to measure PH value of water quality, Data stability and reliable performance.

Main Features

- The host has an IP67 protection rating;
- 3.5-inch color screen display, interface menu design is beautiful, easy to operate;
- Ergonomic curve design, suitable for hand grip, with rubber non-slip hand strap, not easy to slip in wet environment;
- With data storage function, and data export through USB interface;
- Built-in rechargeable battery and charging directly via USB without disassembling the battery;
- Automatically identify the connected sensor type and the reading interface automatically adapts;
- The sensor can be parameterized and calibrated.

Application

- It is widely used in on-site portable monitoring of PH in aquaculture, sewage treatment, surface water, industrial and agricultural water supply and drainage, domestic water, swimming pools, scientific research universities a nd other industries and fields.

Technical Specifications

Measurement range	pH：0-14, Temperature：0-60℃
Resolution	pH：0.01PH, Temperature：0.01℃
Accuracy	pH：≤±0.1PH, Temperature：≤±0.5℃
Display	3.5-inch color display screen with adjustable backlight
Power supply	Built-in battery power, battery specifications: 4 3.7V rechargeable lithium battery
Data storage	More than 100,000 data
Material	Mainframe:ABS+PC；Sensor:Blue transparent polycarbonate housing
Protection level	Mainframe: IP67,sensor: IP68/NEMA6P
Operating temp.	0-50℃（Non-freezing）
Storage temperature	-15-50℃
Size&Weight	Mainframe:203*100*43mm,0.5KG sensor: Dia 12mm*Length 120mm,<0.1KG
Cable length	Standard: 5 m(The cable can be extendable)

PMI800-PH Portable Digital PH Water Quality Analyzer

Introduction



The PMI800 portable pH analyzer consists of a PMI-800 host and a digital PPH-500B portable pH sensor. The sensor uses a combination electrode of a glass indicator electrode and a reference electrode to measure the pH value and temperature of water quality, with stable data and reliable performance.

Main Features

- The host has an IP67 protection rating;
- Ergonomic curve design, suitable for hand holding, with a rubber non-slip wristband to prevent slipping in humid environments;
- Equipped with data storage function, and data can be exported via USB interface;
- Built-in rechargeable battery, which can be directly charged via USB without removing the battery;
- Automatically identifies the type of connected sensor, and the reading interface adapts automatically;
- Allows parameter setting and calibration of the sensor;
- Equipped with PT1000 temperature compensation function, ensuring good repeatability and stability of measurement results;
- Digital communication, RS485, standard Modbus protocol;

Application

- Purified water plants, tap water plants, domestic sewage treatment plants, beverage factories, wine-making industry;
- Environmental protection departments, industrial water, pharmaceutical industry, epidemic prevention departments, hospitals, etc.

Technical Specifications

Measurement Range	0-14pH, -10-80℃
Measurement Accuracy	pH: ≤±0.1pH; Temperature: ≤±0.5℃
Resolution	0.01pH, 0.1℃
Calibration	Automatic air calibration, sample calibration
Housing Material	Housing: 316L stainless steel; Host: ABS+PC
Operating Temperature	0-45℃ (no freezing)
Weight	Sensor: 1.0KG; Host: 0.5KG
Dimensions	Sensor: Diameter 34mm * Length 230mm; Host: 203*100*43mm (Length*Width*Height)
Protection Rating	Host: IP67; Sensor: IP68
Cable Length	Standard 3-meter cable (extendable)
Display	3.5-inch color display screen with adjustable backlight
Data Storage	More than 100,000 data records

PMI800-EC Portable Four-Electrode Conductivity Water Quality Analyzer

Introduction



The PMI800-EC portable conductivity analyzer consists of a PMI-800 host and a PEC-305 conductivity sensor. The four-electrode conductivity meter adopts the core design of "current-voltage electrode separation", which fundamentally solves the interference problems such as polarization and contact resistance of the traditional two-electrode type. It has the characteristics of high precision, wide measurement range, strong anti-interference, and low maintenance. The core logic of its principle is "establishing an electric field with constant current, measuring the real voltage with independent electrodes, and accurately separating interference factors". Therefore, it has become the preferred conductivity detection equipment in fields such as environmental monitoring and industrial process control.

Main Features

- The host has an IP67 protection rating;
- 3.5-inch color screen display with an aesthetically designed interface menu and simple operation;
- Ergonomic curve design, suitable for hand holding, with a rubber non-slip wristband to prevent slipping in humid environments;
- Equipped with data storage function, and data can be exported via USB interface;
- Built-in rechargeable battery, which can be directly charged via USB without removing the battery;
- Automatically identifies the type of connected sensor, and the reading interface adapts automatically;
- Allows parameter setting and calibration of the sensor;
- Equipped with NTC temperature compensation function, ensuring good repeatability and stability of measurement results;
- Strong anti-polarization ability and small measurement error;
- Extremely wide measurement range and strong versatility;
- High measurement accuracy and reliable data.

Application

- High-purity water/ultra-pure water monitoring: such as semiconductor, power, and pharmaceutical industries;
- High-concentration electrolyte solution measurement: such as seawater, concentrated salt solution, acid-base chemical processes;
- Laboratory precision measurement: scientific research and quality inspection fields requiring high-precision data;
- Online process control: industrial continuous monitoring with high requirements for stability and reliability.

Technical Specifications

Measurement Range	10μs/cm~200.0ms/cm (K=0.3)
Measurement Accuracy	≤±1% or ±1μS/cm, whichever is larger
Resolution	0.01μS/cm-1μS/cm, depending on the range of the measured value
Parameter Switching	Conductivity, salinity, resistivity, TDS
Housing Material	Sensor: Epoxy + graphite; Host: ABS+PC
Operating Temperature	5-35℃ (no freezing)
Weight	Sensor: 1.4KG; Host: 0.5KG
Dimensions	Sensor: Diameter 12.7mm * Length 142mm; Host: 203*100*43mm (Length*Width*Height)
Protection Rating	Host: IP67; Sensor: IP68
Cable Length	Standard 5-meter cable (extendable to 10m)
Display	3.5-inch color display screen with adjustable backlight
Data Storage	More than 100,000 data records

PMI800-EC Portable Digital Four-Electrode EC Water Quality Analyzer

Introduction



The PMI800-EC portable digital four-electrode EC analyzer consists of a PMI-800 host and a PEC-500B conductivity sensor. The four-electrode conductivity meter adopts the core design of "current-voltage electrode separation", which fundamentally solves the interference problems such as polarization and contact resistance of the traditional two-electrode type. It has the characteristics of high precision, wide measurement range, strong anti-interference, and low maintenance. The core logic of its principle is "establishing an electric field with constant current, measuring the real voltage with independent electrodes, and accurately separating interference factors". Therefore, it has become the preferred conductivity detection equipment in fields such as environmental monitoring and industrial process control.

