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# Water Quality Meter and Laboratory Instruments

- pH/ORP/ION/WATER HARDNESS METERS
- CONDUCTIVITY/TDS/SALINITY/RESISTIVITY METERS
- DISSOLVED 0XYGEN/BOD/OUR/SOUR METERS
- MULTIPARAMETER WATER QUALITY METERS
- TURBIDITY METERS
- POLARIMETERS
- HOT PLATE MAGNETIC STIRRERS
- ELECTRODES



# S series Bluetooth pH/ORP/Ion/Conductivity/DO Testers



High performance wireless bluetooth tester, including the 6 models. The meter are suitable for Android smartphone or tablet.

### S10 pH TESTER

- 1 to 5 points calibration with auto-buffer recognition.
- Selectable pH buffer group (USA/NIST/DIN) or using the custom calibration solutions.
- · Automatic electrode diagnosis with pH slope and offset display.
- Solution Temperature Coefficient compensates for the pure water samples and references the pH to 25°C.

### S20 ORP TESTER

- 1 point offset calibration allows adjusting the displayed value to known standard.
- Relative and absolute mV modes ensure the reliable ORP measurements.

### **S30 ION TESTER**

- Selectable five ion measurement methods, including the direct reading, known addition, known subtraction, sample addition and sample subtraction.
- Selectable concentration units, including the ppm, mg/L, mol/L and mmol/L.
- 2 to 5 points calibration providing the 8 concentration points can be selected.
- Electrode management is capable of storing the 3 electrode slopes and recalling the calibration data of each ion selective electrode.

### S40 WATER HARDNESS TESTER

- 2 to 5 points calibration from low to high concentrations.
- Selectable hardness units (German degree, English degree, French degree, gpg, mg/L and mmol/L) are used for professional water hardness measurements.

### S50 CONDUCTIVITY/TDS/SALINITY/RESISTIVITY TESTER

- 1 to 3 points calibration, automatically recognizes the conductivity standards.
- Selectable cell constant (K=0.1/1/10) is matched the connected electrode.
- Selectable temperature compensation type (linear, non-linear, USP, EP), temperature compensation coefficient, pure water compensation coefficient, reference temperature (20°C or 25°C) and TDS conversion factor.





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### S60 D0/B0D/0UR/S0UR TESTER

- 1 or 2 points calibration using the air-saturated water or zero oxygen solution.
- Salinity and barometric pressure compensations ensure accurate measurement.
   Selectable Testing time, Beginning/Ending DO are used for the OUR and SOUR calculations.
- Data Management provides the detailed BOD data records.

#### **GENERAL FEATURES**

- Manual or Automatic Temperature Compensation provides accurate reading over the entire range.
- · Limit alarm alerts when reading exceeds range.
- Calibration Due Alarm prompts calibrating the tester regularly.
- Calibration report provides a detailed information for checking the tester.
- Stability indicator shows when a measurement is recognized as stable.
- · Auto-Read feature senses and locks the measurement endpoint.
- Interval Readings automatically send the measurement data to memory or printer.
- Password protection prevents the unauthorized calibration and settings.
- Device memory is capable of storing a large amount of data.
- Stored data can be printed or sent to the computer by e-mail.
- Multiparameter measurement allows up to 3 testers connected to device.
- Reset feature automatically resumes all settings back to factory default options.

🕼 рн		:	J pl
MEASURE			MEASURE
			pН
	7.0	<b>00</b> PH	pH Buffer USA
			Calibratic 3 points
0.0 mV		25.0 ATC	Resolutio
	Sample ID: 0000		Solution OFF
- pH - 10			Alarm Lin OFF
			General
8		60 40	Temperat °C
0	22.4 23.1 23.8	20 0	Stability ( Standard
Last Calibration	Offect	Averana Sione	Measurer
01/01/2018	0.0 mV	100 %	Timed Int OFF
£		Ð	Calibratio

🕼 рн		:	
		SETTINGS	
pН			
pH Buffer Group USA		>	
Calibration Points 3 points		>	
Resolution 0.001		>	
Solution Temperatur	re Coefficient	>	
Alarm Limits			
Temperature Unit		>	
Stability Criteria Standard		>	
Measurement Mode Continuous		>	
Timed Interval Read	ings		
Calibration Due			



Calibration Report		
Conductivity		
Data and Time:	01/01/2018 10:25:0	10
Cell Constant:	2-cell (K=1)	
Temperature:	25.0°C	
Calibration Due:	3 days	
84.0µS/cm	1.058	
1413µS/cm	0.951	
12.88 mS/cm	1.125	

#### METER INCLUDES

- S10 tester: pH buffer solutions (4.01/7.00/10.01), carrying case.
- S20 tester: solution storage bottles, carrying case.
- S30 tester: ion selective electrode, standard solutions, carrying case.
- S40 tester: water hardness electrode, standard solutions, carrying case.
- S50 tester: conductivity standard solutions (84µS/cm, 1413µS/cm, 12.88mS/cm), carrying case.
- S60 tester: D0 probe, membrane cap, electrolyte solution, carrying case.





	Model		S10	S20	S30	S40
	Measuring Range	-2.000~20.000pH	•	—	_	_
	Accuracy	±0.002pH	•	_		—
т	Resolution	0.001, 0.01, 0.1pH	•	_	_	_
d	Calibration Points	1~5 points	•	_		—
	pH Buffer Options	USA, NIST, DIN or Custom	•	_	_	_
	Temperature Compensation	0~100°C, 32~212°F, Automatic	•	_		—
	Measuring Range	$\pm 2000 mV$	•	•	•	٠
2	Accuracy	$\pm 0.2 mV$	•	•	•	•
Ξ	Resolution	0.1, 1mV	•	•	•	٠
	Calibration Points	1 point, only for relative mV mode	—	•	—	—
	Measuring Range	0.001~30000, depending on the range of ion selective electrode	—	—	•	—
	Measurement Units	ppm, mg/L, mol/L, mmol/L	—	—	•	—
	Accuracy	$\pm$ 0.5% F.S (Monovalent), $\pm$ 1% F.S (Divalent)	—	—	•	—
	Resolution	0.001, 0.01, 0.1, 1	—	—	•	—
lon	Calibration Points	2~5 points	_	—	•	—
	Calibration Solutions	0.001, 0.01, 0.1, 1, 10, 100, 1000, 10000ppm, mg/L, mol/L, mmol/L	—	—	•	—
	Temperature Compensation	0~100°C, 32~212°F, Manual	_	—	•	—
	Measurement Methods	Direct reading, known addition, known subtraction, sample addition, sample subtraction	—	—	•	—
	Electrode Management	1 to 3 electrodes	_	—	•	—
	Measuring Range	0.05~200mmol/L, 0~1122°dH, 0~1404°e, 0~2000°fH, 0~1170gpg,	—	—		•
(0)		0 ~ 20000mg/L (CaCO <sub>3</sub> ), 0 ~ 11220mg/L (CaO), 0 ~ 8020mg/L (Ca <sup>2+</sup> )	_	—	_	٠
lnes	Accuracy	±1% F.S	—	—		•
r Har	Resolution	0.001, 0.01, 0.1, 1	_	—	—	٠
Natei	Calibration Points	2~5 points	—	—	—	•
	Calibration Solutions	0.01, 0.1, 1, 10, 100mmol/L	_	—	—	٠
	Temperature Compensation	0~50°C, 32~122°F, Manual	—	—	—	•
	Data Hold	Manual or Auto-Endpoint	•	•	•	•
	Stability Criteria	Fast, Standard or Slow	•	•	•	•
	Measurement Modes	Continuous or Auto-Read	•	•	•	٠
	Timed Interval Readings	10, 30, 60, 300 seconds or Off	•	•	•	٠
	Calibration Due	1 to 99 days or Off	•	•	•	٠
	Data Transafer	Send to memory or printer	•	•	•	•
ieral	Password Protection	Yes	•	•	•	٠
Gen	Reset Function	Yes	•	•	•	•
	Max Wireless Range	10 meters	•	•	•	•
	Connectivity	Bluetooth 4.0	•	•	•	•
	Software	BanteLab APP	•	•	•	•
	Power Requirements	2×1.2V lithium batteries or AAA batteries	•	•	•	•
	Dimensions	250(L)×40(Dia.)mm	•	•	•	•
	Weight	100g	•	•	•	•



	Model		S50	S60
	Measuring Range	0.01~200µS/cm (model S50-L), 10µS/cm~20mS/cm (model S50-M), 100µS/cm~200mS/cm (model S50-H)	•	_
	Accuracy	±0.5% F.S	•	—
	Resolution	0.001, 0.01, 0.1, 1	•	_
vity	Calibration Points	1~3 points	•	_
ducti	Calibration Solutions	10µS/cm, 84µS/cm, 1413µS/cm, 12.88mS/cm, 111.8mS/cm	•	_
Cond	Temperature Compensation	0~100°C, 32~212°F, Automatic	•	—
	Reference Temperature	20°C or 25°C	•	_
	Temperature Coefficient	Linear (0.0~10.0%/°C), Non-Iinear, USP or EP	•	—
	Pure Water Compensation	Yes	•	_
	Measuring Range	0~200mg/L (model S50-L), 0~20g/L (model S50-M), 0~200g/L (model S50-H)	•	_
DS	Accuracy	±1% F.S	•	_
₽	Resolution	0.01, 0.1, 1	•	_
	TDS Factor	0.01~1.00 (Default 0.5)	•	_
	Range (Practical Salinity)	0~10.00psu (model S50-M), 0~42.00psu (model S50-H)	•	_
>	Range (Natural Seawater)	0~10.00ppt (model S50-M), 0~80.00ppt (model S50-H)	•	_
Salinity	Range (%)	0~1.00% (model S50-M), 0~8.00% (model S50-H)	•	_
	Accuracy	±1% F.S	•	_
	Resolution	0.01	•	_
ity	Measuring Range	0~100M $\Omega$ (model S50-L), 0~10M $\Omega$ (model S50-M), 0~1M $\Omega$ (model S50-H)	•	_
sistivii	Accuracy	±1% F.S	•	_
Re	Resolution	0.1, 1	•	_
Ash	Measuring Range	0~100%	•	—
ivity ,	Accuracy	$\pm$ 1% F.S	•	—
Iduct	Resolution	0.01, 0.1, 1	•	—
Co	Measurement Modes	Refined Sugar or Raw Sugar	•	—
	Measuring Range	0.00~20.00mg/L, 0.0~200.0% saturation	—	•
	Accuracy	$\pm$ 0.2mg/L, $\pm$ 2.0%	_	٠
SOUR	Resolution	0.01mg/L, 0.1%	—	•
)UR/	Calibration Points	1 or 2 points	_	•
0D/00	Temperature Compensation	0~50°C, 32~122°F, Automatic	—	•
DO/B	Pressure Correction	60.0~113.3kPa, 450~850mmHg	_	•
	Salinity Correction	0~50g/L	—	•
	Measurement Functions	DO, BOD, OUR, SOUR	_	•
	Data Hold	Manual or Auto-Endpoint	•	•
	Stability Criteria	Fast, Standard or Slow	•	•
ଜ	Measurement Modes	Continuous or Auto-Read	•	•
ener	Timed Interval Readings	10, 30, 60, 300 seconds or Off	•	•
-0-	Calibration Due	1 to 99 days or Off	•	•
	Power Requirements	2×1.2V lithium batteries or AAA batteries	•	•
	Dimensions and Weight	250(L)×40(Dia.)mm, 100g	•	•



### PHscan10/20/30/40 Pocket pH Tester



### PHSCAN10/20 FEATURES

- 2 points push-button calibration with auto-buffer recognition.
- · Hold function freezes reading momentarily for easy viewing and recording.
- Auto-Power Off effectively conserves battery life.
- · Replaceable electrode module reduces the maintenance and replacement costs.

### PHSCAN30/40 FEATURES

- 1 to 3 points push-button calibration with auto-buffer recognition.
- Automatic Temperature Compensation ensures the accurate measuring results.
- Auto-Hold feature senses and locks the measurement endpoint.
- Auto-Power Off effectively conserves battery life.
- Setup menu allows setting the 5 parameters, including the pH buffer group (USA/NIST), number of calibration points, temperature unit, etc.
- · Reset feature automatically resumes all settings back to factory default options.





### METER INCLUDES

pH buffer pouches (4.01/7.00/10.01), plastic box or carrying case.

	Model	PHscan10	PHscan20	PHscan30	PHscan40
	Measuring Range	0.0~14.0pH	0.00~14.00pH	-1.00~15.00pH	-1.00~15.00pH
	Accuracy	$\pm$ 0.1pH	$\pm$ 0.05pH	$\pm$ 0.01pH	$\pm$ 0.01pH
Ŧ	Resolution	0.1pH	0.01pH	0.01pH	0.01pH
đ	Temperature Compensation	—	0~60°C, Automatic	0~60°C, Automatic	0~100°C, Manual
	Calibration Points	2 points	2 points	1~3 points	1~3 points
	pH Buffer Options	USA	USA	USA or NIST	USA or NIST
ture	Measuring Range	—	_	0~60°C, 32~140°F	—
pera	Accuracy	—	_	±1°C	—
Tem	Resolution	—	_	0.1°C	—
	Data Hold	Manual	Manual	Manual or Auto-Endpoint	Manual or Auto-Endpoint
-	Connector	6-pin	6-pin	6-pin	BNC
enera	Power Requirements	3×1.5V G13A batteries	3×1.5V G13A batteries	2×1.5V AAA batteries	2×1.5V AAA batteries
5	Dimensions	185(L)×40(Dia.)mm	185(L)×40(Dia.)mm	185(L)×40(Dia.)mm	175(L)×40(Dia.)mm
	Weight	100g	100g	100g	100g



### ORPscan10/20 Pocket ORP Tester



### FEATURES

- 1 point offset calibration allows adjusting the displayed value to known standard.
- Auto-Hold feature senses and locks the stable reading for easy viewing and recording.
- Battery indicator shows the remaining battery capacity.
- Auto-Power Off effectively conserves battery life.
- Replaceable electrode module reduces the maintenance and replacement costs.
- Reset feature automatically resumes all settings back to factory default options.
- Waterproof feature to ensure complete protection in harsh environments.

### **OPTIONAL ELECTRODES**

- 502 ORP electrode: suitable for the samples with a weak redox potential.
- 504 ORP electrode: suitable for the high temperature samples (<100°C).





### METER INCLUDES

- ORPscan10 tester: plastic box.
- ORPscan20 tester: 501 ORP electrode, carrying case.

	Model	ORPscan10	ORPscan20
	Measuring Range	-999~999mV	-999~999mV
	Accuracy	$\pm 2 mV$	$\pm 2 mV$
	Resolution	1mV	1mV
	Measurement Modes	Relative and Absolute mV	Relative and Absolute mV
	Calibration Points	1 point	1 point
	Data Hold	Manual or Auto-Endpoint	Manual or Auto-Endpoint
<del>م</del>	Auto-Power Off	8 minutes after last key pressed	8 minutes after last key pressed
B	Sensor Type	E-ORPscan-S ORP electrode	General purpose ORP electrode
	Connector	6-pin	BNC
	Operating Temperature	0~60°C, 32~140°F	0~60°C, 32~140°F
	Display	Single-display LCD	Single-display LCD
	Power Requirements	2×1.5V AAA batteries	2×1.5V AAA batteries
	Dimensions	185(L)×40(Dia.)mm	175(L)×40(Dia.)mm
	Weight	100g	100g



### ECscan10 Pocket Conductivity Tester



### APPLICATIONS

- ECscan10L tester: suitable for measuring the low conductivity liquids.
- ECscan10M tester: suitable for general applications.
- ECscan10H tester: suitable for measuring the high conductivity liquids.

### FEATURES

- Single range conductivity tester is installed with a platinum sensor.
- 1 point push-button calibration allows using the custom calibration solution.
- Automatic Temperature Compensation ensures the accurate measuring results.
- Hold function freezes reading momentarily for easy viewing and recording.
- Auto-Power Off effectively conserves battery life.
- Replaceable electrode module reduces the maintenance and replacement costs.
- Waterproof feature to ensure complete protection in harsh environments.



### METER INCLUDES

Conductivity standard solution (146.5 $\mu$ S/cm, 1413 $\mu$ S/cm, 12.88mS/cm), plastic box or carrying case.

	Model	ECscan10L	ECscan10M	ECscan10H
	Measuring Range	1.0~199.9µS/cm	10~1999µS/cm	0.1~19.99mS/cm
	Accuracy	$\pm$ 1% F.S	$\pm$ 1% F.S	$\pm$ 1% F.S
	Resolution	0.1µS/cm	1µS/cm	0.01mS/cm
	Calibration Points	1 point	1 point	1 point
	Calibration Solutions	146.5µS/cm	1413µS/cm	12.88mS/cm
A.	Temperature Compensation	0~50°C	0~50°C	0~50°C
ctivit	Temperature Coefficient	2%/°C	2%/°C	2%/°C
npuo	Reference Temperature	25°C	25°C	25°C
0	Cell Constant	K=1, platinum conductivity cell	K=1, platinum conductivity cell	K=1, platinum conductivity cell
	Data Hold	Manual	Manual	Manual
	Display	Single-display LCD	Single-display LCD	Single-display LCD
	Power Requirements	3×1.5V G13A batteries	3×1.5V G13A batteries	3×1.5V G13A batteries
	Dimensions	185(L)×40(Dia.)mm	185(L)×40(Dia.)mm	185(L)×40(Dia.)mm
	Weight	100g	100g	100g



### ECscan20/30/40 Pocket Conductivity Tester



### MEASUREMENT PARAMETERS

- ECscan20 tester: Conductivity
- ECscan30 tester: Conductivity, Total Dissolved Solids
- ECscan40 tester: Conductivity, Total Dissolved Solids, Salinity

### FEATURES

- Multi-range conductivity tester is installed with a platinum sensor.
- 1 to 3 points calibration, automatically recognizes the standard solutions.
- Automatic Temperature Compensation ensures the accurate measuring results.
- Auto-Hold feature senses and locks the measurement endpoint.
- Auto-Power Off effectively conserves battery life.
- Setup menu allows setting the 6 parameters, including the number of calibration points, TDS conversion factor, temperature unit, etc.
- Reset feature automatically resumes all settings back to factory default options.





### METER INCLUDES

Conductivity standard solutions (84µS/cm, 1413µS/cm, 12.88mS/cm), carrying case.

	Model		ECscan20	ECscan30	ECscan40
ivity	Measuring Range	0~20.00, 200.0, 2000µS/cm, 20.00mS/cm	•	•	•
ducti	Accuracy	$\pm$ 1% F.S	•	•	•
Con	Resolution	0.01, 0.1, 1	•	•	•
	Measuring Range	0~10.00, 100.0, 1000ppm, 10.00ppt (Max. 20ppt)	_	•	•
TDS	Accuracy	$\pm$ 1% F.S	_	٠	•
	TDS Factor	0.1~1.0 (Default 0.5)	_	•	•
2	Measuring Range	0.00~10.00ppt	_	_	•
alinit	Accuracy	±1% F.S	_	_	•
S	Resolution	0.01	_	_	•
	Calibration Points	1~3 points (84µS/cm, 1413µS/cm, 12.88mS/cm)	•	•	•
-	Temperature Compensation	0~60°C, Automatic	•	•	•
enera	Cell Constant	K=1, platinum conductivity cell	•	•	•
5	Power Requirements	2×1.5V AAA batteries	•	•	•
	Dimensions and Weight	185(L)×40(Dia.)mm, 100g	•	•	•



### TDSscan10/20 Pocket TDS Tester



### **TDSSCAN10 FEATURES**

- Single range TDS tester is installed with a platinum sensor.
- 1 point push-button calibration allows using the custom calibration solution.
- Selectable TDS conversion factor is used for accurate TDS measurements.
- Replaceable electrode module reduces the maintenance and replacement costs.

### **TDSSCAN20 FEATURES**

- Multi-range TDS tester covers the low, mid, high ranges.
- 1 to 3 points calibration allows using the custom calibration solutions.
- Auto-Hold feature senses and locks the measurement endpoint.
- Auto-Power Off effectively conserves battery life.
- Setup menu allows setting the 5 parameters, including the number of calibration points, TDS conversion factor, temperature unit, etc.
- Reset feature automatically resumes all settings back to factory default options.



### METER INCLUDES TDS standard solution (71.8ppm, 744.7ppm, 7447ppm), plastic box or carrying case.

	Model	TDSscan10L	TDSscan10M	TDSscan10H	TDSscan20
	Measuring Range	0.5~100.0ppm	5~1000ppm	0.05~10.00ppt	0~10.00ppt (Max. 20ppt)
	Accuracy	$\pm$ 1% F.S	$\pm$ 1% F.S	$\pm$ 1% F.S	$\pm$ 1% F.S
	Resolution	0.1	1	0.01	0.01, 0.1, 1
	Calibration Points	1 point	1 point	1 point	1~3 points
	Calibration Solutions	71.8ppm	744.7ppm	7447ppm	71.8, 744.7, 7447ppm
	TDS Factor	0.4~1.0 (Default 0.5)	0.4~1.0 (Default 0.5)	0.4~1.0 (Default 0.5)	0.1~1.0 (Default 0.5)
S	Temperature Compensation	0~50°C, Automatic	0~50°C, Automatic	0~50°C, Automatic	0~50°C, Automatic
8	Temperature Coefficient	2%/°C	2%/°C	2%/°C	2%/°C
	Cell Constant	K=1	K=1	K=1	K=1
	Data Hold	Manual	Manual	Manual	Manual or Auto-Endpoint
	Display	Single-display LCD	Single-display LCD	Single-display LCD	Dual-display LCD
	Power Requirements	3×1.5V G13A batteries	3×1.5V G13A batteries	3×1.5V G13A batteries	2×1.5V AAA batteries
	Dimensions	185(L)×40(Dia.)mm	185(L)×40(Dia.)mm	185(L)×40(Dia.)mm	185(L)×40(Dia.)mm
	Weight	100g	100g	100g	100g



### SALscan10/20 Pocket Salinity Tester



### APPLICATIONS

- SALscan10 tester: suitable for measuring the low concentration samples.
- SALscan20 tester: suitable for measuring the seawater.

### FEATURES

- Multi-parameter salinity tester contains the conductivity measurement mode.
- Platinum sensor provides fast and reliable readings.
- 1 to 3 points calibration, automatically recognizes the standard solutions.
- Automatic Temperature Compensation ensures the accurate measuring results.
- Auto-Hold feature senses and locks the measurement endpoint.
- Auto-Power Off effectively conserves battery life.
- Setup menu allows setting the 5 parameters, including the number of calibration points, temperature unit, etc.
- Reset feature automatically resumes all settings back to factory default options.



### METER INCLUDES

Conductivity standard solutions (84µS/cm, 1413µS/cm, 12.88mS/cm, 111.8mS/cm), plastic box or carrying case.

	Model	SALscan10	SALscan20
y	Measuring Range	0.00~10.00ppt	0.00~80.00ppt
alinit	Accuracy	±1% F.S	$\pm$ 1% F.S
S	Resolution	0.01ppt	0.01ppt
ivity	Measuring Range	$0{\sim}20.00,200.0,2000\mu S/cm,20.00m S/cm$	100~2000µS/cm, 20.00, 200.0mS/cm
ducti	Accuracy	$\pm$ 1% F.S	$\pm$ 1% F.S
Con	Resolution	0.01, 0.1, 1	0.01, 0.1, 1
	Temperature Compensation	0~60°C, Automatic	0~60°C, Automatic
	Temperature Coefficient	2%/°C	2%/°C
	Reference Temperature	25°C	25°C
eral	Cell Constant	K=1, platinum conductivity cell	K=10, platinum conductivity cell
Gen	Data Hold	Manual or Auto-Endpoint	Manual or Auto-Endpoint
	Power Requirements	2×1.5V AAA batteries	2×1.5V AAA batteries
	Dimensions	185(L)×40(Dia.)mm	185 (L)×40 (Dia.) mm
	Weight	100g	100g



### DOscan10 Pocket Dissolved Oxygen Tester



### FEATURES

- Economy dissolved oxygen tester is equipped with a polarographic electrode.
- 1 or 2 points calibration using the air-saturated water or zero oxygen solution.
- Salinity and barometric pressure compensations ensure accurate measurement.
- Auto-Hold feature senses and locks the stable reading.
- Battery indicator shows the remaining battery capacity.
- Auto-Power Off effectively conserves battery life.
- Setup menu allows setting the 6 parameters, including the number of calibration points, temperature unit, concentration unit (mg/L, ppm, %), etc.
- Reset feature automatically resumes all settings back to factory default options.





METER INCLUDES

Dissolved oxygen probe, membrane cap, electrolyte solution, carrying case.

	Model	DOscan10
	Measuring Range	0.0~20.0mg/L
8	Accuracy	$\pm$ 0.5mg/L
	Resolution	0.1mg/L
tion	Measuring Range	0.0~200.0%
atura	Accuracy	$\pm 2.0\%$
% S	Resolution	0.1%
	Temperature Compensation	0~40°C, Automatic
	Barometric Pressure Correction	60.0~112.5kPa, 450~850mmHg
I	Salinity Correction	0~35g/L
	Data Hold	Manual or Auto-Endpoint
	Auto-Power Off	8 minutes after last key pressed
eral	Sensor Type	DO100 polarographic electrode
Gen	Connector	6-pin mini plug
	Operating Temperature	0~60°C, 32~140°F
	Display	Dual-display LCD
	Power Requirements	2×1.5V AAA batteries
	Dimensions	175(L)×40(Dia.)mm
	Weight	100g



### Bante220/221 Portable pH/ORP Meter





### BANTE220 FEATURES

- 1 to 3 points push-button calibration with auto-buffer recognition.
- Selectable pH buffer group, including the USA and NIST options.
- Automatic electrode diagnosis with pH slope and offset display.
- Automatic Temperature Compensation provides accurate reading over the entire range.
- · Auto-Hold feature senses and locks the measurement endpoint.
- Setup menu allows setting the 7 parameters, including the pH buffer group, number of calibration points, temperature unit, auto-power off, etc.
- Expanded memory stores and recalls up to 100 data sets.
- Stored readings can be transferred into the computer by USB communication interface.

### **BANTE221 FEATURES**

pH:

- 1 to 5 points push-button calibration with auto-buffer recognition.
- Selectable pH buffer group (USA/NIST/DIN) or using the custom calibration solutions.
- Automatic electrode diagnosis with pH slope and offset display.
- Automatic Temperature Compensation provides accurate reading over the entire range.
- Calibration Due Reminder prompts user to calibrate the meter regularly.

#### ORP:

- 1 point offset calibration allows adjusting the displayed value to a known standard.
- Relative and absolute millivolt modes ensure the reliable ORP measurements.





#### GENERAL:

- Stability indicator shows when a measurement is recognized as stable.
- Auto-Hold feature senses and locks the measurement endpoint.
- Setup menu allows setting the 10 parameters, including the number of calibration points, resolution, stability criteria, temperature unit, auto-power off, etc.
- · Reset feature automatically resumes all settings back to factory default options.
- Expanded memory stores and recalls up to 500 data sets.
- Stored readings can be transferred into the computer by USB communication interface.
- Multi-mode power scheme (batteries, power adapter or USB port) ensures that use the meter smoothly.







	Model	Bante 220	Bante 221
	Measuring Range	-2.00~20.00pH	-2.000~20.000pH
	Accuracy	±0.01pH	$\pm 0.002 pH$
F	Resolution	0.01pH	0.001, 0.01, 0.1pH
	Calibration Points	1~3 points	1~5 points
	pH Buffer Options	USA or NIST	USA, NIST, DIN or Custom
	Measuring Range	$\pm$ 1999mV	$\pm$ 1999.9mV
	Accuracy	$\pm 1 \mathrm{mV}$	$\pm$ 0.2mV
کھ ا	Resolution	1mV	0.1, 1mV
	Calibration Points	_	1 point, only for relative mV mode
	Measurement Modes	Absolute mV	Relative and Absolute mV
rature	Measuring Range	0~105°C, 32~221°F	0~105°C, 32~221°F
	Accuracy	$\pm$ 0.5°C, $\pm$ 0.9°F	$\pm$ 0.5°C, $\pm$ 0.9°F
empe	Resolution	0.1°C, 0.1°F	0.1°C, 0.1°F
	Calibration Points	1 point	1 point
	Temperature Compensation	0~100°C, 32~212°F, Manual or Automatic	0~100°C, 32~212°F, Manual or Automatic
	Data Hold	Manual or Auto-Endpoint	Manual or Auto-Endpoint
	Stability Criteria	—	Low or High
	Calibration Due Alarm	-	1 to 31 days or Off
	Power Off	Manual or Automatic (30 minutes after last key pressed)	Manual or Automatic (10, 20 or 30 minutes after last key pressed)
eral	Reset Function	Yes	Yes
Gen	Memory	Stores up to 100 data sets	Stores up to 500 data sets
	Output	USB communication interface	USB communication interface
	Connector	BNC	BNC
	Power Requirements	3×1.5V AA batteries or DC5V power adapter	3×1.5V AA batteries or DC5V power adapter
	Dimensions	170(L)×85(W)×30(H)mm	170(L)×85(W)×30(H)mm
	Weight	300g	300g



### Bante320/321 Portable pH/Ion Meter





### MEASUREMENT PARAMETERS

- 320 meter: pH, mV, Relative mV, Ion Concentration, Temperature
- 321 meter: Ion Concentration, mV, Temperature

### FEATURES

### pH:

- 1 to 5 points push-button calibration with auto-buffer recognition.
- Selectable pH buffer group (USA/NIST/DIN) or using the custom calibration solutions.
- Automatic electrode diagnosis with pH slope and offset display.
- Automatic Temperature Compensation provides accurate reading over the entire range.

### ORP:

- 1 point offset calibration allows adjusting the displayed value to a known standard.
- Relative and absolute millivolt modes ensure the reliable ORP measurements.

### ION:

- 2 to 5 points calibration, providing the 8 concentration points can be selected.
- Automatically recognizes the ion selective electrode, does not need to specify type of ion.
- Automatic electrode diagnosis shows the calibration points and details of slopes.
- Direct ion concentration readout simplifies the measurement process.
- mV measurement mode can be used to calculate the ion concentration.
- Selectable concentration units, including the ppm, mg/L and mol/L.





#### GENERAL:

- Calibration Due Reminder prompts user to calibrate the meter regularly.
- Stability indicator shows when a measurement is recognized as stable.
- Auto-Hold feature senses and locks the measurement endpoint.
- Setup menu allows setting the 10 parameters, including the number of calibration points, resolution, stability criteria, temperature unit, auto-power off, etc.
- Reset feature automatically resumes all settings back to factory default options.
- · Expanded memory stores and recalls up to 500 data sets.
- Stored readings can be transferred into the computer by USB communication interface.
- Multi-mode power scheme (batteries, power adapter or USB port) ensures that use the meter smoothly.







	Model		Bante 320	Bante 321
	Measuring Range	-2.000~20.000pH	•	—
	Accuracy	$\pm$ 0.002pH	•	—
Hd	Resolution	0.001, 0.01, 0.1pH	•	—
	Calibration Points	1~5 points	•	—
	pH Buffer Options	USA, NIST, DIN or Custom	•	—
Ľ	Measuring Range	$\pm$ 1999.9mV	•	•
	Accuracy	$\pm$ 0.2mV	•	•
۲ ۲	Resolution	0.1, 1mV	•	•
	Calibration Points	1 point, only for relative mV mode	•	—
	Measurement Modes	Relative and Absolute mV	•	—
	Measuring Range	0.001~19999, depending on the range of ion selective electrode	•	•
lon	Measurement Units	ppm, mg/L, mol/L	•	•
	Accuracy	$\pm$ 0.5% F.S (Monovalent), $\pm$ 1% F.S (Divalent)	•	•
	Resolution	0.001, 0.01, 0.1, 1	•	•
	Calibration Points	2~5 points	•	•
	Calibration Solutions	0.001, 0.01, 0.1, 1, 10, 100, 1000, 10000ppm, mg/L, mol/L, mmol/L	•	•
e	Measuring Range	0~105°C, 32~221°F	•	•
eratu	Accuracy	$\pm$ 0.5°C, $\pm$ 0.9°F	•	•
empe	Resolution	0.1°C, 0.1°F	•	•
	Calibration Points	1 point	•	•
	Temperature Compensation	0~100°C, 32~212°F, Manual or Automatic	•	•
	Data Hold	Manual or Auto-Endpoint	•	•
	Stability Criteria	Low or High	•	•
	Calibration Due Alarm	1 to 31 days or Off	•	•
	Power Off	Manual or Automatic (10, 20 or 30 minutes after last key pressed)	•	•
eral	Reset Function	Yes	•	•
Gen	Memory	Stores up to 500 data sets	•	•
	Output	USB communication interface	•	•
	Connector	BNC	•	•
	Power Requirements	3×1.5V AA batteries or DC5V power adapter	•	•
	Dimensions	170(L)×85(W)×30(H)mm	•	•
	Weight	300g	•	•

### METER INCLUDES

• Bante 320 meter: pH electrode, temperature probe, pH buffer solutions (4.01/7.00/10.01), carrying case.