Main Features

- Ergonomic curve design, suitable for hand holding, with a rubber non-slip wristband to prevent slipping in humid environments;
- Equipped with data storage function, and data can be exported via USB interface;
- Built-in rechargeable battery, which can be directly charged via USB without removing the battery;
- Automatically identifies the type of connected sensor, and the reading interface adapts automatically;
- Allows parameter setting and calibration of the sensor;
- Digital communication, RS485, standard Modbus protocol;

Application

- Purified water plants, tap water plants, domestic sewage treatment plants;
- beverage factories, wine-making industry;
- Environmental protection departments, industrial water, pharmaceutical industry, epidemic prevention departments, hospitals, etc.

Technical Specifications

Measurement Range	10μs/cm~200.0ms/cm (K=0.3)
Measurement Accuracy	≤±1% or ±1μS/cm, whichever is larger
Resolution	0.01μS/cm-1μS/cm, depending on the range of the measured value
Parameter Switching	Conductivity, salinity, resistivity, TDS
Housing Material	Sensor: Epoxy + graphite; Host: ABS+PC
Operating Temperature	5-35℃ (no freezing)
Dimensions&Weight	Sensor: Diameter 12.7mm * Length 142mm; Host: 203*100*43mm (Length*Width*Height).Sensor: 1.4KG; Host: 0.5KG
Protection Rating	Host: IP67; Sensor: IP68
Cable Length	Standard 5-meter cable (extendable to 10m)
Display	3.5-inch color display screen with adjustable backlight
Data Storage	More than 100,000 data records

PMI800-EC Portable Conductivity Water Analyzer

Introduction



The PMI800-EC portable EC analyzer consists of a PMI-800 host and a PEC-300 conductivity sensor.

The portable conductivity analyzer consists of a portable mainframe and a portable conductivity sensor. The measurement principle is to put two par allel plates into the measured solution, add a certain electric potential (us ually sine wave voltage) at both ends of the plate, and then measure the c urrent flowing between the plates. Conductivity is determined by Ohm's fo rmula based on voltage and current values.

Main Features

- The host with IP67 protection rating;
- 3.5-inch color screen display, interface menu design is beautiful, easy to operate;
- Ergonomic curve design, suitable for hand grip, with rubber non-slip hand strap, not easy to slip in wet environment;
- With data storage function, and data export through USB interface;
- Built-in rechargeable battery and charging directly via USB without disassembling the battery;
- Automatically identify the connected sensor type and the reading interface automatically adapts;
- The sensor can be parameterized and calibrated.

Application

- It is widely used in on-site portable monitoring of conductivity in aquaculture, sewage treatment, surface water, indust rial and agricultural water supply and drainage, domestic water, swimming pools, scientific research universities and other industries and fields.

Technical Specifications

Measurement range	0~20000us/cm（K=1）
Parameter switching	Conductivity, salinity, resistivity，TDS
Resolution	0.1us/cm~0.01ms/cm（Depends on the measuring range）
Accuracy	±1%F.S.
Display	3.5-inch color display screen with adjustable backlight
Power supply	Built-in battery power, battery specifications: 4 3.7V rechargeable lithium battery
Data storage	More than 100,000 data
Material	Mainframe:ABS+PC；Sensor:Black ABS case
Protection level	Mainframe: IP67,sensor: IP68/NEMA6P
Operating temp.	0~50℃（Non-freezing）
Storage temperature	-15~50℃
Size&Weight	Mainframe:203*100*43mm,0.5KG sensor:Dia 12mm*Length 120mm,＜0.1KG
Cable length	Standard: 5 m(The cable can be extendable)

PMI800-ORP Portable Digital ORP Water Quality Analyzer

Introduction

The PMI800 portable ORP analyzer consists of a PMI-800 host and a POP-500B portable ORP sensor. The ORP sensor uses a combination electrode of a glass indicator electrode and a reference electrode to measure the ORP value of water quality, with stable data and reliable performance.



Main Features

- The host has an IP67 protection rating;
- 3.5-inch color screen display with an aesthetically designed interface menu and simple operation;
- Ergonomic curve design, suitable for hand holding, with a rubber non-slip wristband to prevent slipping in humid environments;
- Equipped with data storage function, and data can be exported via USB interface;
- Built-in rechargeable battery, which can be directly charged via USB without removing the battery;
- Automatically identifies the type of connected sensor, and the reading interface adapts automatically;
- Allows parameter setting and calibration of the sensor;
- Digital communication, RS485, standard Modbus protocol;
- With reverse connection protection for power supply and communication.

Application

- Purified water plants, tap water plants, domestic sewage treatment plants, beverage factories, wine-making industry;
- Environmental protection departments, industrial water, pharmaceutical industry, epidemic prevention departments, hospitals, etc.

Technical Specifications

Measurement Range	±2000mV
Measurement Accuracy	≤±5 mV
Resolution	0.1mV
Repeatability	≤±2 mV
Housing Material	Housing: 316L stainless steel; Host: ABS+PC
Operating Temperature	0-45℃ (no freezing)
Weight	Sensor: 1.0KG; Host: 0.5KG
Dimensions	Sensor: Diameter 34mm * Length 230mm; Host: 203*100*43mm (Length*Width*Height)
Protection Rating	Host: IP67; Sensor: IP68
Cable Length	Standard 3-meter cable (extendable)
Display	3.5-inch color display screen with adjustable backlight
Data Storage	More than 100,000 data records

PMI800-ORP Portable ORP Water Quality Analyzer

Introduction

The PMI800 portable ORP analyzer consists of a PMI-800 host and a POP-300 portable ORP sensor.Portable ORP analyzer consists of portable host and portable ORP sensor. The sensor uses composite electrode composed of a glass indicator electrode and a reference electrode to measure ORP value of water quality, data stability and reliable performance.



Main Features

- The host has an IP67 protection rating;
- 3.5-inch color screen display with an aesthetically designed interface menu and simple operation;
- Ergonomic curve design, suitable for hand holding, with a rubber non-slip wristband to prevent slipping in humid environments;
- Equipped with data storage function, and data can be exported via USB interface;
- Built-in rechargeable battery, which can be directly charged via USB without removing the battery;
- Automatically identifies the type of connected sensor, and the reading interface adapts automatically;
- Allows parameter setting and calibration of the sensor;
- Digital communication, RS485, standard Modbus protocol;
- With reverse connection protection for power supply and communication.

Application

- It is widely used in on-site portable monitoring of ORP in aquaculture, sewage treatment, surface water, industrial and agricultural water supply and drainage, domestic water, swimming pools, scientific research universities and other industries and fields.

Technical Specifications

Measurement range	-2000mV ~ +2000mV
Resolution	1mV
Accuracy	≤±2mV（electronic component）
Display	3.5-inch color display screen with adjustable backlight
Power supply	Built-in battery power, battery specifications: 4 3.7V rechargeable lithium battery
Data storage	More than 100,000 data
Material	Mainframe:ABS+PC；Sensor:red PC housing, platinum disc
Protection level	Mainframe: IP67,sensor: IP68/NEMA6P
Operating temp.	0-50℃（Non-freezing）
Storage temperature	-15-50℃
Size&Weight	Mainframe:203*100*43mm,0.5KG sensor: Dia 12mm*Length 120mm,<0.1KG
Cable length	Standard: 5 m(The cable can be extendable)

PMI800-FDO Portable Dissolved Oxygen Water Analyzer

Introduction

The PMI800-FDO portable dissolved oxygen analyzer consists of a PMI-800 host and a PFDO-500 fluorescence dissolved oxygen sensor. Portable dissolved oxygen meter consists of portable host and fluorescence dissolved oxygen sensor. Using advanced fluorescence measurement princi ple, no membrane and electrolyte, basically no maintenance, no oxygen consumption during measurement, no flow rate/agitation requirements; and built-in NTC temperature compensation function, the measurement results have good repeatability and stability .



Main Features

- The host with IP67 protection rating;
- 3.5-inch color screen display, interface menu design is beautiful, easy to operate;
- Ergonomic curve design, suitable for hand grip, with rubber non-slip hand strap, not easy to slip in wet environment;
- With data storage function, and data export through USB interface;
- Built-in rechargeable battery and charging directly via USB without disassembling the battery;
- Automatically identify the connected sensor type and the reading interface automatically adapts;
- The sensor can be parameterized and calibrated.

Application

- It is widely used in on-site portable monitoring of PH in aquaculture, sewage treatment, surface water, industrial and agricultural water supply and drainage, domestic water, swimming pools, scientific research universities a nd other industries and fields.

Technical Specifications

Measurement range	DO：0-20 mg/L or 0-200% Saturation; Temperature：0-45℃
Resolution	0.01mg/l
Measurement Accuracy	DO: ±3% or ±0.3 mg/L, Greater one; Temperature：±0.5℃
Calibration	Air automated calibration, sample calibration
Display	3.5-inch color display screen with adjustable backlight
Power supply	Built-in battery power, battery specifications: 4 3.7V rechargeable lithium battery
Data storage	More than 100,000 data
Material	Mainframe:ABS+PC；Sensor:SUS316L
Protection level	Mainframe: IP67,sensor: IP68/NEMA6P
Operating temp.	0-50℃（Non-freezing）
Storage temperature	-15-50℃
Size&Weight	Mainframe:203*100*43mm,0.5KG sensor: Dia 25mm*Length 127mm,<0.3KG
Cable length	Standard: 3 m(The cable can be extendable)

PMI800-FDO Portable Dissolved Oxygen Water Analyzer

Introduction



The PMI800-FDO portable dissolved oxygen analyzer consists of a PMI-800 host and a PFDO-700 fluorescence dissolved oxygen sensor. Adopting the advanced fluorescence measurement principle, when the blue light emitted by the sensor irradiates the fluorescent substance on the fluorescent cap, the fluorescent substance is excited to emit red light. Since oxygen molecules can take away energy (quenching effect), the time and intensity of the excited red light are inversely proportional to the concentration of oxygen molecules. The concentration of dissolved oxygen in water can be obtained through calculation. It is equipped with an NTC temperature compensation function, ensuring good repeatability and stability of measurement results.

Main Features

- The host with IP67 protection rating;
- The host has an IP67 protection rating;
- 3.5-inch color screen display with an aesthetically designed interface menu and simple operation;
- Ergonomic curve design, suitable for hand holding, with a rubber non-slip wristband to prevent slipping in humid environments;
- Equipped with data storage function, and data can be exported via USB interface;
- Built-in rechargeable battery, which can be directly charged via USB without removing the battery;
- Automatically identifies the type of connected sensor, and the reading interface adapts automatically;
- Allows parameter setting and calibration of the sensor;
- The sensor adopts a new type of oxygen-sensitive membrane and is equipped with an NTC temperature compensation function, ensuring good repeatability and stability of measurement results;
- No oxygen consumption during measurement, and no requirement for flow rate/agitation;
- Innovative fluorescence technology, no membrane or electrolyte, basically no maintenance required;
- Built-in self-diagnostic function to ensure data accuracy;
- Calibrated at the factory, no calibration required for one year, and on-site calibration is possible.

Application

- Purified water plants, tap water plants, domestic sewage treatment plants, beverage factories, wine-making industry;
- Environmental protection departments, industrial water, pharmaceutical industry, epidemic prevention departments, hospitals, etc.