• Bante 321 meter: ion selective electrode, temperature probe, standard solutions, carrying case.

### **OPTIONAL ION SELECTIVE ELECTRODES**

Ammonium (NH<sub>4</sub><sup>+</sup>), bromide (br), cadmium (Cd<sup>2+</sup>), calcium (Ca<sup>2+</sup>), chloride (Cl<sup>-</sup>), cupric (Cu<sup>2+</sup>), cyanide (Cn<sup>-</sup>), fluoride (F), lodide (I<sup>-</sup>), lead (Pb<sup>2+</sup>), nitrate (NO<sub>3</sub><sup>-</sup>), potassium (K<sup>+</sup>), silver (Ag<sup>+</sup>), sodium (Na<sup>+</sup>), sulphide (S<sup>2-</sup>) and ammonia (NH<sub>3</sub>).



### Bante322 Portable Water Hardness Meter



### MEASUREMENT PARAMETERS

Concentration (mmol/L or mg/L), German degree (°dH), English degree (°e), French degree (°fH), Temperature

### FEATURES

- 2 to 5 points calibration from low to high concentrations.
- Selectable measurement units, including the mmol/L, mg/L (CaCO<sub>3</sub>), mg/L (CaO), mg/L (Ca), German degree (°dH), English degree (°e) and French degree (°fH).
- Automatic Temperature Compensation provides accurate reading over the entire range.
- Calibration Due Reminder prompts user to calibrate the meter regularly.
- Stability indicator shows when a measurement is recognized as stable.
- Auto-Hold feature senses and locks the measurement endpoint.
- Setup menu allows setting the 7 parameters, including the number of calibration points, stability criteria, auto-power off, etc.
- Reset feature automatically resumes all settings back to factory default options.
- Expanded memory stores and recalls up to 500 data sets.
- Stored readings can be transferred into the computer by USB communication interface.
- Multi-mode power scheme (batteries, power adapter or USB port) ensures that use the meter smoothly.

### METER INCLUDES

Water hardness electrode, temperature probe, standard solutions, carrying case.

	Model	Bante 322
(0)	Measuring Range	0.05~200mmol/L, 0~1122°dH, 0~1404°e, 0~2000°fH, 0~8020mg/L (Ca <sup>2+</sup> ), 0~19999mg/L (CaCO <sub>3</sub> ), 0~11220mg/L (CaO)
dnes	Accuracy	±1% F.S
r Har	Resolution	0.001, 0.01, 0.1
Wate	Calibration Points	2~5 points (0.01mmol/L, 0.1mmol/L, 0.001mol/L, 0.01mol/L, 0.1mol/L)
	Temperature Compensation	0~50°C, Manual or Automatic
Temperature	Measuring Range	0~105°C, 32~221°F
	Accuracy	$\pm 0.5^{\circ}$ C, $\pm 0.9^{\circ}$ F
	Resolution	0.1°C, 0.1°F
	Calibration Points	1 point
	Data Hold	Manual or Auto-Endpoint
	Stability Criteria	Low or High
	Calibration Due Alarm	1 to 31 days or Off
<u> </u>	Power Off	Manual or Automatic (10, 20 or 30 minutes after last key pressed)
ener	Memory	Stores up to 500 data sets
5	Output	USB communication interface
	Power Requirements	3×1.5V AA batteries or DC5V power adapter
	Dimensions	170(L)×85(W)×30(H)mm
	Weight	300g



## Bante520/530/531/540 Portable Conductivity Meter



### MEASUREMENT PARAMETERS

- 520 meter: Conductivity, Temperature
- 530 meter: Conductivity, Total Dissolved Solids, Temperature
- 531 meter: Conductivity, Salinity, Temperature
- 540 meter: Conductivity, Total Dissolved Solids, Salinity, Resistivity, Temperature

### FEATURES

- 1 to 5 points push-button calibration, automatically recognizes the calibration solutions.
- Selectable cell constant (0.1/1/10), normalization temperature (20°C/25°C), TDS factor, linear and pure water compensations, seawater and practical salinity measurement modes.
- Automatic Temperature Compensation provides accurate reading over the entire range.
- Calibration Due Reminder prompts user to calibrate the meter regularly.
- Stability indicator shows when a measurement is recognized as stable.
- Auto-Hold feature senses and locks the measurement endpoint.
- Calibration report provides the details of the calibration standard and cell constant.
- Setup menu allows setting the 11 parameters, including the number of calibration points, stability criteria, temperature unit, auto-power off, etc.
- · Reset feature automatically resumes all settings back to factory default options.
- Expanded memory stores and recalls up to 500 data sets.
- Stored readings can be transferred into the computer by USB communication interface.
- Multi-mode power scheme (batteries, power adapter or USB port) ensures that use the meter smoothly.





#### METER INCLUDES

Conductivity electrode (range:10µS/cm~10mS/cm), temperature probe, standard solutions (84µS/cm, 1413µS/cm, 12.88mS/cm), carrying case.

### **OPTIONAL ELECTRODES**

CON-0.1 conductivity electrode (K=0.1): Suitable for measuring the low conductivity liquids (<10µS/cm), e.g., pure water.

CON-10 conductivity electrode (K=10):

Suitable for measuring the high conductivity liquids (>20mS/cm), e.g., seawater.







	Model		Bante 520	Bante 530	Bante 531	Bante 540
	Measuring Range	0.01 ~ 20.00, 200.0, 2000 $\mu S/cm$ , 20.00, 200 mS/cm *	•	•	•	•
ivity	Accuracy	$\pm$ 0.5% F.S	•	•	•	•
Conduct	Resolution	0.001, 0.01, 0.1, 1	•	•	•	•
	Calibration Points	1~3 points (model 520), 1~5 points (model 530/531/540)	•	•	•	•
	Calibration Solutions	10µS/cm, 84µS/cm, 1413µS/cm, 12.88mS/cm, 111.8mS/cm or Custom	•	•	•	•
	Measuring Range	0~10.00, 100.0, 1000ppm, 10.00, 100ppt (Max. 200ppt)*	—	•	—	•
S	Accuracy	$\pm$ 1% F.S	—	•	_	•
F	Resolution	0.01, 0.1, 1	—	•	—	•
	TDS Factor	0.01~1.00 (Default 0.5)	_	•	_	•
	Measuring Range	0.00~80.00ppt, 0.00~42.00psu*	—	—	•	•
nity	Accuracy	$\pm$ 1% F.S	_	_	•	•
Sali	Resolution	0.01, 0.1, 1	—	—	•	•
	Measurement Modes	Practical Salinity (psu) or Natural Seawater (ppt)	—	_	•	•
Resistivity	Measuring Range	$0.00 \sim 20 M \Omega^*$	—	—	—	•
	Accuracy	$\pm$ 1% F.S	—	_	_	•
	Resolution	0.01, 0.1, 1	—	—	—	•
e	Measuring Range	0~105°C, 32~221°F	•	•	•	•
eratu	Accuracy	$\pm$ 0.5°C, $\pm$ 0.9°F	•	•	•	•
empe	Resolution	0.1°C, 0.1°F	•	•	•	•
	Calibration Points	1 point	•	•	•	•
	Temperature Compensation	0~100°C, 32~212°F, Manual or Automatic	•	•	•	•
	Cell Constant	K=0.1, 1, 10 or Custom	•	•	•	•
	Temperature Coefficient	Linear (model 520), Linear and Pure water compensation (model 530/531/540)	•	•	•	•
	Reference Temperature	25°C (model 520), 20°C or 25°C (model 530/531/540)	•	•	•	•
	Data Hold	Manual or Auto-Endpoint	•	•	•	•
	Stability Criteria	Low or High	•	•	•	•
eral	Calibration Due Alarm	1 to 31 days or Off	•	•	•	•
Gen	Power Off	Manual or Automatic (10, 20 or 30 minutes after last key pressed)	•	•	•	•
	Memory	Stores up to 100 data sets (model 520), 500 data sets (model 530/531/540)	•	•	•	•
	Output	USB communication interface	•	•	•	•
	Connector	6-pin mini plug	•	•	•	٠
	Power Requirements	3×1.5V AA batteries or DC5V power adapter	•	•	•	•
	Dimensions	170(L)×85(W)×30(H)mm	•	•	•	•
	Weight	300g	•	•	•	•

\* The meter must be equipped with the CON-0.1 and CON-10 conductivity electrodes for the full-range measurements.



## Bante820/821 Portable Dissolved Oxygen Meter



### MEASUREMENT PARAMETERS

Dissolved oxygen concentration, % saturation of oxygen

### FEATURES

- 1 or 2 points calibration using the air-saturated water or zero oxygen solution.
- Salinity and barometric pressure compensations provide the reliable measuring results.
- Selectable measurement units, including the mg/L, ppm, mmHg and kPa.
- Automatic Temperature Compensation provides accurate reading over the entire range.
- Calibration Due Reminder prompts user to calibrate the meter regularly.
- Stability indicator shows when a measurement is recognized as stable.
- · Auto-Hold feature senses and locks the measurement endpoint.
- Battery indicator shows the remaining battery capacity.
- Auto-Power Off effectively conserves battery life.
- Setup menu allows setting the 9 parameters, including the number of calibration points, resolution, stability criteria, etc.
- · Reset feature automatically resumes all settings back to factory default options.
- Expanded memory stores and recalls up to 100 data sets.
- Stored readings can be transferred into the computer by USB communication interface.
- Multi-mode power scheme (batteries, power adapter or USB port) ensures that use the meter smoothly.

### METER INCLUDES

Dissolved oxygen probe, membrane cap, electrolyte solution, carrying case.

	Model	Bante 820	Bante 821
	Measuring Range	0.00~20.00mg/L	0.00~20.00mg/L
DO	Accuracy	$\pm$ 0.5mg/L	$\pm$ 0.2mg/L
	Resolution	0.01mg/L	0.01, 0.1mg/L
tion	Measuring Range	0.0~200.0%	0.0~200.0%
atura	Accuracy	±2.0%	±2.0%
% Si	Resolution	0.1%	0.1, 1%
	Calibration Points	1 or 2 points	1 or 2 points
	Temperature Compensation	0~50°C, 32~122°F, Automatic	0~50°C, 32~122°F, Automatic
	Barometric Pressure Correction	60.0~112.5kPa, 450~850mmHg	60.0~112.5kPa, 450~850mmHg
	Salinity Correction	0~50g/L	0~50g/L
	Data Hold	Manual or Auto-Endpoint	Manual or Auto-Endpoint
eral	Stability Criteria	-	Low or High
Gen	Calibration Due Alarm	_	1 to 31 days or Off
	Memory	Stores up to 100 data sets	Stores up to 500 data sets
	Output	USB communication interface	USB communication interface
	Power Requirements	3×1.5V AA batteries or DC5V power adapter	3×1.5V AA batteries or DC5V power adapter
	Dimensions	170(L)×85(W)×30(H)mm	170(L)×85(W)×30(H)mm
	Weight	300g	300g



## **Bante9 series Portable Multiparameter Water Quality Meter**



### MEASUREMENT PARAMETERS

- 900P meter: pH, mV, Ion, Conductivity, TDS, Salinity, Resistivity, DO
- 901P meter: pH, mV, Conductivity, TDS
- 902P meter: pH, mV, Conductivity, TDS, Salinity, Resistivity
- 903P meter: pH, mV, DO
- 904P meter: Conductivity, TDS, Salinity, Resistivity, DO

### FEATURES

- Multi-parameter portable meter is equipped with a large backlit LCD display.
- 1 to 5 points push-button calibration with auto-buffer recognition.
- Selectable pH buffer group (USA/NIST/DIN) or using the custom calibration solutions.
- Automatic electrode diagnosis with pH slope and offset display.

#### ORP:

- 1 point offset calibration allows adjusting the displayed value to a known standard.
- Relative and absolute millivolt modes provide the reliable ORP measurements.

#### ION:

- 2 to 5 points calibration, providing the 8 concentration points can be selected.
- Automatically recognizes the ion selective electrode, does not need to specify type of ion.
- Automatic electrode diagnosis shows the calibration points and details of slopes.
- Direct ion concentration readout simplifies the measurement process.
- mV measurement mode can be used to calculate the ion concentration.
- Selectable concentration units, including the ppm, mg/L and mol/L.

### CONDUCTIVITY/TDS/SALINITY/RESISTIVITY:

- 1 to 5 points push-button calibration, automatically recognizes the calibration solutions.
- Selectable cell constant (0.1/1/10), normalization temperature (20°C/25°C), TDS factor, linear and pure water compensations, seawater and practical salinity measurement modes.





#### DISSOLVED OXYGEN:

- 1 or 2 points calibration using the air-saturated water or zero oxygen solution.
- Salinity and barometric pressure compensations provide the reliable measuring results.
- Selectable measurement units, including the mg/L, ppm, mmHg and kPa.

#### GENERAL:

- Automatic Temperature Compensation provides accurate reading over the entire range.
- Calibration Due Reminder prompts user to calibrate the meter regularly.
- Stability indicator shows when a measurement is recognized as stable.
- Auto-Hold feature senses and locks the measurement endpoint.
- Battery indicator shows the remaining battery capacity.
- Auto-Power Off effectively conserves battery life.
- Calibration report provides the details of the calibration standards and electrode slopes.
- Setup menu allows setting the 15 parameters, including the number of calibration points, stability criteria, temperature unit, etc.
- Reset feature automatically resumes all settings back to factory default options.
- · Expanded memory stores and recalls up to 500 data sets.
- Stored readings can be transferred into the computer by USB communication interface.
- Multi-mode power scheme (batteries, power adapter or USB port) ensures that use the meter smoothly.



	Model		Bante 900P	Bante 901P	Bante 902P	Bante 903P	Bante904P
	Measuring Range	-2.000~20.000pH	•	•	•	•	_
표	Accuracy	$\pm$ 0.002pH	•	•	•	•	—
	Calibration Points	1~5 points (USA, NIST, DIN or Custom)	•	•	•	•	_
	Measuring Range	$\pm$ 1999.9mV	•	•	•	•	_
Ę	Accuracy	$\pm$ 0.2mV	•	•	•	•	_
	Calibration Points	1 point, only for relative mV mode	•	—	•	—	—
	Measuring Range	0.001~19999ppm, mg/L, mol/L (Depending on range of ISE)	•	—	—	—	—
<u></u>	Accuracy	$\pm$ 0.5% F.S (Monovalent), $\pm$ 1% F.S (Divalent)	•	—	—	—	—
	Calibration Points	2~5 points	•	_	—	—	_
	Measuring Range	$0.01{\sim}20.00,200.0,2000\mu S/cm,20.00,200mS/cm$	•	•	•	—	•
~	Accuracy	$\pm$ 0.5% F.S	•	•	٠	—	•
ctivit	Calibration Points	1~5 points (10, 84, 1413µS/cm, 12.88, 111.8mS/cm)	•	•	•	—	•
ondu	Cell Constant	K=0.1, 1, 10 or Custom	•	•	•	—	•
	Temperature Coefficient	Linear and Pure water compensation	•	•	•	—	•
	Reference Temperature	20°C or 25°C	•	•	•	—	•
TDS	Measuring Range	0~10.00, 100.0, 1000ppm, 10.00, 100ppt (Max. 200ppt)	•	•	•	—	•
	Accuracy	$\pm$ 1% F.S	•	•	•	_	•
	TDS Factor	0.01~1.00 (Default 0.5)	•	•	•	—	•
A	Measuring Range	0.00~80.00ppt, 0.00~42.00psu	•	—	•	—	•
alinit	Accuracy	$\pm$ 1% F.S	•	—	•	—	•
S	Measurement Modes	Practical Salinity (psu) or Natural Seawater (ppt)	•	—	•	—	•
ity	Measuring Range	0.00~20ΜΩ	•	—	•	—	•
sistiv	Accuracy	$\pm$ 1% F.S	•	—	•	—	•
Re	Resolution	0.01, 0.1, 1	•	—	•	—	•
	Measuring Range	0.00~20.00mg/L, 0.0~200.0% saturation	•	_	_	•	•
	Accuracy	$\pm$ 0.2mg/L, $\pm$ 2.0%	•	—	—	•	•
DO	Calibration Points	1 or 2 points	•	_	_	•	•
	Barometric Pressure Correction	60.0~112.5kPa, 450~850mmHg	•	—	—	•	•
	Salinity Correction	0~50g/L	•	_	—	•	•
	Temperature Compensation	0~100°C, 32~212°F, Manual or Automatic	•	•	•	•	•
<u></u>	Memory	Stores up to 500 data sets	•	•	•	•	•
ener	Output	USB communication interface	•	•	•	•	•
5	Power Requirements	3×1.5V AA batteries or DC5V power adapter	•	•	•	•	•
	Dimensions and Weight	170(L)×85(W)×30(H)mm, 300g	•	•	•	•	•

### METER INCLUDES

Bante 900P meter: pH electrode, conductivity electrode, D0 probe, temperature probe, pH buffers, conductivity standard solutions, D0 electrolyte solution, carrying case.