Technical Specifications

Measurement Range	Dissolved Oxygen: 0-20mg/L; 0-200%; Temperature: 0-45℃
Measurement Accuracy	Dissolved Oxygen: ±3% of the measured value or ±0.3mg/L, whichever is larger; Temperature: ±0.5℃
Resolution	0.01mg/L
Calibration	Automatic air calibration, sample calibration
Housing Material	Sensor: SUS316L, titanium alloy (seawater version); Upper and lower covers: PPS + glass fiber; Host: ABS+PC
Storage Temperature	-15-50℃
Operating Temperature	0-45℃ (no freezing)
Weight	Sensor: 1.4KG; Host: 0.5KG
Dimensions	Sensor: Diameter 49.5mm * Length 252.3mm; Host: 203*100*43mm (Length*Width*Height)
Protection Rating	Host: IP67; Sensor: IP68/NEMA6P
Cable Length	Standard 3-meter cable (extendable)
Display	3.5-inch color display screen with adjustable backlight
Data Storage	More than 100,000 data records

PMI800-TU Portable Turbidity Water Quality Analyzer

Introduction

The PMI800-TU portable turbidity analyzer consists of a PMI-800 host and a PTU-500 turbidity sensor. Adopting infrared scattered light technology, it can eliminate the influence of sample color. That is, when the infrared light emitted by the light source passes through the measured sample during transmission, scattering occurs, and the intensity of the scattered light is proportional to the turbidity. The turbidity sensor is equipped with a scattered light receiver in the 90° direction, and the turbidity value is obtained by analyzing the intensity of this group of scattered light.



Main Features

- Ergonomic curve design, suitable for hand holding, with a rubber non-slip wristband to prevent slipping in humid environments;
- Equipped with data storage function, and data can be exported via USB interface;
- Built-in rechargeable battery, which can be directly charged via USB without removing the battery;
- Automatically identifies the type of connected sensor, and the reading interface adapts automatically;
- Allows parameter setting and calibration of the sensor;
- Infrared scattered light technology can eliminate the influence of sample color;
- Equipped with an automatic cleaning brush function, which greatly reduces the maintenance volume of the sensor;Digital sensor with strong anti-interference ability and long transmission distance;
- The sensor is easy and quick to install on-site, realizing plug-and-play;

Application

- Turbidity monitoring of raw water, sedimentation tanks, surface water and other links of tap water;
- Turbidity monitoring of water environmental protection, aquaculture and other environments.

Technical Specifications

Measurement Range	0.01-1000 NTU
Measurement Accuracy	≤±5% or ±0.3NTU, whichever is larger
Resolution	0.01-0.1NTU, depending on different measurement ranges
Calibration	Sample calibration, slope calibration
Housing Material	Sensor: SUS316L; Host: ABS+PC
Storage Temperature	-15-50℃
Operating Temperature	0-45℃ (no freezing)
Weight	Sensor: 0.55KG; Host: 0.5KG
Dimensions	Sensor: Diameter 34mm * Length 207mm; Host: 203*100*43mm (Length*Width*Height)
Protection Rating	Host: IP67; Sensor: IP68
Cable Length	Standard 3-meter cable (extendable)
Display	3.5-inch color display screen with adjustable backlight
Data Storage	More than 100,000 data records

PMI800-TU Portable Turbidity Analyzer

Introduction



The PMI800-TU portable turbidity analyzer consists of a PMI-800 host and a PTU-300 turbidity sensor. Portable turbidity water analyzer consists of a main host and a turbidity sensor Turbidity Sensor is based on the method of combination of infrared absorption scattered light.Infrared light which the photo source sends out scattered by suspended particles in the sample.And finally converted to electrical signals by photoelectric detector and getting the turbidity value of the sample after treatment by analog and digital signals.

Main Features

- The host with IP67 protection rating;
- 3.5-inch color screen display, interface menu design is beautiful, easy to operate;
- Ergonomic curve design, suitable for hand grip, with rubber non-slip hand strap, not easy to slip in wet environment;
- With data storage function, and data export through USB interface;
- Built-in rechargeable battery and charging directly via USB without disassembling the battery;
- Automatically identify the connected sensor type and the reading interface automatically adapts;
- The sensor can be parameterized and calibrated.

Application

- It is widely used in on-site portable monitoring of turbidity in sewage treatment, surface water, industrial and agricultural water supply and drainage, boiler water,domestic water, swimming pools, aquaculture,scientific research universities and other industries and fields.

Technical Specifications

Measurement range	0.1-1000 NTU
Measurement accuracy	Less than ±5% of the measured reading or ±0.3NTU,whichever is greate
Resolution	0.01~0.1NTU，base on range
Response time	< 30 s
Calibration	Sample Calibration,Slope Calibration
Display	3.5-inch color display screen with adjustable backlight
Power supply	Built-in battery power, battery specifications: 4 3.7V rechargeable lithium battery
Data storage	More than 100,000 data
Material	Mainframe:ABS+PC；sensor: SUS316L
Protection level	Mainframe: IP67,sensor: IP68/NEMA6P
Operating temp.	0-50℃（Non-freezing）
Storage temperature	-15-50℃
Size&Weight	Mainframe:203*100*43mm,0.5KG sensor:Dia 24mm*Length 135mm，<0.25KG
Cable length	Standard: 3 m(The cable can be extendable)

PMI800-TU Portable Turbidity Analyzer

Introduction



The PMI800-TU portable turbidity meter is composed of a PMI-800 main unit and a PTU-800 turbidity sensor. The turbidity sensor is based on the combined infrared absorption and scattering light method: the infrared light emitted by the light source is scattered by turbidity particles in the sample, then converted into an electrical signal by the photodetector, and the sample turbidity value is obtained after analog and digital signal processing.

Main Features

- Ergonomic curved design for comfortable hand-held use, equipped with a rubber anti-slip strap to prevent slipping in humid environments.
- Built-in data storage function, supporting data export via USB interface.
- Built-in rechargeable battery, charged directly via USB without battery removal.
- Automatically identifies the connected sensor type and adapts the reading interface accordingly.
- Supports parameter setting and calibration for the sensor.
- The sensor adopts dual-beam infrared scattering photometer technology, ensuring excellent repeatability and stability.
- Complies with the ISO 7027 standard (infrared light scattering technology) to eliminate the interference of sample color.
- Optional automatic cleaning brush function to greatly reduce sensor maintenance workload.

Application

- Turbidity monitoring for raw tap water, sedimentation tanks, surface water and other water treatment links.
- Turbidity monitoring in environmental protection, aquaculture and other scenarios.