• Bante 901P and 902P meters: pH electrode, conductivity electrode, temperature probe, pH buffers, conductivity standard solutions, carrying case.

• Bante 903P meter: pH electrode, DO probe, temperature probe, pH buffers, DO electrolyte solution, carrying case.

• Bante 904P meter: conductivity electrode, DO probe, temperature probe, conductivity standard solutions, DO electrolyte solution, carrying case.



### Bante210 Benchtop pH Meter



### MEASUREMENT PARAMETERS

pH, mV, Temperature

### FEATURES

- 1 to 3 points push-button calibration with auto-buffer recognition.
- Selectable pH buffer group, including the USA and NIST options.
- Automatic electrode slope display helps user decide whether to replace sensor.
- Automatic Temperature Compensation provides accurate reading over the entire range.
- Auto-Hold feature senses and locks the measurement endpoint.
- Manual temperature calibration corrects the temperature deviation.
- Setup menu allows setting the 5 parameters, including the pH buffer group, number of calibration points, temperature unit, etc.
- · Reset feature automatically resumes all settings back to factory default options.

### METER INCLUDES

pH electrode, temperature probe, pH buffer pouches (4.01/7.00/10.01), electrode holder, power adapter.

	Model	Bante 210
	Measuring Range	-1.00~15.00pH
	Accuracy	±0.01pH
Ηd	Resolution	0.01pH
	Calibration Points	1~3 points
	pH Buffer Options	USA (pH4.01/7.00/10.01) or NIST (pH4.01/6.86/9.18)
Am (	Measuring Range	$\pm$ 1999mV
	Accuracy	$\pm 1 \text{mV}$
	Resolution	1mV
e	Measuring Range	0~105°C, 32~221°F
ratur	Accuracy	±1°C
empe	Resolution	0.1°C, 0.1°F
Ĕ	Calibration Points	1 point
	Temperature Compensation	0~100°C, 32~212°F, Manual or Automatic
General	Data Hold	Manual or Auto-Endpoint
	Power Requirements	DC9V, using AC adapter, 220VAC/50Hz
	Dimensions and Weight	210(L)×205(W)×75(H)mm, 1.5kg



### **Bante510 Benchtop Conductivity Meter**



### MEASUREMENT PARAMETERS

Conductivity, Total Dissolved Solids, Temperature

### FEATURES

- 1 to 3 points push-button calibration, automatically recognizes the calibration solutions.
- Selectable cell constant (0.1/1/10), temperature coefficient and TDS conversion factor.
- Automatic Temperature Compensation provides accurate reading over the entire range.
- Auto-Hold feature senses and locks the measurement endpoint.
- Manual temperature calibration corrects the temperature deviation.
- Setup menu allows setting the 6 parameters, including the number of calibration points, temperature unit, etc.
- Reset feature automatically resumes all settings back to factory default options.

### METER INCLUDES

Conductivity electrode ( range: 0.01 to 20mS/cm ), temperature probe, standard solutions ( $84\mu$ S/cm, 1413\muS/cm, 12.88mS/cm), electrode holder, power adapter.

### **OPTIONAL ELECTRODES**

CON-0.1 Conductivity Electrode (K=0.1): Suitable for measuring the low conductivity liquids (<10µS/cm), e.g., pure water.

#### CON-10 Conductivity Electrode (K=10):

Suitable for measuring the high conductivity liquids (>20mS/cm), e.g., seawater.

	Model	Bante 510
y	Measuring Range	0.01~20.00, 200.0, 2000µS/cm, 20.00, 200mS/cm
Ictivit	Accuracy	±1% F.S
ondu	Resolution	0.001, 0.01, 0.1, 1
	Calibration Points	1~3 points (10µS/cm, 84µS/cm, 1413µS/cm, 12.88mS/cm, 111.8mS/cm)
	Measuring Range	0~10.00, 100.0, 1000ppm, 10.00, 100ppt (Max. 200ppt)
IDS	Accuracy	±1% F.S
	TDS Factor	0.01~1.00 (Default 0.5)
e	Measuring Range	0~105°C, 32~221°F
iratur	Accuracy	±1°C
ampe	Resolution	0.1°C, 0.1°F
Ĕ	Calibration Points	1 point
	Temperature Compensation	0~100°C, 32~212°F, Manual or Automatic
B	Temperature Coefficient	0.0~10.0%/°C
enera	Cell Constant	K=0.1, 1, 10
6	Power Requirements	DC9V, using AC adapter, 220VAC/50Hz
	Dimensions and Weight	210(L)×205(W)×75(H)mm, 1.5kg



### Bante810 Benchtop Dissolved Oxygen Meter



### MEASUREMENT PARAMETERS

Dissolved oxygen concentration, % saturation of oxygen

### FEATURES

- 1 or 2 points calibration using the air-saturated water or zero oxygen solution.
- · Salinity and barometric pressure compensations improve the accuracy of measurement.
- Automatic Temperature Compensation provides accurate reading over the entire range.
- Auto-Hold feature senses and locks the measurement endpoint.
- Manual temperature calibration corrects the temperature deviation.
- Setup menu allows setting the 6 parameters, including the number of calibration points, temperature unit, concentration unit, etc.
- Reset feature automatically resumes all settings back to factory default options.

### METER INCLUDES

Dissolved oxygen probe, membrane cap, electrolyte solution, electrode holder, power adapter.

	Model	Bante 810
	Measuring Range	0.0~20.0mg/L
8	Accuracy	$\pm$ 0.5mg/L
	Resolution	0.1mg/L
tion	Measuring Range	0.0~200.0%
atura	Accuracy	±2.0%
% S	Resolution	0.1%
	Temperature Compensation	0~40°C, Automatic
	Barometric Pressure Correction	60.0~112.5kPa, 450~850mmHg
	Salinity Correction	0~35g/L
	Data Hold	Manual or Auto-Endpoint
eral	Power Off	Manual or Automatic (3 hours after last key pressed)
Gen	Sensor Type	D0100 polarographic D0 probe
	Connector	6-pin mini plug
	Power Requirements	DC9V, using AC adapter, 220VAC/50Hz
	Dimensions	210(L)×205(W)×75(H)mm
	Weight	1.5kg



## A120/130/131 Professional pH/ORP/Ion Meter



### MEASUREMENT PARAMETERS

- A120 meter: pH, mV, Relative mV, Temperature
- A130 meter: pH, mV, Relative mV, Ion Concentration, Water Hardness, Temperature
- A131 meter: Ion Concentration, Water Hardness, mV, Temperature

### FEATURES

#### pH:

- 1 to 5 points push-button calibration with auto-buffer recognition.
- Selectable pH buffer group (USA/NIST/DIN) or using the custom calibration solutions.
- Automatic electrode diagnosis with pH slope and offset display.
- Automatic Temperature Compensation provides accurate reading over the entire pH range.
- Solution Temperature Coefficient compensates for the pure water samples and references the pH to 25°C.
- · Limit alarm alerts when reading exceeds range.

#### ORP:

- 1 point offset calibration allows adjusting the displayed value to a known standard.
- Relative and absolute millivolt modes provide the reliable ORP measurements.

Settings	• • •		Settings				•
Sample ID	 Sample ID Set the sample ID to associate readings with the data log.	S S	Sample ID	6	Water Hardness Unit Set the default measurement unit.		
pH Buffer Group			Concentration Unit				
Calibration Points	0000		Water Hardness Unit		≡ ndH	mg/L (CaO)	
Resolution	0000		Calibration Points		°e	mg/L (Ca2)	
STC			Ionic Valency		9H	mmoliL	
Alarm Limits			Alarm Limits		mg/L (CaCOs)		
Calibration Due			Calibration Due				

#### ION:

- Selectable ion measurement methods, including the direct reading, known addition, known subtraction, sample addition and sample subtraction.
- Selectable concentration units, including the ppm, mg/L, mol/L and mmol/L.
- 2 to 5 points calibration, providing the 8 concentration points can be selected.
- Automatically recognizes the ion selective electrodes, does not need to specify type of ion.
- Electrode management is capable of storing the 3 slopes and recalling the calibration data of each electrode.
- Calibration report provides the details of the calibration standard and slope.

#### WATER HARDNESS:

- 2 to 5 points calibration from low to high concentrations.
- Selectable measurement units (German degree, English degree, French degree, mg/L and mmol/L) are used for professional water hardness measurements.

#### GENERAL:

- Calibration Due Reminder prompts user to calibrate the meter regularly.
- Stability indicator shows when a measurement is recognized as stable.
- Auto-Read feature senses and locks the measurement endpoint.
- Interval Readings automatically send the measurement data to the computer or printer.
- Password protection prevents the unauthorized calibration and settings.
- Expanded memory stores and recalls up to 1000 data sets.
- Stored readings can be transferred into the computer by USB communication interface.
- Reset feature automatically resumes all settings back to factory default options.



	Model		A120	A130	A131
	Measuring Range	-2.000~20.000pH	•	•	—
	Accuracy	$\pm$ 0.002pH	•	•	—
Ηd	Resolution	0.001, 0.01pH	•	•	—
	Calibration Points	1~5 points	•	•	_
	pH Buffer Options	USA, NIST, DIN or Custom	•	•	_
	Measuring Range	$\pm 2000 \text{mV}$	•	•	•
	Accuracy	$\pm$ 0.2mV	•	•	•
ک س	Resolution	0.1mV	•	•	•
	Calibration Points	1 point, only for relative mV mode	•	•	_
	Measurement Modes	Relative and Absolute mV	•	•	_
	Measuring Range	0.001 ~30000, depending on the range of ion selective electrode	_	•	•
lon	Measurement Units	ppm, mg/L, mol/L, mmol/L	—	•	•
	Accuracy	$\pm$ 0.5% F.S (Monovalent), $\pm$ 1% F.S (Divalent)	_	•	•
	Resolution	0.001, 0.01, 0.1, 1	—	•	•
	Calibration Points	2~5 points	—	•	•
	Calibration Solutions	0.001, 0.01, 0.1, 1, 10, 100, 1000, 10000ppm, mg/L, mol/L, mmol/L	—	•	•
	Measurement Methods	Direct reading, known addition, known subtraction, sample addition, sample subtraction	—	•	•
	Measuring Range	0.05~200mmol/L, 0~1120°dH, 0~1404°e, 0~2000°fH, 0~8000mg/L (Ca²)	—	•	•
dness	Accuracy	$\pm$ 1% F.S	—	•	•
Har	Resolution	0.001, 0.01, 0.1, 1	—	•	•
Nater	Calibration Points	2~5 points	—	•	•
	Calibration Solutions	0.01, 0.1, 1, 10, 100mmol/L	—	•	•
e	Measuring Range	0~105°C, 32~221°F	•	•	•
ratur	Accuracy	±0.5°C, ±0.9°F	•	•	•
empe	Resolution	0.1°C, 0.1°F	•	•	•
Ĕ	Calibration Points	1 point	•	•	•
	Temperature Compensation	0~100°C, 32~212°F, Manual or Automatic	•	•	•
	Data Hold	Manual or Auto-Endpoint	•	•	•
	Stability Criteria	Standard or High-accuracy	•	•	•
	Interval Readings	10, 30, 60 seconds, 10, 30 minutes or Off	•	•	•
eral	Calibration Due Alarm	1 to 31 days or Off	•	•	•
Gen	Memory	Stores up to 1000 data sets	•	•	•
	Output	USB communication interface	•	•	•
	Display	7 inch TFT LCD	•	•	•
	Power Requirements	DC12V/2A power adapter	•	•	•
	Dimensions and Weight	240(L)×220(W)×80(H)mm, 1.7kg	•	•	•

### METER INCLUDES

A120 and A130 meters: pH electrode, temperature probe, pH buffer pouches (4.01/7.00/10.01), electrode holder, power adapter.
A131 meter: ion selective electrode, temperature probe, standard solutions, electrode holder, power adapter.



## A150/151 Professional Conductivity/TDS/Salinity Meter





### MEASUREMENT PARAMETERS

- A150 meter: Conductivity, TDS, Salinity, Resistivity, Conductivity Ash, Temperature
- A151 meter: Conductivity, TDS, Salinity, Resistivity, Temperature

### FEATURES

- 1 to 5 points push-button calibration, automatically recognizes the calibration solutions.
- Selectable cell constant is matched the connected conductivity electrode and recalled the calibration data.
- Selectable linear temperature compensation coefficient, pure water compensation coefficient, reference temperature and TDS conversion factor.
- Automatic Temperature Compensation corrects the conductivity measurement to selected reference temperature.
- · Limit alarm alerts when reading exceeds range.
- Calibration Due Reminder prompts user to calibrate the meter regularly.
- Calibration report provides the details of the calibration standard and cell constant.
- Stability indicator shows when a measurement is recognized as stable.
- Auto-Read feature senses and locks the measurement endpoint.
- Interval Readings automatically send the measured data to the computer or printer.
- Password protection prevents the unauthorized calibration and settings.
- Expanded memory stores and recalls up to 1000 data sets.
- Stored readings can be transferred into the computer by USB communication interface.
- Reset feature automatically resumes all settings back to factory default options.



### METER INCLUDES

Conductivity electrode (range:  $10\mu S/cm$  to 20m S/cm), temperature probe, standard solutions (84 $\mu S/cm$ , 1413 $\mu S/cm$ , 12.88m S/cm), electrode holder, power adapter.

### **OPTIONAL ELECTRODES**

CON-0.1 Conductivity Electrode (K=0.1): Suitable for measuring the low conductivity liquids (<10µS/cm), e.g., pure water.

CON-10 Conductivity Electrode (K=10):

Suitable for measuring the high conductivity liquids (>20mS/cm), e.g., seawater.

Settings		•••	Settings				•
Conductivity			General				
Sample ID	Cell Constant Set the cell constant to match the connected electr	rode.	Alarm Limits	68	Calibration Due Set the calibration interval to	activate alarm.	
Cell Constant			Calibration Due				
Calibration Points	2-pole electrode (K=0.1)		Temperature Unit		2	Orași de	
Temperature Coefficient	2-pole electrode (K=1)		Stability Criteria		3	Day(a)	
Pure Water Coefficient	2-pole electrode (K=10)		Auto-Read				
Reference Temperature	4-pole electrode		Auto-Power Off				
TDS Factor			Date and Time				



	Model		A150	A151
onductivity	Measuring Range	0.01~20.00, 200.0, 2000µS/cm, 20.00, 200.0mS/cm*	•	•
	Accuracy	$\pm$ 0.5% F.S	•	•
	Resolution	0.001, 0.01, 0.1, 1	•	•
	Calibration Points	1~3 points (10µS/cm, 84µS/cm, 1413µS/cm, 12.88mS/cm, 111.8mS/cm)	•	•
	Measuring Range	0.00mg/L~100.0g/L (Max. 200g/L)*	•	•
S	Accuracy	±1% F.S	•	•
2	Resolution	0.01, 0.1, 1	•	•
	TDS Factor	0.01~1.00 (Default 0.5)	•	•
	Measuring Range	0.00~80.00ppt, 0.00~42.00psu, 0.00~8.00%*	•	•
nity	Accuracy	±1% F.S	•	•
Sali	Resolution	0.01, 0.1, 1	•	•
	Measurement Modes	Practical Salinity (psu), Natural Seawater (ppt) or %	•	•
ity	Measuring Range	$0.00 \sim 30 M \Omega^*$	•	•
sistiv	Accuracy	±1% F.S	•	•
Re	Resolution	0.01, 0.1, 1	•	•
Ash	Measuring Range	0.00~100%*	•	—
vity A	Accuracy	$\pm$ 1% F.S	•	—
Iduct	Resolution	0.01, 0.1, 1	•	—
Co	Measurement Modes	Refined Sugar or Raw Sugar	•	—
e	Measuring Range	0~105°C, 32~221°F	•	•
ratur	Accuracy	$\pm 0.5^{\circ}$ C, $\pm 0.9^{\circ}$ F	•	•
edme	Resolution	0.1°C, 0.1°F	•	•
Ĕ	Calibration Points	1 point	•	•
	Temperature Compensation	0~100°C, 32~212°F, Manual or Automatic	•	•
	Cell Constant	2-pole electrodes (K=0.1, 1, 10) or 4-pole electrode	•	•
	Temperature Coefficient	Linear (0.0~10.0%/°C), Non-linear or Pure water compensation	•	•
	Reference Temperature	20°C or 25°C	•	•
	Data Hold	Manual or Auto-Endpoint	•	•
<u></u>	Stability Criteria	Standard or High-accuracy	•	•
Genera	Interval Readings	10, 30, 60 seconds, 10, 30 minutes or Off	•	•
	Calibration Due Alarm	1 to 31 days or Off	•	•
	Memory	Stores up to 1000 data sets	•	•
	Output	USB communication interface	•	•
	Display	7 inch TFT LCD	•	•
	Power Requirements	DC12V/2A power adapter	•	•
	Dimensions and Weight	240(L)×220(W)×80(H)mm, 1.7kg	•	•

\* The meter must be equipped with the CON-0.1 and CON-10 conductivity electrodes for the full-range measurements.