Technical Specifications

Measuring Range	0.01–100 NTU, 0.01–4000 NTU
Measurement Accuracy	≤±2% of the measured value or ±0.1 NTU, whichever is larger
Resolution	0.01–0.1 NTU, depending on the measuring range
Calibration	Sample calibration, slope calibration
Housing Material	Main body: SUS316L (standard version), titanium alloy (seawater version); Cable: PUR
Storage Temperature	-15–50℃
Operating Temperature	0–45℃ (non-freezing)
Weight	Sensor: 1.65 kg; Main unit: 0.5 kg
Dimensions	Sensor: Φ60×261 mm (diameter×length); Main unit: 203×100×43 mm (L×W×H)
Protection Rating	Main unit: IP67; Sensor: IP68
Cable Length	Standard 3-meter cable (extendable)
Display	3.5-inch color screen with adjustable backlight
Data Storage	More than 100,000 data records

PMI800-SS Portable Suspended Solids Water Quality Analyzer

Introduction



The PMI800-SS portable suspended solids analyzer consists of a PMI-800 host and a PSS-600 suspended solids sensor. The sensor is based on the combined infrared absorption and scattering light method, and can continuously and accurately determine suspended solids (sludge concentration) by applying the ISO 7027 method. According to the ISO 7027 infrared dual-scattering light technology, the suspended solids (sludge concentration) value can be determined without being affected by chromaticity.

Main Features

- Ergonomic curve design, suitable for hand holding, with a rubber non-slip wristband to prevent slipping in humid environments;
- Equipped with data storage function, and data can be exported via USB interface;
- Built-in rechargeable battery, which can be directly charged via USB without removing the battery;
- Automatically identifies the type of connected sensor, and the reading interface adapts automatically;
- Allows parameter setting and calibration of the sensor;
- Digital sensor with strong anti-interference ability and long transmission distance;
- Infrared scattered light technology can eliminate the influence of sample color;
- Optional automatic cleaning brush function, which greatly reduces the maintenance volume of the sensor;
- The sensor is easy and quick to install on-site, realizing plug-and-play;

Application

- Online monitoring of sludge concentration in various process links of sewage treatment plants;
- Online monitoring of suspended solids (sludge concentration) in various industrial process water and wastewater treatment processes;
- Online monitoring of sewage plant outlets, municipal pipe network water quality and pollution source discharge outlets, etc.

Technical Specifications

Measurement Range	0.01-1000 NTU
Measurement Accuracy	≤±5% or ±0.3NTU, whichever is larger
Resolution	0.01-0.1NTU, depending on different measurement ranges
Calibration	Sample calibration, slope calibration
Housing Material	Sensor: SUS316L; Host: ABS+PC
Storage Temperature	-15-50℃
Operating Temperature	0-45℃ (no freezing)
Weight	Sensor: 0.55KG; Host: 0.5KG
Dimensions	Sensor: Diameter 34mm * Length 207mm; Host: 203*100*43mm (Length*Width*Height)
Protection Rating	Host: IP67; Sensor: IP68
Cable Length	Standard 3-meter cable (extendable)
Display	3.5-inch color display screen with adjustable backlight
Data Storage	More than 100,000 data records

PMI800-SS Portable Suspended Solids Quality Analyzer

Introduction



The PMI800-SS portable suspended solids analyzer consists of a PMI-800 host and a PSS-800 suspended solids sensor.The portable suspended solids analyzer consists of a main host and a suspended solids sensor. The sensor is based on the combined infrared absorption and scattering light method, and the ISO7027 method can be used for continuous accurate determination of suspended solids (sludge concentration). The value of suspended solids (sludge concentration) was determined by ISO7027 infrared double-scattered light technique without influence of chroma.

Main Features

- The host with IP67 protection rating;
- 3.5-inch color screen display, interface menu design is beautiful, easy to operate;
- Ergonomic curve design, suitable for hand grip, with rubber non-slip hand strap, not easy to slip in wet environment;
- With data storage function, and data export through USB interface;
- Built-in rechargeable battery and charging directly via USB without disassembling the battery;
- Automatically identify the connected sensor type and the reading interface automatically adapts;
- The sensor can be parameterized and calibrated.

Application

- It is widely used in on-site portable monitoring of suspended solids in sewage treatment, surface water, scientific research universities and other fields.

Technical Specifications

Measurement range	0.01~20000mg/L;0.01~45000mg/L;0.01~120000mg/L(Optional)
Measurement accuracy	Less than the ±5% of measured value. (Depending on the homogeneity of sludge)
Resolution	0.01~1 mg/L, base on range
Calibration	Sample Calibration,Slope Calibration
Display	3.5-inch color display screen with adjustable backlight
Power supply	Built-in battery power, battery specifications: 4 3.7V rechargeable lithium battery
Data storage	More than 100,000 data
Material	Mainframe:ABS+PC sensor: Body: SUS316L（fresh water）, Titanium alloy（marine）
Protection level	Mainframe: IP67,sensor: IP68/NEMA6P
Operating temp.	0~45℃（Non-freezing）
Storage temperature	-15~50℃
Size&Weight	Mainframe:203*100*43mm,0.5KG sensor:Dia 60mm*Length 261mm,1.65KG
Cable length	Standard: 3 m(The cable can be extendable)

PMI800-BA Portable Blue-Green Algae Water Analyze

Introduction



The PMI800-BA portable Blue-Green Algae water analyze consists of a PMI-800 host and a PBA-300 Blue-Green Algae sensor. Portable Blue-Green Algae water analyzer consists of portable host and Blue-Green Algae sensor. The principle of Blue-Green Algae Sensor is using the characteristics of cyanobacteria who has absorption peaks and emission peaks in the spectrum.The absorption peaks emit monochromatic light into the water,cyanobacteria in the water absorbs the energy of monochromatic light,releasing monochromatic light of emission peak of another wavelength.The light intensity emitted by cyanobacteria is proportional to the content of cyanobacteria in water.

Main Features

- The host with IP67 protection rating;
- 3.5-inch color screen display, interface menu design is beautiful, easy to operate;
- Ergonomic curve design, suitable for hand grip, with rubber non-slip hand strap, not easy to slip in wet environment;
- With data storage function, and data export through USB interface;
- Built-in rechargeable battery and charging directly via USB without disassembling the battery;
- Automatically identify the connected sensor type and the reading interface automatically adapts;
- The sensor can be parameterized and calibrated;

Application

- It is widely used in on-site portable monitoring of Blue-Green Algae in aquaculture, surface water, scientific research universities and other industries and fields.

Technical Specifications

Measurement range	0-300,000cells/mL
Detection limit	200cells/mL
Resolution	20 cells/mL
Measurement Accuracy	±10% of the signal level corresponding value of 1ppb Rhodamine B Dye
Display	3.5-inch color display screen with adjustable backlight
Power supply	Built-in battery power, battery specifications: 4 3.7V rechargeable lithium battery
Data storage	More than 100,000 data
Material	Mainframe:ABS+PC Sensor:SUS316L
Protection level	Mainframe: IP67,sensor: IP68/NEMA6P
Operating temp.	0~50℃（Non-freezing）
Storage temperature	-15~50℃
Size&Weight	Mainframe:203*100*43mm,0.5KG sensor: Dia 24mm*Length 145mm,0.25KG
Cable length	Standard: 3 m(The cable can be extendable)

PMI800-CH Portable Chlorophyll Water Analyzer

Introduction



The PMI800-CH portable Chlorophyll water analyze consists of a PMI-800 host and a PCH-300 Chlorophyll sensor.Portable chlorophyll water analyzer consists of portable host and chlorophyll sensor. The principle of chlorophyll sensor is using the characteristics of chlorophyll A who has absorption peaks and emission peaks in the spectrum.The absorption peaks emit monochromatic light into the water,chlorophyll A in the water absorbs the energy of monochromatic light,releasing monochromatic light of emission peak of another wavelength.The light intensity emitted by cyanobacteria is proportional to the content of chlorophyll A in water.

Main Features

- The host with IP67 protection rating;
- 3.5-inch color screen display, interface menu design is beautiful, easy to operate;
- Ergonomic curve design, suitable for hand grip, with rubber non-slip hand strap, not easy to slip in wet environment;
- With data storage function, and data export through USB interface;
- Built-in rechargeable battery and charging directly via USB without disassembling the battery;
- Automatically identify the connected sensor type and the reading interface automatically adapts;
- The sensor can be parameterized and calibrated;

Application

- It is widely used in on-site portable monitoring of Chlorophyll in aquaculture, surface water, scientific research universities and other industries and fields.

Technical Specifications

Measurement range	0-500 ug/L
Resolution	0.01 ug/L
Measurement Accuracy	±5% of the signal level corresponding value of 1ppb Rhodamine B Dye
Display	3.5-inch color display screen with adjustable backlight
Power supply	Built-in battery power, battery specifications: 4 3.7V rechargeable lithium battery
Data storage	More than 100,000 data
Material	Mainframe:ABS+PC Sensor:SUS316L
Protection level	Mainframe: IP67,sensor: IP68/NEMA6P
Operating temp.	0~50℃（Non-freezing）
Storage temperature	-15~50℃
Size&Weight	Mainframe:203*100*43mm,0.5KG sensor: Dia 24mm*Length 145mm,0.25KG
Cable length	Standard: 3 m(The cable can be extendable)

PMI800-COD AnalyzerPortable Spectrometer Organic Water Analyzer

Introduction



The PMI800-COD portable spectrometer organic analyzer consists of a PMI-800 host and a PUVCOD-600 spectrometer organic sensor. Portable spectrometer organic water analyzer consists of portable host and Spectrometer Organic sensor.Based on the UV absorption reaction by organic matter, the Spectrometer Organic On-Line Analyzer uses the 254nm spectral absorption coefficient SAC254 to measure the content of soluble organic compound in the water, and it can be converted to COD or BOD values under certain conditions. This method allows continuous monitoring without any reagents.

Main Features

- Ergonomic curve design, suitable for hand grip, with rubber non-slip hand strap, not easy to slip in wet environment;
- With data storage function, and data export through USB interface;
- Built-in rechargeable battery and charging directly via USB without disassembling the battery;
- Automatically identify the connected sensor type and the reading interface automatically adapts;
- The sensor can be parameterized and calibrated;
- The sensor uses LED light source, low power consumption.

Application

- Continuous on-line monitoring of wastewater ,surface water, industrial effluent, and fishery wastewater.

Technical Specifications

Measuring Range	COD (using KHP calibration): 0~1000mg/l COD（5mm）,Turbidity: 10~1000NTU COD (using KHP calibration): 0~100mg/l COD（25mm）Turbidity: 10~300NTU BOD (using KHP calibration): 0~750mg/l BOD（5mm） BOD (using KHP calibration): 0~75mg/l BOD（25mm） TOC (using KHP calibration): 0~400mg/l BOD（5mm） TOC (using KHP calibration): 0~40mg/l BOD（25mm）
Accuracy	COD:±5% or ±1mg/L （KHP Standard solution）,Greater one;Turbidity: ±10%
Repeatability	5%（KHP Standard solution）
Resolution	COD:0.01mg/L,Turbidity: 0.01NTU
Pressure Range	≤0.1Mpa
Display	3.5-inch color display screen with adjustable backlight
Power supply	Built-in battery power, battery specifications: 4 3.7V rechargeable lithium battery
Data storage	More than 100,000 data
Material	Mainframe:ABS+PC Sensor Body: SUS316L（fresh water）, Titanium alloy（Ocean marine）;

Protection level	Mainframe: IP67,sensor: IP68/NEMA6P
Operating temp.	0~50℃（Non-freezing）
Storage temperature	-15~50℃
Size&Weight	Mainframe:203*100*43mm,0.5KG sensor:Dia 34mm*Length 223mm（5mm）,0.8KG Dia 34mm*Length 244mm（25mm）,0.8KG
able length	Standard: 3 m(The cable can be extendable)

PMI800-CT Portable Colority Water Quality Analyzer

Introduction



The PMI800-CT portable colority analyzer consists of a PMI-800 host and a PCT-600 colority sensor. The PCT-600 colority Analyzer adopts the spectrophotometric measurement principle, which complies with the platinum-cobalt color standard. It can be directly immersed for measurement without sampling and pretreatment, no chemical reagents are needed, no secondary pollution is caused, and colority monitoring is realized.