## A180/181 Professional DO/BOD/OUR/SOUR Meter



### **MEASUREMENT PARAMETERS**

- A180 meter: Dissolved Oxygen, BOD, Oxygen Uptake Rate, Specific Oxygen Uptake Rate
- A181 meter: Dissolved Oxygen, % saturation of oxygen

### FEATURES

- 1 or 2 points push-button calibration using the air-saturated water or zero oxygen solution.
- Salinity and barometric pressure compensations ensure the accurate D0 measurements.
- Selectable testing time, beginning/ending DO are used for the OUR and SOUR calculations.
- Limit alarm alerts when reading exceeds range.
- Calibration Due Reminder prompts user to calibrate the meter regularly.
- Stability indicator shows when a measurement is recognized as stable.
- Auto-Read feature senses and locks the measurement endpoint.
- Interval Readings automatically send the measured data to the computer or printer.
- Password protection prevents the unauthorized calibration and settings.
- Expanded memory stores and recalls up to 1000 data sets.
- Stored readings can be transferred into the computer by USB communication interface.
- Reset feature automatically resumes all settings back to factory default options.



### METER INCLUDES

Dissolved oxygen probe, membrane cap, electrolyte solution, electrode holder, power adapter.

	Model		A180	A181
ŀ	Measuring Range	0.00~20.00mg/L, 0.0~200.0% saturation	•	•
	Accuracy	$\pm$ 0.2mg/L, $\pm$ 2.0%	•	•
	Calibration Points	1 or 2 points	•	٠
	Temperature Compensation	0~50°C, 32~122°F, Automatic	•	•
~	Barometric Pressure Correction	450~850mmHg, 60.0~113.3kPa	•	٠
SOU	Salinity Correction	0~50g/L	•	•
DUR/	BOD/OUR/SOUR Measurements	Only for A180 meter	•	—
D/Q	Stability Criteria	Standard or High-accuracy	•	•
0/B(	Interval Readings	10, 30, 60 seconds, 10, 30 minutes or Off	•	•
	Memory	Stores up to 1000 data sets	•	•
ŀ	Output	USB communication interface	•	•
	Display	7 inch TFT LCD	•	•
	Power Requirements	DC12V/2A power adapter	•	•
	Dimensions and Weight	240 (L)×220 (W)×80 (H) mm, 1.7kg	•	•



### **Bante9 series Multiparameter Water Quality Meter**



### MEASUREMENT PARAMETERS

- 900 meter: pH, mV, Ion, Conductivity, TDS, Salinity, Resistivity, DO
- 901 meter: pH, mV, Conductivity, TDS
- 902 meter: pH, mV, Conductivity, TDS, Salinity, Resistivity
- 903 meter: pH, mV, DO
- 904 meter: Conductivity, TDS, Salinity, Resistivity, DO

#### FEATURES pH:

- Multi-parameter meter is equipped with a large backlit LCD display.
- 1 to 5 points push-button calibration with auto-buffer recognition.
- Selectable pH buffer group (USA/NIST/DIN) or using the custom calibration solutions.
- Automatic electrode diagnosis with pH slope and offset display.

#### ORP:

- 1 point offset calibration allows adjusting the displayed value to a known standard.
- Relative and absolute millivolt modes provide the reliable ORP measurements.

#### ION:

- 2 to 5 points calibration, providing the 8 concentration points can be selected.
- Automatically recognizes the ion selective electrode, does not need to specify type of ion.
- Automatic electrode diagnosis shows the calibration points and details of slopes.
- Direct ion concentration readout simplifies the measurement process.
- mV measurement mode can be used to calculate the ion concentration.
- Selectable concentration units, including the ppm, mg/L and mol/L.

### CONDUCTIVITY/TDS/SALINITY/RESISTIVITY:

- 1 to 5 points push-button calibration, automatically recognizes the calibration solutions.
- Selectable cell constant (0.1/1/10), normalization temperature (20°C/25°C), TDS factor, linear and pure water compensations, seawater and practical salinity measurement modes.



#### DISSOLVED OXYGEN:

- 1 or 2 points calibration using the air-saturated water or zero oxygen solution.
- Salinity and barometric pressure compensations provide the reliable measuring results.
- Selectable measurement units, including the mg/L, ppm, mmHg and kPa.

#### GENERAL:

- Automatic Temperature Compensation provides accurate reading over the entire range.
- Calibration Due Reminder prompts user to calibrate the meter regularly.
- Stability indicator shows when a measurement is recognized as stable.
- · Auto-Hold feature senses and locks the measurement endpoint.
- · Battery indicator shows the remaining battery capacity.
- Auto-Power Off effectively conserves battery life.
- Calibration report provides the details of the calibration standards and electrode slopes.
- Setup menu allows setting the 15 parameters, including the number of calibration points, stability criteria, temperature unit, etc.
- Reset feature automatically resumes all settings back to factory default options.
- Expanded memory stores and recalls up to 500 data sets.
- Stored readings can be transferred into the computer by USB communication interface.



	Model		Bante 900	Bante 901	Bante 902	Bante 903	Bante 904
	Measuring Range	-2.000~20.000pH	•	•	•	•	_
Æ	Accuracy	$\pm$ 0.002pH	•	•	•	•	_
	Calibration Points	1~5 points (USA, NIST, DIN or Custom)	•	•	•	•	_
	Measuring Range	$\pm$ 1999.9mV	•	•	•	•	—
۲m ۲	Accuracy	$\pm 0.2 \mathrm{mV}$	•	•	•	•	—
	Calibration Points	1 point, only for relative mV mode	•	—	•	—	—
	Measuring Range	0.001~19999ppm, mg/L, mol/L (Depending on range of ISE)	•	_	_	_	_
lo	Accuracy	$\pm$ 0.5% F.S (Monovalent), $\pm$ 1% F.S (Divalent)	•	_	—	_	—
	Calibration Points	2~5 points	•		_	_	_
	Measuring Range	0.01~20.00, 200.0, 2000µS/cm, 20.00, 200mS/cm	•	•	•	—	•
>	Accuracy	$\pm 0.5\%$ F.S	•	•	•	_	•
ctivit	Calibration Points	1~5 points (10, 84, 1413µS/cm, 12.88, 111.8mS/cm)	•	•	•	—	•
npuo	Cell Constant	K=0.1, 1, 10 or Custom	•	•	•	_	•
Ö	Temperature Coefficient	Linear and Pure water compensation	•	•	•	_	•
	Reference Temperature	20°C or 25°C	•	•	•	_	٠
	Measuring Range	0~10.00, 100.0, 1000ppm, 10.00, 100ppt (Max. 200ppt)	•	•	•	—	•
TDS	Accuracy	$\pm$ 1% F.S	•	•	•	_	•
	TDS Factor	0.01~1.00 (Default 0.5)	•	•	•	—	•
~	Measuring Range	0.00~80.00ppt, 0.00~42.00psu	•	_	•	_	•
alinit	Accuracy	$\pm$ 1% F.S	•	—	•	—	•
õ	Measurement Modes	Practical Salinity (psu) or Natural Seawater (ppt)	•	_	•	_	•
<u>it</u>	Measuring Range	0.00~20ΜΩ	•	—	•	—	•
sistiv	Accuracy	$\pm$ 1% F.S	•	_	•	_	•
Re	Resolution	0.01, 0.1, 1	•	—	•	—	•
	Measuring Range	0.00~20.00mg/L, 0.0~200.0% saturation	•	_	_	٠	٠
	Accuracy	$\pm$ 0.2mg/L, $\pm$ 2.0%	•	—	—	•	•
20	Calibration Points	1 or 2 points	•	_	_	•	•
	Barometric Pressure Correction	60.0~112.5kPa, 450~850mmHg	•	—	—	•	•
	Salinity Correction	0~50g/L	•	_	_	•	•
	Temperature Compensation	0~100°C, 32~212°F, Manual or Automatic	•	•	•	•	•
-	Memory	Stores up to 500 data sets	•	•	•	•	•
enere	Output	USB communication interface	•	•	•	•	•
ĕ	Power Requirements	DC5V, using AC adapter, 220VAC/50Hz	•	•	•	•	•
	Dimensions and Weight	210(L)×188(W)×60(H)mm, 1.5kg	•	•	•	•	•

### METER INCLUDES

Bante 900 meter: pH electrode, conductivity electrode, D0 probe, temperature probe, pH buffers, conductivity standard solutions, D0 electrolyte solution, power adapter.

• Bante 901 and 902 meters: pH electrode, conductivity electrode, temperature probe, pH buffers, conductivity standard solutions, power adapter.

• Bante 903 meter: pH electrode, DO probe, temperature probe, pH buffers, DO electrolyte solution, power adapter.

• Bante 904 meter: conductivity electrode, D0 probe, temperature probe, conductivity standard solutions, D0 electrolyte solution, power adapter.



### Bante920/930/931 Laboratory pH/ORP/Ion Meter



### MEASUREMENT PARAMETERS

- 920 meter: pH, mV, Relative mV, Temperature
- 930 meter: pH, mV, Relative mV, Ion Concentration, Temperature
- 931 meter: Ion Concentration, mV, Temperature

### FEATURES

- pH:
- 1 to 5 points push-button calibration with auto-buffer recognition.
- Selectable pH buffer group (USA/NIST/DIN) or using the custom calibration solutions.

#### ORP:

- 1 point offset calibration allows adjusting the displayed value to a known standard.
- Relative and absolute millivolt modes ensure the reliable ORP measurements.

### ION:

- 2 to 5 points calibration, providing the 8 concentration points can be selected.
- Selectable concentration units, including the ppm, mg/L and mol/L.

### GENERAL:

- Automatic Temperature Compensation provides accurate reading over the entire range.
- Calibration Due Reminder prompts user to calibrate the meter regularly.
- Stability indicator shows when a measurement is recognized as stable.
- Auto-Hold feature senses and locks the measurement endpoint.
- Setup menu allows setting the 10 parameters, including the number of calibration points, stability criteria, temperature unit, auto-power off, etc.
- Reset feature automatically resumes all settings back to factory default options.
- Expanded memory stores and recalls up to 500 data sets.

	Model		Bante 920	Bante 930	Bante 931
Hd	Measuring Range	-2.000~20.000pH	•	•	—
	Accuracy	±0.002pH	•	•	—
	Calibration Points	1~5 points (USA, NIST, DIN or Custom)	•	•	—
	Measuring Range	$\pm$ 1999.9mV	•	•	—
۲m ک	Accuracy	$\pm$ 0.2mV	•	•	—
	Calibration Points	1 point, only for relative mV mode	•	•	_
Lon I	Measuring Range	0.001~19999ppm, mg/L, mmol/L (Depending on the range of ISE)	—	•	•
	Accuracy	$\pm$ 0.5% F.S (Monovalent), $\pm$ 1% F.S (Divalent)	—	•	•
	Calibration Points	2~5 points (0.001, 0.01, 0.1, 1, 10, 100, 1000, 10000ppm, mg/L, mol/L, mmol/L)	—	•	•
	Temperature Compensation	0~100°C, 32~212°F, Manual or Automatic	•	•	•
	Data Hold	Manual or Auto-Endpoint	•	•	•
<u></u>	Calibration Due Alarm	1 to 31 days or Off	•	•	•
Genera	Memory	Stores up to 500 data sets	•	•	•
	Output	USB communication interface	•	•	•
	Power Requirements	DC5V, using AC adapter, 220VAC/50Hz	•	•	•
	Dimensions and Weight	210(L)×188(W)×60(H)mm, 1.5kg	•	•	•



### **Bante932 Laboratory Water Hardness Meter**



### MEASUREMENT PARAMETERS

Concentration (mmol/L or mg/L), German degree (°dH), English degree (°e), French degree (°fH), Temperature

### FEATURES

- 2 to 5 points calibration from low to high concentrations.
- Selectable measurement units, including the mmol/L, mg/L (CaCO<sub>3</sub>), mg/L (CaO), mg/L (Ca), German degree (°dH), English degree (°e) and French degree (°fH).
- Automatic Temperature Compensation provides accurate reading over the entire range.
- Calibration Due Reminder prompts user to calibrate the meter regularly.
- Stability indicator shows when a measurement is recognized as stable.
- Auto-Hold feature senses and locks the measurement endpoint.
- Setup menu allows setting the 7 parameters, including the number of calibration points, stability criteria, auto-power off, etc.
- · Reset feature automatically resumes all settings back to factory default options.
- Expanded memory stores and recalls up to 500 data sets.
- Stored readings can be transferred into the computer by USB communication interface.

### METER INCLUDES

Water hardness electrode, temperature probe, standard solutions, electrode holder, power adapter.

	Model	Bante 932
Hardness	Measuring Range	0.05~200mmol/L, 0~1122°dH, 0~1404°e, 0~2000°fH, 0~8020mg/L (Ca <sup>2</sup> ), 0~19999mg/L (CaCO <sub>3</sub> ), 0~11220mg/L (CaO)
	Accuracy	±1% F.S
	Resolution	0.001, 0.01, 0.1
Vate	Calibration Points	2~5 points (0.01mmol/L, 0.1mmol/L, 0.001mol/L, 0.01mol/L, 0.1mol/L)
	Temperature Compensation	0~50°C, Manual or Automatic
e	Measuring Range	0~105°C, 32~221°F
ratur	Accuracy	$\pm$ 0.5°C, $\pm$ 0.9°F
empe	Resolution	0.1°C, 0.1°F
Ĕ	Calibration Points	1 point
	Data Hold	Manual or Auto-Endpoint
	Stability Criteria	Low or High
-	Calibration Due Alarm	1 to 31 days or Off
Genera	Memory	Stores up to 500 data sets
	Output	USB communication interface
	Power Requirements	DC5V, using AC adapter, 220VAC/50Hz
	Dimensions and Weight	210(L)×188(W)×60(H)mm, 1.5kg



## Bante950 Laboratory Conductivity/TDS/Salinity Meter



### MEASUREMENT PARAMETERS

Conductivity, Total Dissolved Solids, Salinity, Resistivity, Temperature

### FEATURES

- 1 to 5 points push-button calibration, automatically recognizes the calibration solutions.
- Selectable cell constant (0.1/1/10), normalization temperature (20°C/25°C), TDS factor, linear and pure water compensations, seawater and practical salinity measurement modes.
- Automatic Temperature Compensation provides accurate reading over the entire range.
- Calibration Due Reminder prompts user to calibrate the meter regularly.
- Stability indicator shows when a measurement is recognized as stable.
- Auto-Hold feature senses and locks the measurement endpoint.
- Setup menu allows setting the 11 parameters, including the number of calibration points, stability criteria, temperature unit, auto-power off, etc.
- Reset feature automatically resumes all settings back to factory default options.
- Expanded memory stores and recalls up to 500 data sets.
- Stored readings can be transferred into the computer by USB communication interface.

### METER INCLUDES

Conductivity electrode (range: $10\mu$ S/cm-10mS/cm), temperature probe, standard solutions (84 $\mu$ S/cm, 1413 $\mu$ S/cm, 12.88mS/cm), electrode holder, power adapter.

### **OPTIONAL ELECTRODES**

- CON-0.1 conductivity electrode: Suitable for measuring the pure water (<10µS/cm).</li>
- CON-10 conductivity electrode: Suitable for measuring the seawater (>20mS/cm).

	Model	Bante 950
ductivity	Measuring Range	0.01~20.00, 200.0, 2000µS/cm, 20.00, 200mS/cm
	Accuracy	$\pm 0.5\%$ F.S
Con	Calibration Points	1~5 points (10μS/cm, 84μS/cm, 1413μS/cm, 12.88mS/cm, 111.8mS/cm or Custom)
	Measuring Range	0~10.00, 100.0, 1000ppm, 10.00, 100ppt (Max. 200ppt)
TDS	Accuracy	$\pm$ 1% F.S
	TDS Factor	0.01~1.00 (Default 0.5)
nity	Measuring Range	0.00~80.00ppt, 0.00~42.00psu
Sali	Accuracy	±1% F.S
s:	Measuring Range	0.00~20MΩ
ž	Accuracy	±1% F.S
	Temperature Compensation	0~100°C, 32~212°F, Manual or Automatic
	Cell Constant	K=0.1, 1, 10 or Custom
eral	Temperature Coefficient	0.0~10.0%/°C
Gen	Memory	Stores up to 500 data sets, USB communication interface
	Power Requirements	DC5V, using AC adapter, 220VAC/50Hz
	Dimensions and Weight	210(L)×188(W)×60(H)mm, 1.5kg



### Bante980 Laboratory Dissolved Oxygen Meter



### MEASUREMENT PARAMETERS

Dissolved oxygen concentration, % saturation of oxygen

### FEATURES

- 1 or 2 points calibration using the air-saturated water or zero oxygen solution.
- Salinity and barometric pressure compensations provide the reliable measuring results.
- Selectable measurement units, including the mg/L, ppm, mmHg and kPa.
- Automatic Temperature Compensation provides accurate reading over the entire range.
- Calibration Due Reminder prompts user to calibrate the meter regularly.
- Stability indicator shows when a measurement is recognized as stable.
- Auto-Hold feature senses and locks the measurement endpoint.
- Setup menu allows setting the 9 parameters, including the number of calibration points, resolution, stability criteria, etc.
- Reset feature automatically resumes all settings back to factory default options.
- Expanded memory stores and recalls up to 100 data sets.
- Stored readings can be transferred into the computer by USB communication interface.

### METER INCLUDES

Dissolved oxygen probe, membrane cap, electrolyte solution, electrode holder, power adapter.

	Model	Bante 980
	Measuring Range	0.00~20.00mg/L
8	Accuracy	$\pm$ 0.2mg/L
	Resolution	0.01, 0.1mg/L
tion	Measuring Range	0.0~200.0%
atura	Accuracy	$\pm 2.0\%$
% S	Resolution	0.1, 1%
	Calibration Points	1 or 2 points
	Temperature Compensation	0~50°C, 32~122°F, Automatic
	Barometric Pressure Correction	60.0~112.5kPa, 450~850mmHg
	Salinity Correction	0~50g/L
eral	Data Hold	Manual or Auto-Endpoint
Gen	Calibration Due Alarm	1 to 31 days or Off
Ŀ	Memory	Stores up to 500 data sets
	Output	USB communication interface
	Power Requirements	DC5V, using AC adapter, 220VAC/50Hz
	Dimensions and Weight	210(L)×188(W)×60(H)mm, 1.5kg


# **BI-620 Industrial pH Controller**



#### MEASUREMENT PARAMETERS

pH, mV, Temperature

#### FEATURES

- Economical online pH controller is equipped with an industrial pH electrode.
- 1 to 3 points push-button calibration with auto-buffer recognition.
- Selectable pH buffer group, including the USA and NIST options.
- Automatic electrode slope display helps user decide whether to replace sensor.
- Automatic Temperature Compensation provides accurate reading over the entire range.
- Low or high alarm limit can be set by user and automatically activate an external device.
- 4 to 20mA output signal meets industry standard.
- Manual temperature calibration corrects the temperature deviation.
- Setup menu allows setting the 9 parameters, including the pH buffer group, number of calibration points, alarm limits, hysteresis value, etc.
- Reset feature automatically resumes all settings back to factory default options.

#### METER INCLUDES

IE-20T industrial pH electrode, pH buffer pouches (4.01/7.00/10.01).

	Model	BI-620
Hd	Measuring Range	-1.00~15.00pH
	Accuracy	±0.01pH
	Resolution	0.01pH
	Calibration Points	1~3 points, USA (pH4.01/7.00/10.01) or NIST (pH4.01/6.86/9.18)
	Temperature Compensation	0~100°C, 32~212°F, Automatic
	Measuring Range	$\pm$ 1000mV
۲ س	Accuracy	$\pm 1 \text{mV}$
	Resolution	1mV
a	Measuring Range	0~100°C, 32~212°F
eratu	Accuracy	±1°C
mpe	Resolution	0.1°C, 0.1°F
	Calibration Points	1 point
	Signal Output	4~20mA
	Load	Max. 500 <b>Ω</b>
	Low and High Alarm Limits	1.00~10.00pH, selectable
eral	Communication Interface	RS485
Gene	Connection Terminals	Detachable screw terminals
	Power Requirements	DC24V
	Dimensions	96(L)×96(W)×75(H)mm
	Weight	350g



# **BI-650 Industrial Conductivity Controller**



#### MEASUREMENT PARAMETERS

Conductivity, Total Dissolved Solids, Temperature

#### FEATURES

- · Economical online conductivity controller contains the TDS measurement mode.
- 1 to 3 points push-button calibration, automatically recognizes the calibration solutions.
- Selectable cell constant (0.1/1/10), temperature coefficient and TDS conversion factor.
- Automatic Temperature Compensation provides accurate reading over the entire range.
- Low or high alarm limit can be set by user and automatically activate an external device.
- 4 to 20mA output signal meets industry standard.
- Manual temperature calibration corrects the temperature deviation.
- Setup menu allows setting the 9 parameters, including the number of calibration points, temperature unit, alarm limits, hysteresis value, etc.
- Reset feature automatically resumes all settings back to factory default options.

#### METER INCLUDES

IE-50MT industrial conductivity electrode

	Model	BI-650
Conductivity	Measuring Range	0.01~20.00, 200.0, 2000µS/cm, 20.00, 200mS/cm
	Accuracy	±1% F.S
	Resolution	0.01, 0.1, 1
	Calibration Points	1~3 points (84µS/cm, 1413µS/cm, 12.88mS/cm, 111.8mS/cm)
	Measuring Range	0~10.00, 100.0, 1000ppm, 10.00, 100ppt (Max. 200ppt)
S	Accuracy	±1% F.S
	Resolution	0.01, 0.1, 1
	TDS Factor	0.01~1.00 (Default 0.5)
Ŀ	Temperature Compensation	0~100°C, 32~212°F, Automatic
	Temperature Coefficient	Linear, 0.0~10.0%/°C
	Cell Constant	K=0.1, 1, 10
	Reference Temperature	25°C
	Signal Output	4~20mA
eral	Load	Max. 500 <b>Ω</b>
Gen	Low and High Alarm Limits	0.02µS/cm~20.0mS/cm, selectable
Ľ	Communication Interface	RS485
	Connection Terminals	Detachable screw terminals
	Power Requirements	DC24V
	Dimensions	96(L)×96(W)×75(H)mm
	Weight	350g



# **BI-680 Industrial Dissolved Oxygen Controller**



#### MEASUREMENT PARAMETERS

Dissolved oxygen concentration, % saturation of oxygen

#### FEATURES

- Economical online dissolved oxygen controller is equipped with a polarographic probe.
- 1 or 2 points calibration using the air-saturated water or zero oxygen solution.
- Salinity and barometric pressure compensations improve the accuracy of measurement.
- Automatic Temperature Compensation provides accurate reading over the entire range.
- Low or high alarm limit can be set by user and automatically activate an external device.
- 4 to 20mA output signal meets industry standard.
- Manual temperature calibration corrects the temperature deviation.
- Setup menu allows setting the 9 parameters, including the number of calibration points, measurement unit, alarm limits, hysteresis value, etc.
- Reset feature automatically resumes all settings back to factory default options.

#### METER INCLUDES

IE-80T industrial dissolved oxygen electrode, membrane cap, electrolyte solution.

	Model	BI-680
DO	Measuring Range	0.0~20.0mg/L
	Accuracy	$\pm$ 0.5mg/L
	Resolution	0.1mg/L
tion	Measuring Range	0.0~200.0%
atura	Accuracy	$\pm 2.0\%$
% S	Resolution	0.1%
	Temperature Compensation	0~40°C, Automatic
E	Tempareture Calibration	1 point
	Barometric Pressure Correction	60.0~112.5kPa, 450~850mmHg
	Salinity Correction	0~35g/L
	Signal Output	4~20mA
	Load	Max. 500 <b>Ω</b>
General	Low and High Alarm Limits	1.00~18.00mg/L, selectable
	Communication Interface	RS485
	Connection Terminals	Detachable screw terminals
	Sensor Type	IE-80T polarographic DO electrode
	Display	Custom LCD
	Power Requirements	DC24V
	Dimensions	96(L)×96(W)×75(H)mm
	Weight	350g



# **TB100 Portable Turbidity Meter**



#### FEATURES

- High performance portable turbidity meter is suitable for process control and field uses.
- 2 to 5 points calibration using the formazin standards.
- Selectable 4 turbidity units, including the NTU, FNU, EBC and ASBC.
- Single measurement mode automatically recognizes the stable reading.
- Continuous measurement mode is used for indexing or matching the sample vials.
- Auto-Power Off effectively conserves battery life.
- Setup menu allows setting the 7 parameters, including the date and time, measurement mode, resolution, etc.
- Expanded memory stores and recalls up to 100 data sets.
- Stored readings can be transferred into the computer by USB communication interface.
- Reset feature automatically resumes all settings back to factory default options.
- Multi-mode power scheme (batteries, power adapter or USB port) ensures that use the meter smoothly.





#### METER INCLUDES

Sample vials, calibration standards (0.02, 200, 500 and 1000NTU), lint-free cloth, carrying case.

Model	TB100
Measurement Method	ISO 7027 nephelometric method (90°)
Measuring Range	0~1100 NTU/FNU, 0~275 EBC, 0~9999 ASBC
Resolution	0.01 (0~100 NTU), 0.1 (100~999 NTU), 1 (999~1100 NTU)
Accuracy	$\pm 2\%$ (0 ~ 500 NTU), $\pm 3\%$ (501 ~ 1100 NTU)
Calibration Points	2~5 points (0.02, 10.00, 200, 500, 1000 NTU)
Light Source	Infrared-emitting diode (850nm wavelength)
Detector	Silicon Photodiode
Stray Light	<0.02 NTU
Sample Vials	60(H)×25(Dia)mm
Power Off	Manual or Automatic (15 minutes after last key pressed)
Memory	Stores up to 100 data sets
Output	USB communication interface
Display	Custom LCD
Power Requirements	9V battery
Dimensions	180(L)×85(W)×70(H)mm
Weight	300g



# TB200 Benchtop Turbidity/TSS Meter



#### MEASUREMENT PARAMETERS

Turbidity, Total Suspended Solids

#### FEATURES

- 2 to 7 points push-button calibration using the formazin standards.
- Selectable 4 turbidity units, including the NTU, FNU, EBC and ASBC.
- TSS conversion factor ensures accurate measurement of the total suspended solids.
- Hold function freezes current reading for easy viewing and recording.
- Password protection prevents the unauthorized calibration and settings.
- Setup menu allows setting the 9 parameters, including the date and time, measurement mode, resolution, backlight brightness, etc.
- Expanded memory stores and recalls up to 200 data sets.
- Stored readings can be transferred into the computer by USB communication interface.
- Reset feature automatically resumes all settings back to factory default options.



#### METER INCLUDES

Sample vials, calibration standards (0.02, 200, 500 and 1000NTU), lint-free cloth, power adapter.

Model	TB200
Measurement Method	ISO 7027 nephelometric method (90°)
Turbidity Range	0~2000 NTU/FNU, 0~500 EBC, 0~9999 ASBC
TSS Range	Deponds on TSS factor
Resolution	0.01 (0~100 NTU), 0.1 (100~999 NTU), 1 (999~2000 NTU)
Accuracy	$\pm 2\%$ (0~500 NTU), $\pm 3\%$ (501~2000 NTU)
Calibration Points	2~7 points (0.02, 10.00, 200, 500, 1000, 1500, 2000 NTU)
Light Source	Infrared-emitting diode (850nm wavelength)
Detector	Silicon Photodiode
Stray Light	<0.02 NTU
Sample Vials	60(H)×25(Dia)mm
Memory	Stores up to 200 data sets
Output	USB communication interface
Display	4.5 inch TFT LCD
Power Requirements	DC12V/2A power adapter
Dimensions	250(L)×177(W)×96(H)mm
Weight	1.2kg



# WXG-4 Manual Polarimeter



Easy-to-use manual polarimeter, measuring range from -180 to +180 degrees. The instrument is suitable for measuring the optical rotation of the optically active substances, accuracy: 0.05 degrees.

#### FEATURES

This polarimeter is equipped with a 589nm sodium lamp. Switch on the power, the polarized light beam radiates to the polarizer filter. The operator is able to observe the distinct visual fields through eyepiece. Put the sample tube into the measuring field chamber, rotating the vernier knob until the visual fields appear the equal brightness. Reading and recording the measured value from the vernier scale, the measurement is completed.





**INSTRUMENT INCLUDES** Sample tubes (100/200mm), sealing rings, power cable.

Model	WXG-4
Measuring Range	-180°~180°
Scale Value	1°
Vernier	0.05°
Magnifier	3X
Light Source	Sodium Lamp
Wavelength	589nm
Test Tube Length	50, 100 or 200mm
Power Requirements	AC220V/50Hz
Dimensions	500(L)×135(W)×330(H)mm
Weight	5kg



# **POL-200 Semiautomatic Polarimeter**



#### **MEASUREMENT PARAMETERS**

Optical Rotation, Specific Rotation, Concentration, International Sugar Scale

#### FEATURES

- Multi-parameter semiautomatic polarimeter is equipped with a 5.6 inch touch screen.
- LED light source effectively extends the service life.
- Built-in temperature sensor automatically senses temperature of the sample chamber.
- Selectable tube lengths (100/200mm) or manually enter the desired settings.
- · Automatically zero return simplify the operation steps.
- Manual zero calibration is used for adjusting the optical visual field and eliminating the measurement error.
- 1 to 3 point push-button calibration, correcting the potential mechanical error.
- Expanded memory stores and recalls up to 100 data sets.
- On-screen operation manual detailedly shows the polarimeter uses.
- · Reset feature automatically resumes all settings back to factory default options.



INSTRUMENT INCLUDES		
Completubes (100 /200mm)	appling	ringo

\_....

#### Sample tubes (100/200mm), sealing rings, power cable.

Model	P0L-200
Measurement Modes	Optical Rotation, Specific Rotation, Concentration, International Sugar Scale (°Z)
Measuring Range	±90°, ±130°Z
Resolution	0.005°
Accuracy	±0.02°, ±0.05°Z
Calibration Points	1~3 points
Light Source	LED, interference filter
Wavelength	589nm
Test Tube Length	50, 100 or 200mm
Temperature Range	0~100°C
Temperature Accuracy	±0.5°C
Memory	Stores up to 100 data sets
Output	USB communication interface
Display	5.6 inch TFT LCD
Power Requirements	AC220V/50Hz
Dimensions	550(L)×300(W)×220(H)mm
Weight	7.5kg



# JB-1A Magnetic Stirrer



#### FEATURES

Simple and interesting magnetic stirrer, using an electrical motor spins the magnet module, stirring speed from 0 to 1250rpm.

#### SPECIFICATION

Model	JB-1A
Stirring Volume	0~2000mL
Stirring Speed	0~1250rpm
Top Plate Size	Dia.145mm
Material	PC
Stir Bar	30(L)×7(Dia.)mm
Power Requirements	AC 220V/50Hz
Dimensions	185 (Dia.) × 75 (H) mm
Weight	0.6kg
	ModelStirring VolumeStirring SpeedTop Plate SizeMaterialStir BarPower RequirementsDimensionsWeight

# **MS series Magnetic Stirrer**







#### FEATURES

- High performance hot plate magnetic stirrer comes with a temperature probe.
- Large LCD display clearly shows the timer, temperature and running status.
- Push-button speed control effectively avoids the hot-liquids hurt the operator.
- Adjustable heating temperature, stirring times and speeds.
- Automatic constant temperature through an appendant temperature probe.
- 1 point push-button calibration improves the accuracy of temperature control.

#### STIRRER INCLUDES

- Stir bar
- Temperature probe

Model	MS200	MS300	MS400
Stirring Volume	0~2000mL		
Stirring Speed	0~1250rpm		
Temperature Range	—	0~300°C	0~400°C
Timer Range	0 to 999 minute	S	
Top Plate Size	135(L)×135(W)	mm	
Material	Stainless Steel		
Stir Bar	30(L)×7(Dia.)m	im	
Power Requirements	AC 220V/50Hz		
Dimensions	230(L)×180(W)	×120(H)mm	
Weight	2.2kg		



# P series Laboratory pH Electrode 😹

#### P11

General purpose pH electrode, suitable for measuring the liquids.



Measuring Range	0~14pH
Temperature Range	0~80°C, 32~176°F
Reference Type	AgCI, Single Junction
Junction Type	Annular Ceramic
Body Type	Glass
Connector	BNC, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

#### P11-HA

Professional pH electrode, suitable for measuring the high alkalines samples.