Main Features

- The host has an IP67 protection rating;
- Ergonomic curve design, suitable for hand holding, with a rubber non-slip wristband to prevent slipping in humid environments;
- Equipped with data storage function, and data can be exported via USB interface;
- Built-in rechargeable battery, which can be directly charged via USB without removing the battery;
- Automatically identifies the type of connected sensor, and the reading interface adapts automatically;
- Allows parameter setting and calibration of the sensor;
- Short response time, enabling continuous measurement;
- Adopts LED light source, which is small in size, low in power consumption, and easy for on-site integration;
- The sensor has an automatic cleaning function, which can reduce maintenance volume;
- Reverse connection protection for the sensor power supply positive and negative electrodes;
- Protection against wrong connection of sensor RS485 A/B terminals to power supply.

Application

- Real-time online monitoring of colority of tap water, secondary water supply, and rural drinking water;
- Real-time online monitoring of colority of environmental water bodies such as surface water.

Technical Specifications

Measurement Range	0-100 degrees
Measurement Accuracy	≤±10% or ±1 degree, whichever is larger
Resolution	0.1 degree
Repeatability	≤±5%
Housing Material	Body: SUS316L, titanium alloy (seawater version); Host: ABS+PC
Storage Temperature	-15-50℃
Operating Temperature	0-45℃ (no freezing)
Weight	Sensor: 0.8KG; Host: 0.5KG
Dimensions	Sensor: Diameter 34mm * Length 244mm; Host: 203*100*43mm (Length*Width*Height)
Protection Rating	Host: IP67; Sensor: IP68
Cable Length	Standard 3-meter cable (extendable)
Display	3.5-inch color display screen with adjustable backlight
Data Storage	More than 100,000 data records

PMI800-OIL Portable Oil-in-Water Water Quality Analyzer

Introduction



The PMI800-OIL portable oil-in-water analyzer consists of a PMI-800 host and a POIL-700 oil-in-water sensor. The POIL-700 online oil-in-water analyzer adopts the ultraviolet fluorescence method to monitor the oil content in water bodies. According to the fluorescence intensity emitted by petroleum, its aromatic hydrocarbons and compounds with conjugated double bonds after absorbing ultraviolet light, the oil concentration in water bodies is quantitatively analyzed. Aromatic hydrocarbons in petroleum can produce fluorescence under ultraviolet excitation, and the oil content in water is calculated according to the intensity of the fluorescence.

Main Features

- Ergonomic curve design, suitable for hand holding, with a rubber non-slip wristband to prevent slipping in humid environments;
- Equipped with data storage function, and data can be exported via USB interface;
- Built-in rechargeable battery, which can be directly charged via USB without removing the battery;
- Automatically identifies the type of connected sensor, and the reading interface adapts automatically;
- Allows parameter setting and calibration of the sensor;
- Advanced optical monitoring method, no reagents, no dilution, stable long-term operation;
- Short response time, enabling continuous measurement;
- Adopts LED light source, which is small in size, low in power consumption, and easy for on-site integration;
- The sensor has an automatic cleaning function, which can reduce maintenance volume;
- Adopts unique optical and electronic filtering technology to eliminate the influence of ambient light.

Application

- Real-time online monitoring of oil in environmental water bodies such as surface water, groundwater, drinking water, and pollution source discharge control.

Technical Specifications

Measurement Range	0-50mg/L (NDSA)
Measurement Accuracy	≤±10% or ±0.3mg/L, whichever is larger
Resolution	0.01mg/L
Repeatability	≤±5%
Calibration	Sample calibration, slope calibration
Housing Material	Body: SUS316L; Host: ABS+PC
Storage Temperature	-15-50℃
Operating Temperature	0-45℃ (no freezing)
Weight	Sensor: 1.55KG; Host: 0.5KG
Dimensions	Sensor: Diameter 60mm * Length 213mm; Host: 203*100*43mm (Length*Width*Height)
Protection Rating	Host: IP67; Sensor: IP68
Cable Length	Standard 3-meter cable (extendable)
Display	3.5-inch color display screen with adjustable backlight
Data Storage	More than 100,000 data records

PMI800-OIL Portable Oil-in-Water Water Quality Analyzer

Introduction



The PMI800-OIL portable oil-in-water analyzer consists of a PMI-800 host and a POIL-800 oil-in-water sensor. The POIL-800 online oil-in-water analyzer adopts the ultraviolet fluorescence method to monitor the oil content in water bodies. According to the fluorescence intensity emitted by petroleum, its aromatic hydrocarbons and compounds with conjugated double bonds after absorbing ultraviolet light, the oil concentration in water bodies is quantitatively analyzed. Aromatic hydrocarbons in petroleum can produce fluorescence under ultraviolet excitation, and the oil content in water is calculated according to the intensity of the fluorescence.

Main Features

- The host has an IP67 protection rating;
- 3.5-inch color screen display with an aesthetically designed interface menu and simple operation;
- Ergonomic curve design, suitable for hand holding, with a rubber non-slip wristband to prevent slipping in humid environments;
- Equipped with data storage function, and data can be exported via USB interface;
- Built-in rechargeable battery, which can be directly charged via USB without removing the battery;
- Automatically identifies the type of connected sensor, and the reading interface adapts automatically;
- Allows parameter setting and calibration of the sensor;
- Advanced optical monitoring method, no reagents, no dilution, stable long-term operation;
- Short response time, enabling continuous measurement;
- Adopts LED light source, which is small in size, low in power consumption, and easy for on-site integration;
- The sensor has an automatic cleaning function, which can reduce maintenance volume;
- Adopts unique optical and electronic filtering technology to eliminate the influence of ambient light.

Application

- Real-time online monitoring of oil in environmental water bodies such as surface water, groundwater, seawater, drinking water, and pollution source discharge control;
- Real-time online monitoring of oil in environmental water bodies such as surface water, groundwater, drinking water, and pollution source discharge control.