Measuring Range	0~14pH
Temperature Range	0~100°C, 32~212°F
Reference Type	Ag/AgCl
Junction Type	Ceramic
Body Type	Glass
Connector	BNC, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

#### P12

General purpose pH electrode, suitable for measuring the sample in the test tube.

Bante Instruments

Measuring Range	0~14pH
Temperature Range	0~80°C, 32~176°F
Reference Type	AgCI, Single Junction
Junction Type	Frit Ceramic
Body Type	Glass
Connector	BNC, 1 meter cable
Dimensions	150(L)×6(Dia.)mm

#### P11-LiCl

Professional pH electrode, suitable for measuring the non-aqueous samples.



Measuring Range	0~14pH
Temperature Range	0~80°C, 32~176°F
Reference Type	AgCl, Double Junction
Junction Type	Ceramic
Body Type	Glass
Connector	BNC, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

#### P11-NA

Professional pH electrode, suitable for measuring the biofuels.



Measuring Range	0~14pH
Temperature Range	0~60°C, 32~140°F
Reference Type	Ag/AgCl, Double Junction
Junction Type	Ceramic
Body Type	Glass
Connector	BNC, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

#### P13

General purpose pH electrode, suitable for measuring the micro-volume samples.

Bante Instrument

Measuring Range	0~14pH
Temperature Range	0~80°C, 32~176°F
Reference Type	AgCI, Single Junction
Junction Type	Frit Ceramic
Body Type	Glass
Connector	BNC, 1 meter cable
Dimensions	90(L)×4.3(Dia.)mm



#### P15

Professional pH electrode, suitable for measuring the low conductivity liquids.



Measuring Range	0~11pH
Temperature Range	0~50°C, 32~122°F
Reference Type	HgCl, Single Junction
Junction Type	Annular Ceramic
Body Type	Glass
Connector	BNC, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

#### P18

Professional pH electrode, suitable for measuring the slurries and soils.



Measuring Range	0~14pH
Temperature Range	0~80°C, 32~176°F
Reference Type	AgCI, Single Junction
Junction Type	Annular Ceramic
Body Type	Glass
Connector	BNC, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

#### P21

Professional pH electrode, suitable for measuring the colloids.



Measuring Range	0~14pH
Temperature Range	0~80°C, 32~176°F
Reference Type	AgCl, Double Junction
Junction Type	Sleeve
Body Type	Glass
Connector	BNC, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

P16

Professional pH electrode, suitable for measuring the Tris buffers.



Measuring Range	0~14pH
Temperature Range	0~50°C, 32~122°F
Reference Type	HgCl, Single Junction
Junction Type	Frit Ceramic
Body Type	Glass
Connector	BNC, 1 meter cable
Dimensions	90(L)×6(Dia.)mm

#### P19

Professional pH electrode, suitable for measuring the semisolid. E.g., fruit, cheese.



Measuring Range	0~14pH
Temperature Range	0~80°C, 32~176°F
Reference Type	AgCI, Single Junction
Junction Type	Frit Ceramic
Body Type	Glass
Connector	BNC, 1 meter cable
Dimensions	40(L)×6(Dia.)mm

P22

General purpose pH electrode, suitable for measuring the high temperature samples.



0~14pH
0~130°C, 32~266°F
AgCl, Double Junction
Porous Teflon
Glass
BNC, 1 meter cable
120(L)×12(Dia.)mm



# **E series Laboratory pH Electrode**

#### E201-BNC

Economical pH electrode, suitable for measuring the liquids.

Measuring Range	0~14pH
Temperature Range	0~60°C, 32~140°F
Reference Type	AgCI, Single Junction
Junction Type	Fiber
Body Type	Ероху
Connector	BNC, 1 meter cable
Dimensions	120 (L)×12 (Dia.) mm

#### E203-BNC

Economical pH electrode with a built-in temperature sensor.



0~14pH
10K <b>Ω</b>
AgCl, Single Junction
Fiber
Ероху
BNC and phone plug, 1 meter cable
120(L)×12(Dia.)mm

#### E202-BNC

Economical pH electrode, suitable for measuring the semisolids.

Measuring Range	0~14pH
Temperature Range	0~60°C, 32~140°F
Reference Type	AgCI, Single Junction
Junction Type	Teflon
Body Type	Ероху
Connector	BNC, 1 meter cable
Dimensions	120 (L) × 12 (Dia.) mm

#### E65-1

Economical pH electrode, suitable for measuring the weak corrosive liquids.



Measuring Range	0~14pH
Temperature Range	0~100°C, 32~212°F
Reference Type	Ag/AgCI, Single Junction
Junction Type	Annular Ceramic
Body Type	Glass
Connector	BNC, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

# **IE-20T Industrial pH Electrode**



General purpose industrial pH electrode with a temperature sensor,  $3/4"\,$  male NPT. Cable length: 5 meters.

Measuring Range	0~14pH
Temperature Range	0~80°C, 32~176°F
Reference Type	Ag/AgCl
Junction Type	Teflon
Temperature Sensor	10K <b>Ω</b>
Body Type	PPS/PC
Dimensions	150(L)×29.5(Dia.)mm



#### pH ELECTRODE SELECTION CHART

The accurate pH measurement depends on selecting the suitable pH electrode. The following chart describes the application range of each sensor. For reference only.

Sample Type	P11	P12	P13	P14	P15	P16	P18	P19	P20	P21	E201	E202	E65-1
Agar												•	
Alkalines (high)	P11-HA												
Beer	•	•	•	•					•	•	•	•	•
Blood Products	•	•	•							•		•	•
Bread, Dough							•	•					
Cement	•												•
Cosmetics	•	•	•	•						•		•	•
Dairy Products	•	•	•					•				•	•
Education	•			•							•	•	•
Fats/Cream								•					
Field Use				•			•		•		•	•	
Fish Products								•				•	
Lab Flasks		•											
Low Ionic	•												•
Meat								•				•	
Cheese								•				•	
Micro Samples			•										
Paint		•	•									•	
Photographic	P11-HA												
Soil							•	•					
Surface												•	
Test Tubes		•				•							
Tris Buffer						•							
Viscose Samples												•	

# **5** series Laboratory ORP Electrode

• 501 ORP electrode: suitable for general applications.

• 502 ORP electrode: suitable for measuring the sample with a weak redox potential.

• 504 ORP electrode: suitable for measuring the high temperature samples (<100°C).







# US series Ion Selective Electrode

#### FEATURES

- Combination ion selective electrode
- No reference electrode needed
- Solid state sensors Ideal for unskilled operatives
- No filling solution required
- Can be left dry for long periods
- Long lifetime

#### SPECIFICATIONS

Model	lon	Concentration (mol/L)	Limits (ppm)	pH Range	Temperature Range
NH4-US	Ammonium	5×10 <sup>-6</sup> ~1	0.1~18000	4~10	0~50°C
Br-US	Bromide	5×10 <sup>-6</sup> ~1	0.4~79900	1~12	0~80°C
Cd-US	Cadmium	$1 \times 10^{-6} \sim 0.1$	0.01~11200	2~12	0~80°C
Ca-US	Calcium	$5 \times 10^{-7} \sim 1$	0.02~4000	2.5~11	0~40°C
CL-US	Chloride	5×10 <sup>-6</sup> ~1	1.8~35500	2~12	0~80°C
Cu-US	Cupric	1×10 <sup>-8</sup> ~0.1	0.006~6400	2~12	0~80°C
Cn-US	Cyanide	5×10 <sup>-6</sup> ~0.01	0.2~260	10~14	0~80°C
F-US	Fluoride	$1 \times 10^{-6}$ ~ Saturation	0.02 ~ Saturation	5~7	0~80°C
I-US	lodide	5×10 <sup>-8</sup> ~1	0.06~127000	0~14	0~50°C
Pb-US	Lead	1×10 <sup>-8</sup> ~0.1	0.2~20700	4~7	0~80°C
N03-US	Nitrate	$7 \times 10^{-6} \sim 1$	0.4~62000	2.5~11	0~50°C
K-US	Potassium	1×10 <sup>-6</sup> ~1	0.04~39000	2~12	0~40°C
Ag-US	Silver	$1 \times 10^{-7} \sim 1$	0.01~107900	2~12	0~80°C
Na-US	Sodium	$1 \times 10^{-5} \sim 1$	0.1~23000	>9	0~80°C
S-US	Sulphide	$1 \times 10^{-7} \sim 1$	0.003~32100	2~12	0~80°C
NH3-US	Ammonia	1 × 10 <sup>-6</sup> ~ 1	0.02~17000	11	0~50°C

# Water Hardness Electrode 😹

# Moore

Model	WH-UK
Measuring Range	0.05~200mmol/L
pH Range	2~11pH
Temperature Range	0~50°C
Body Type	Ероху
Connector	BNC, 1 meter cable
Dimensions	120(L)×12(Dia.)mm



# K series Laboratory Conductivity Electrode 😹

#### K10

Platinum conductivity electrode, suitable for the general applications.



Measuring Range	0~35mS/cm
Temperature Range	0~50°C, 32~122°F
Material	Platinum
Cell Constant	K=1
Body Type	Glass
Connector	6-pin mini plug, 1 meter cable
Dimensions	120 (L)×12 (Dia.) mm

#### K30

Platinum conductivity electrode with the flow cell design.



Measuring Range	0~35mS/cm
Temperature Range	0~50°C, 32~122°F
Material	Platinum
Cell Constant	K=1
Body Type	Glass
Connector	6-pin mini plug, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

#### K40

Platinum conductivity electrode, suitable for measuring the low conductivity liquids.



Measuring Range	0~500µS/cm
Temperature Range	0~50°C, 32~122°F
Material	Platinum
Cell Constant	K=0.1
Body Type	Glass
Connector	BNC, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

#### K20

Graphite conductivity electrode, suitable for measuring the paint, dyes, etc.



Measuring Range	0~10mS/cm
Temperature Range	0~50°C, 32~122°F
Material	Graphite
Cell Constant	K=1
Body Type	Ероху
Connector	6-pin mini plug, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

#### P21

Graphite conductivity electrode, suitable for measuring the pure water.

Bante Inst

Measuring Range	0~500µS/cm
Temperature Range	0~50°C, 32~122°F
Material	Graphite
Cell Constant	K=0.1
Body Type	Ероху
Connector	6-pin mini plug, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

#### K22

Graphite conductivity electrode, suitable for measuring the high conductivity liquids.





# CON series Laboratory Conductivity Electrode

#### CON-1

Laboratory conductivity electrode, suitable for the general applications.



Measuring Range	10µS/cm~20mS/cm
Temperature Range	0~80°C, 32~176°F
Material	Platinum
Cell Constant	K=1
Body Type	Glass
Connector	6-pin mini plug, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

#### CON-0.1

Laboratory conductivity electrode, suitable for measuring the pure water.



0~100µS/cm
0~80°C, 32~176°F
Platinum
K=0.1
Glass
6-pin mini plug, 1 meter cable
120 (L)×12 (Dia.) mm

#### CON-10

Laboratory conductivity electrode, suitable for measuring the high conductivity liquids.



Measuring Range	100µS/cm~200mS/cm
Temperature Range	0~80°C, 32~176°F
Material	Platinum
Cell Constant	K=10
Body Type	Glass
Connector	6-pin mini plug, 1 meter cable
Dimensions	120(L)×12(Dia.)mm

# IE-50 series Industrial Conductivity Electrode

#### FEATURES

- IE-50LT: suitable for measuring the low conductivity liquids.
- IE-50MT: suitable for the general applications.
- IE-50HT: suitable for measuring the high conductivity liquids.

Model	IE-50LT	IE-50MT	IE-50HT
Measuring Range	0~100µS/cm	0~20mS/cm	0~200mS/cm
Cell Constant	K=0.1	K=1	K=10
Material	Platinum		
Temperature Sensor	10K <b>Ω</b>		
Connector	3/4" male NPT, 5 meters cable		
Dimensions	150(L)×29.5(Dia.)mm		









# D0100 Laboratory Dissolved Oxygen Electrode

#### FEATURES

- Polarographic dissolved oxygen electrode
- Built-in temperature sensor
- Disposable caps with pre-fit membranes allow user to quickly and conveniently change membranes

#### SENSOR INCLUDES

- Electrolyte solution (30mL)
- Membrane cap

#### SPECIFICATIONS

Model	D0100
Sensor Type	Polarographic
Output at Saturation	400nA (±25%)
Output at Zero Oxygen	<1%
Temperature Range	0~80°C, 32~176°F
Connector	6-pin mini plug, 2 meters cable
Dimensions	120(L)×12(Dia.)mm

# IT-80T Industrial Dissolved Oxygen Electrode 💻

#### FEATURES

- Polarographic dissolved oxygen electrode
- Built-in temperature sensor
- 3/4" male NPT, 6 meters cable

#### SENSOR INCLUDES

- Electrolyte solution
- Membrane cap

# 0

Model	IE-80T
Sensor Type	Polarographic
Output at Saturation	400nA (±25%)
Output at Zero Oxygen	<1%
Temperature Range	0~80°C, 32~176°F
Body Type	PPS/PC
Dimensions	150(L)×29.5(Dia.)mm



NEW

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Famous Series pH/ISE/ORP/Cond./DO Meter (Page 4,8,10,13)



KLS-411 Trace Moisture Analyzer ( Page24 )



ZDY-502 Moisture Titrator ( Page25 )



DZS-708L Multi-Parameter Analyzer ( Page15 )



DZB-718 Portable Multi-Parameter Analyzer ( Page18 )

#### **BestLab Electrode Series**



BestLab PureWater (Page29)



BestLab Chlorion (Cl<sup>-</sup>) (Page30)





Precision Benchtop **PXSJ-226** PHSJ-5

pH Meter

Ion Meter

- Touch, 5" LCD screen.
- GLP norm, more complete checking the stored information.
- Support save, delete, print and view function.
  - Automatic 10 buffers recognition, support Custom Buffer Group.
- RS232 and USB interface, establish communication with PC.

Model	PHSJ-5	PXSJ-226	
Parameters	pH / mV(ORP) /℃	pX / Ion concentration / mV (ORP) / $^\circ\!\!\mathbb{C}$	
		pX: 0.000~14.000	
	pH: -2.000~18.000	mV: ±1999.99	
Range	mV: ±1999.99	Ion Concentration: (0 $\sim$ 19990), unit ug/L $_{ au}$	
	Temp: -5.0~105.0℃	mg/L、g/L、mol/L、mmol/L	
		Temp: -5.0~105.0℃	
Pacalution	pH: 0.1/0.01/0.001	pX: 0.001	
Resolution	mV: 0.1/ 0.01	mV: 0.01	
	<b>Temp: 0.1</b> ℃	Temp: 0.1℃	
		pX I : ±0.002±1 bit, pX II : ±0.005±1 bit	
• • • • • • • • • • • • • • • • • • • •	pH: ±0.002±1 bit	mV: ±0.03%FS	
Accuracy	mv: ±0.03%FS	Ion Concentration: ±0.5%±1bit	
	Temp:±0.2 C±1 bit	Temp: ±0.2℃±1 bit	
		Support multiple common ion mode (such	
Ion Mode	_	as H <sup>+</sup> ,Ag <sup>+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ,NH <sub>4</sub> <sup>+</sup> ,Cl <sup>-</sup> ,F <sup>-</sup> etc)	
		Custom ion mode	
Temp Compensation	Manual/Auto(-5.0~105.0) $^\circ$ C	Manual/Auto(0.0~60.0 °C	
Calibration	Five-p	point calibration	
GLP standard	Yes		
Buffer Recognition	Automatic: USA/NIST	Auto-recognition, Up to 10 Buffers	
Data Storage	200 sets of data	350 sets of data	
View, Delete & Print		Yes	
Display	Touch, 5" LCD screen		
Communication			
Interface	KS-232, USB		
Power	AC (220±22)V; (50±1)Hz		
Dimension&Weight	250×19	95×100(mm), 2kg	
	E-201-D pH Combination	PF-1-01 Fluoride ISE;	
Standard Configuration	Electrode;	232-01 Reference Electrode;	
Standard Comiguration	T-820D ATC Probe;	T-820D ATC Probe;	
	Standard Buffer	JB-1A Stirrer	



**Famous Seríes** 

## PHSJ-3F/4F

Smart-Read function Benchtop pH Meter

More stable the reading with auto recognition end-point

Cont-Read function

Three reading modes

It is clear to read the sample changing in measurement process

Timed-Read function

Auto timed to store the reading

- Auto upgrade hardware
- Power-off protection, protect your data
- Remind the electrode performance and calibration

## PXSJ-216F

#### pH/mV Benchtop Meter

Model	PHSJ-4F	PHSJ-3F	PXSJ-216F
Parameters	pH /mV(0	DRP)/°C	pX/ Ion concentration /mV (ORP)/ $^\circ \!$
Range	pH: -2.000~20.000 mV: ±1999.9 Temp: -5.0~110.0	pH: -2.00~20.00 mV: ±1999 Temp: -5.0~135.0	pX: -2.000~20.000 mV: ±1999.99 Ion concentration: (0~1999.0), unit ug/L, mg/L, g/L, mol/L, mmol/L Temp: -5.0~110.0℃
Resolution	pH: 0.1/0.01/0.001 mV: 0.1 Temp: 0.1℃	pH: 0.01 mV: 1 Temp: 0.1℃	pX: 0.001 pH/pX mV: 0.1 Temp: 0.1℃
Accuracy	pH: (±0.002pH±1 bit)/3h mV: ±0.03%FS Temp: ±0.2℃±1 bit	pH: (±0.01pH±1 bit)/3h mV: ±0.1%FS Temp: ±0.2℃±1 bit	pX: ±0.002pH/pX mV: ±0.03%FS lon concentration: ±0.5% Temp: ±0.2℃
lon Mode	_		Provide several general ion modes, such as: H+, Ag+, Na+, K+, NH4+, Cl-, F-, NO3-, BF4-, CN-, Cu2+, Pb2+, Ca2+, etc and support customer ion mode
Temp Compensation	Manual/Auto (-5.0~110.0)℃	Manual/Auto (-5.0~135.0)℃	Manual/Auto: 0.0~60.0°C
Calibration	May select 5 standard buffer solution for three-point calibration		Five-point calibration
GLP standard		Yes	-
Data storage	500 sets	of data	1400 sets of data
Buffer Recognition	Automatic: F	ive Buffers	Automatic: GB、NIST、DIN
View, Delete&Print	Yes		
Interface	USB		
Power	Universal power adapter (9V DC, 800mA)		
Dimension&Weight	280×215×92mm, 1kg		
Standard Configuration	One-in-three pH Combination Electrode; Standard Buffer	One-in-three pH Combination Electrode; Standard Buffer	PF-1-01 Fluoride ISE; 232-01 Reference Electrode; T-818-B-6 ATC Probe; JB-1A Stirrer







- Big LCD with back light.
- PHS-3E support auto temp compensation.