Technical Specifications

Measurement Range	0-100mg/L (NDSA)
Measurement Accuracy	≤±5% or ±0.15mg/L, whichever is larger
Resolution	0.01mg/L
Repeatability	≤±2%
Calibration	Sample calibration, slope calibration
Housing Material	Body: SUS316L, titanium alloy (seawater version); Host: ABS+PC
Storage Temperature	-15-50℃
Operating Temperature	0-45℃ (no freezing)
Weight	Sensor: 2.1KG; Host: 0.5KG
Dimensions	Sensor: Diameter 60mm * Length 263mm; Host: 203*100*43mm (Length*Width*Height)
Protection Rating	Host: IP67; Sensor: IP68
Cable Length	Standard 3-meter cable (extendable)
Display	3.5-inch color display screen with adjustable backlight
Data Storage	More than 100,000 data records

PMI800-NH3N Portable Ammonia Nitrogen Ion Water Quality Analyzer

Introduction



The PMI800-NH3N portable ammonia nitrogen analyzer consists of a PMI-800 host and a PINH3-500 ammonia nitrogen sensor. It adopts the ion-selective electrode method to measure the ammonia nitrogen concentration. The ammonia nitrogen ion-selective electrode directly detects ammonium ions in the water environment to determine the ammonia nitrogen concentration. A pH electrode is used as a reference electrode to obtain better stability. The ammonia nitrogen sensor is an integrated sensor composed of an ammonium ion-selective electrode, a pH electrode, and a temperature electrode. These parameters can mutually correct and compensate the measured value of ammonia nitrogen, and realize multi-parameter measurement at the same time.

Main Features

- The host has an IP67 protection rating;
- 3.5-inch color screen display with an aesthetically designed interface menu and simple operation;
- Ergonomic curve design, suitable for hand holding, with a rubber non-slip wristband to prevent slipping in humid environments;
- Equipped with data storage function, and data can be exported via USB interface;
- Built-in rechargeable battery, which can be directly charged via USB without removing the battery;
- Automatically identifies the type of connected sensor, and the reading interface adapts automatically;
- Allows parameter setting and calibration of the sensor;
- Integrates ammonia nitrogen, pH, and temperature into an integrated electrode;
- The ammonia nitrogen electrode can be replaced with a membrane head and electrolyte separately, with low consumable cost and simple maintenance;
- Digital sensor with strong anti-interference ability and long transmission distance;
- Reverse connection protection for the sensor power supply positive and negative electrodes, and protection against wrong connection of sensor RS485 A/B terminals to power supply.

Application

- Monitoring the ammonia nitrogen value in the nitrification treatment and aeration tanks of sewage treatment plants, industrial processes, and river water.

Technical Specifications

Measurement Range	NH4N: 0.1-3000mg/L; pH: 5-10; Temperature: 0-40℃
Measurement Accuracy	NH4N: ≤±5% or ±0.2mg/L, whichever is larger; pH: ≤±0.1pH; Temperature: ≤±0.5℃
Resolution	NH4N: 0.01mg/L; Temperature: 0.1℃; pH: 0.01
Repeatability	≤±5% or 0.2mg/L, whichever is larger
Calibration	Sample calibration, slope calibration
Housing Material	Body: SUS316L; Host: ABS+PC
Storage Temperature	0-50℃ (no freezing)
Operating Temperature	0-40℃ (no freezing)
Weight	Sensor: ＜1KG; Host: 0.5KG
Dimensions	Sensor: Diameter 37mm * Length 253mm; Host: 203*100*43mm (Length*Width*Height)
Protection Rating	Host: IP67; Sensor: IP68
Cable Length	Standard 3-meter cable (extendable)
Display	3.5-inch color display screen with adjustable backlight
Data Storage	More than 100,000 data records

PMI800-ISE Portable Ion Water Quality Analyzer

Introduction

The PMI800-ISE portable ion analyzer consists of a PMI-800 host and a PISE-900 ion sensor. The PISE-900 sensor can flexibly select one or two ion-selective electrodes, and is equipped with two default electrodes: pH and temperature, enabling simultaneous monitoring of 4 parameters. The optional parameters of the ion-selective electrode include: ammonia nitrogen (NH4N), nitrate nitrogen (NO3N), potassium ion (K+), chloride (CL-), and fluoride (F-). Different parameter combinations can also achieve mutual compensation, making the measurement data more accurate.



Main Features

- The host has an IP67 protection rating;
- 3.5-inch color screen display with an aesthetically designed interface menu and simple operation;
- Ergonomic curve design, suitable for hand holding, with a rubber non-slip wristband to prevent slipping in humid environments;
- Equipped with data storage function, and data can be exported via USB interface;
- Built-in rechargeable battery, which can be directly charged via USB without removing the battery;
- Automatically identifies the type of connected sensor, and the reading interface adapts automatically;
- Allows parameter setting and calibration of the sensor;
- Can select one or two electrodes from ammonia nitrogen, nitrate nitrogen, potassium ion, chloride, and fluoride to achieve flexible combination and meet the needs of different customers;
- Digital sensor with strong anti-interference ability and long transmission distance;
- Reverse connection protection for the sensor power supply positive and negative electrodes, and protection against wrong connection of sensor RS485 A/B terminals to power supply.

Application

- Monitoring the ammonia nitrogen value in the nitrification treatment and aeration tanks of sewage treatment plants, industrial processes, and river water.

Technical Specifications

Measurement Range	Ammonia Nitrogen (NH4N): 0.1-3000mg/L; Nitrate Nitrogen (NO3N): 0.5-3000mg/L; Potassium Ion (K+): 0.5-5000mg/L; Chloride (CL-): 3-3500mg/L; Fluoride (F-): 0.5-10000mg/L; pH: 5-10; Temperature: 0-40℃
Measurement Accuracy	Ammonia Nitrogen: ≤±5% or ±0.2mg/L, whichever is larger; Other ion parameters: ≤±10% or ±0.2mg/L, whichever is larger; pH: ±0.1pH; Temperature: ±0.5℃
Resolution	Ion parameters: 0.01mg/L; pH: 0.01; Temperature: 0.1℃
Repeatability	≤±5% or ±0.2mg/L, whichever is larger
Calibration	Sample calibration, slope calibration
Housing Material	Body: POM + stainless steel; Host: ABS+PC
Storage Temperature	0-50℃ (no freezing)
Operating Temperature	0-40℃ (no freezing)
Weight	Sensor: ＜1KG; Host: 0.5KG
Dimensions	Sensor: Diameter 55mm * Length 342mm; Host: 203*100*43mm (Length*Width*Height)
Protection Rating	Host: IP67; Sensor: IP68
Cable Length	Standard 3-meter cable (extendable)
Display	3.5-inch color display screen with adjustable backlight
Data Storage	More than 100,000 data records