Built-in stirrer function.

Model		PHS-3C PHS-3G		PHS-3E	PXS-270
Parameters		pH/mV(ORP)	pH/mV(ORP)	pH/mV(ORP)/℃	pX/mV(ORP)
	pH/pX	0.00~14.00pH	-2.00~19.99pH	-2.00~18.00pH	0.00~14.00pX
Range	mV		±1999mV		±1999mV
	Temp	_		<b>0.0~99.9</b> ℃	_
	pH/pX		0.01pH		0.01 pX
Resolution	mV		1mV		1 mV
	Temp	—		<b>0.1</b> ℃	—
	pH/pX	±0.01±1 bit pH			±0.01±1bit pX
Accuracy	mV	±0.1%FS			±0.1%FS
Тетр		— ±0.3℃±1 bit		_	
Temp Compensa	) ation	Manual (0.0~60.0) °C		Maual/Auto (0.0~99.9)℃	Manual(0.0~60.0)℃
Calibrat	ion	Up to two points		o two points	
Buffer reco	gnition		Auton	natic: 3 Buffers	
Powe	r	AC (220±22)V, (50±l )Hz			
Dimension Weight(	(mm) kg)	300×220×90, 1.3 210×320×90,3		300×220×90, 1.3	290×210×92,1.5
		One-in-three pH		PF-1-01 ISE;	
Standa	Standard E-201-C pH Combination Electrode;		ation Electrode;	Combination	232-01 Reference
Configuration		Standard Buffer		Electrode;	Electrode;
-				Standard Buffer	JB-1A Stirrer



Portable

PHB-4 **pH Portable Meter**  **PXB-286** 





Model	PHBJ-260	PHB-4	PXB-286
Parameters	pH /mV(ORP)/℃	pH /mV(ORP)	pX/Ion concentration /mV (ORP)/ $^\circ \!$
Range	pH:0.00~14.00 mV: ±1800 Temp: -5.0~105℃	pH: 0.00~14.00 mV: ±1400	pX: 0.00~14.00 mV: ±1800 Ion concentration: (0~19990)mg/L Temp: 0.0~60.0℃
Resolution	pH: 0.01 mV: 1 Temp: 0.1℃	pH: 0.01 mV: 1	pX: 0.01 mV: 1 Temp: 0.1℃
Accuracy	pH: ±0.01±1 bit mV: ±0.1%FS Temp: ±0.3℃±1 bit	pH: ±0.03±1 bit mV: ±0.2%FS	pX: ±0.01±1 bit mV: ±0.1%FS Temp:±0.3℃±1 bit
Ion Mode	— pH/pX/pF/pCl		
Temp Compensation	Manual/Auto (-5.0~110.0)℃	Manual, (0.0~60.0) °C	
Calibration	May select 5 standard buffer solution for two-point calibration		
Data storage	200 sets of data	—	400 sets of data
View, Delete&Print	Yes	—	Yes
Interface	RS-232	—	—
Display	Backlit LCD		
Housing	IP65	_	IP65
Power	`Four AA batteries	Two AA batteries	Four AA batteries
Dimension&Weight	210×86×50mm, 0.5kg	170×75×30mm,0.5kg	210×86×50mm, 0.5kg
Standard Configuration	One-in-three pH Combination Electrode(waterproof); Standard Buffer	E-201-C pH Combination Electrode; Standard Buffer	PF-202-CF Fluoride ISE (waterproof); T-818-B-6F ATC Probe (waterproof); JB-1A Stirrer



# pH/Ion Meter Series



- Big LCD display
- Manual temp compensation, one or two point calibration

Model		PHS-2F PHS-25			
Parameters		pH /mV(ORP)			
Dongo	рН	0.0	0~14.00		
Kange	mV		±1400		
Decolution	рН		0.01		
Resolution	mV		1		
A	рН	±0.01±1 bit	±0.05±1 bit		
Accuracy	mV	±2	±1%FS		
Stability (±0.01pH±1 bit)/3h (±0.05pH±1 bit)/3h			(±0.05pH±1 bit)/3h		
Temp Compe	np Compensation Manual: 0.0~60.0℃ —				
Calibration	ion Two-point calibration				
Display		3 1/2 LED LCD			
Power		AC(220±22)V,(50±l)Hz	Digital display: DC 6V,300mA		
Dimension &	Weight	290×210×95mm, 1.5kg 220×160×65mm, 1.0kg			
Standard Con	figuration	E-201-C pH Combination Electrode; Standard Buffer			

#### 【Typical case: Detection of Pure Water's pH 】

Slow response, shifting, electrode noise and poor repeatability when measuring pH of pure water are caused by composite factors, such as poor conductivity of pure water and CO2 absorption. Since pure water is easy polluted, sealing equipment is suggested by international standard.

[Recommand pH Meter] PHSJ-3F/4F

[Recommand Electrode] 231-01pH electrode + 232-01 reference electrode

**[Instrument Setup]** Smart reading mode is suggested. PHSJ-3F: set balance time as 30s, balance potential as 1mv. PHSJ-4F: set balance time as 8s, balance potential as 0.1mv. (Draw from many tests)



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# pH/Ion Meter Series



# Specific Ion

- Three measuring modes.
- Matched alkalizing device.
- Two-point dynamic calibration.
- Self-calibrate automatically, and automatic calculation of theoretical percentage of electrode slope.

Model		DWS-295F		
Parame	Parameters pNa、Na <sup>+</sup> concentration、mV(ORP)、Temp			
	pNa	(0.00~9.00)pNa		
Range	Na+	(2.3×10 <sup>-2</sup> ~2.3×10 <sup>7</sup> )µg/L		
	Temp	(-5.0~110.0)℃		
	pNa	±0.01pNa±1bit		
Accuracy	Na+	Conversion error of pNa and Na <sup>+</sup> : $\pm 0.1\%$ ;		
Т	Temp	±0.2°C		
Stability		(±0.01pNa±1bit)/3h		
Temp Compensation		Auto(0.0~50.0) °C		
Power		9V DC, 800mA		
Dimension&Weight		Control Unit: 290×200×70mm, 1 kg; Measuring Unit: 280×290×310, 3.5 kg		
Standard Configuration		DWS-295F-1 Measuring Unit; 6801A pNa ISE		
		6802A Reference Electrode; T-817-B-6 ATC Probe		

Model		DWS-51
Parame	eters	pNa、Na <sup>+</sup> concentration
pNa		(0.00~9.00)pNa
Kange	Na+	(2.3×10 <sup>-2</sup> ~2.3×10 <sup>7</sup> ) µ g/L
Resolution	pNa	0.01pNa
Accuracy	pNa	$\pm$ 0.02pNa $\pm$ 1bit
Stability		( $\pm$ 0.02pNa $\pm$ 1bit)/3h
Power		AC (220 $\pm$ 22)V; (50 $\pm$ 1)Hz
Temp Compensation		Manual(0.0~60.0)℃
Dimension&Weight		290×210×95mm, 1.5kg
Standard Configuration		6801-01 pNa ISE;
		6802-01 Reference Electrode



- Two-point calibration: Static and dynamic
- Static and dynamic measurement mode (match with model DWS-51-1 alkalizing device to realize dynamic measurement)



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# **Conductivity Meter Series**

DDSJ-318 Conductivity Meter

# Precision Benchtop

- 5" large touch screen, friendly interface and easy use.
- Two-point calibration and users can set TDS factor.
- GLP norm, it can view, print and delete stored data. Up to 1500 sets of data can be saved.
- Three reading modes to meet different customer measuring needs. (Smart-Read mode, Continuous-Read mode, Timed-Read mode).
- Full range measuring, no need to exchange electrode.
- Manual/auto temp compensation, the compensation factor is adjustable.

Model		DDSJ-318
Parameters		Conductivity/Resistivity/TDS/Salinity/°C
Condu	Conductivity	0.055µS/cm~199.9mS/cm (Full range measuring, no need to exchange electrode)
Range	Resistivity	5.00Ω·cm~18.25MΩ·cm
nunge	TDS	0.000 mg/L~100g/L
	Salinity	(0.00~8.00)%
	Тетр	-5.0~135.0°C
	Conductivity	±0.5%FS
	Resistivity	±0.5%FS
Accuracy	<b>TDS</b> ±0.5%FS	
	Salinity	±0.1%
	Тетр	±0.3 °C
Temp compensation		Manual/Auto(-5.0~135.0)°C
Calibration		May calibrate electrode constant or TDS factor. support two-point calibration
View, dele	te & print	Yes
Display		Touch, big LCD screen
Communication Interface		RS-232, USB
Power		Universal power adapter (9V DC, 800mA)
Dimension	&Weight	250×195×100mm, 2kg
Standard Configuration		DJS-1D Platinum Black Conductivity Electrode T-818-B-6 ATC Probe



# **Conductivity Meter Series**

# **Famous Seríes**

## DDSJ-308F Conductivity Meter

- Direct displaying conductivity, resistivity, TDS and salinity
- Support calibration (constant or TDS factor, up to two point calibration)
- Power-off protection, protect your data
- Remind the electrode performance and calibration
- Auto upgrade hardware
- Support GLP norm: More complete checking the stored information
  - Support view, print, delete stored data
  - It can record, view and print calibration data.
  - It can store measuring data(600 sets) which follows GLP norm.
  - > The meter requires setting operator No and records the all operating procedures.

Model		DDSJ-308F		
Parameters		Conductivity/Resistivity/TDS/Salinity/ $^{\circ}$ C		
	Conductivity	0.000µS/cm~199.9mS/cm		
	Conductivity	(Full range measuring, no need to exchange electrode)		
Range	Resistivity	5.00Ω·cm~20.00MΩ·cm		
	TDS	0.000 mg/L~99.9g/L		
	Salinity	(0.00~8.00)%		
	Тетр	-5.0~110.0°C		
	Conductivity	±0.5%FS		
A	TDS	±0.5%FS		
Accuracy	Salinity	±0.1%		
	Тетр	±0.2 °C		
Stability		±0.3%(FS)/3h		
Temp compensation		Manual/Auto(-5.0~110.0)°C		
Temp coefficient		Adjustable		
Calibration		May calibrate electrode constant or TDS factor		
GLP Standar	ď	Yes		
Measuring N	Mode	3 (continuous measuring, timed measuring and smart measuring mode)		
Display		LCD screen, backlight		
Power		Universal power adapter (9V DC, 800mA)		
Communication Interface		USB		
Dimension&Weight		280×215×92mm, 1kg		
Standard Co	onfiguration	DJS-1D Platinum Black Conductivity Electrode		
Stanuard Configuration		T-818-B-6 ATC Probe		



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# **Conductivity Meter Series**

# DDBJ-350 Portable Conductivity Meter Convenient to carry

IP65 Protection grade





#### **Portable Conductivity Meter**

Model		DDBJ-350	DDB-303A	
Parameters		Conductivity/TDS/Salinity/ $^{\circ}\!\mathrm{C}$	Conductivity	
	Cond	0.000µS/cm~199.9mS/cm (with 5 switches)	0.00µS/cm~100mS/cm (with 4 switches)	
Range	TDS	0.000 mg/L~19.99g/L (with 5 switches)	_	
	Salinity	(0.00~8.00)%	—	
	Temp	<b>(0.0~40.0)</b> ℃	—	
	Cond	±1.0%(FS)	±1.0%(FS)	
<b>A</b>	TDS	±1.0%(FS)		
Accuracy	Salinity	±0.2%	—	
	Temp	±0.3°C±1 bit	—	
Stability		(±0.7%(FS))/3h		
Temp compensation		Manual/Auto(0.0~40.0)℃	Manual(15.0~35.0)℃	
Temp coefficient		2%	Manual adjustment	
Calibration		Calibrate electrode constant or TDS factor	_	
Data storage		Each 100 sets of data	—	
View, delete	&print	Yes	—	
Display		Backlit LCD		
Under-voltage Instruction		Yes	—	
Communication Interface		RS-232	_	
Housing		IP65	-	
Power		Four AA batteries	Two AA batteries	
Dimension&	Weight	210×86×50mm, 0.5kg	170×70×30mm, 0.3kg	
Standard Configuration		DJS-1CF Platinum Black Conductivity Electrode T-818-B-6F ATC Probe (Waterproof)	DJS-1C Platinum Black Conductivity Electrode	



# **Conductivity Meter Series**

# DDS-307A/307

# Conductivity Meter Base-Model

- Large screen, LCD segmented display
- The default temperature compensation coefficient is 2%.
- With a titanium alloy electrode (K=0.01) and a sealing device, can measure ultrapure water.
- DDS-307A has Auto temperature compensation.

Model		DDS-307A	DDS-307	
Parameters		Conductivity/TDS/°C	Conductivity	
Denge	Cond	0.00µS/cm~100mS/cm	]	
Range	TDS	0~2000mg/L	—	
	Temp	<b>0.0~99.9</b> ℃	_	
Cond		±0.5%(FS)		
Accuracy	TDS	±1.0%(FS)		
	Temp	±0.3℃±1 bit	-	
Temp compensation		Manual/Auto0.0~40.0℃	Manual 15.0~35.0℃	
Displ	ay	LCD, dual parameter		
Pow	er	AC (220±22)V, (50±1 )Hz		
Dimension&Weight		300×220×90mm, 1.3kg	300×220×90mm,1.3kg	
Standard Configuration		DJS-1C Platinum Black Conductivity Electrode T-818-B-6 ATC Probe	DJS-1C	

Model		DDS-11A
Parame	eters	Conductivity
Danga	Cond	0.00µS/cm~100mS/cm
Range	TDS	—
	Temp	—
Possiution	Cond	0.01µS/cm
Resolution	TDS	—
	Cond	±1.5%(FS) ±1bit
Accuracy	TDS	—
	Temp	—
Temp Comp	pensation	Manual 5.0~35.0℃
Temp Coe	fficient	2%
Power		AC (220±22)V, (50±l )Hz
Dimension&Weight		270×185×70mm, 0.9kg
Standard Cor	figuration	DJS-1C Platinum Black Conductivity Electrode

## DDS-11A Conductivity Meter



Cell constant and correspondent conductive measuring range					
Cell constant K (cm <sup>-1</sup> )	0.01	0.1	1.0	10.0	
Measuring range(µS/cm)	0.00~2.0	0.2~20.0	2~1X10 <sup>4</sup>	1X10 <sup>4</sup> ~1X10 <sup>5</sup>	



# **Dissolved Oxygen Meter Series**

# **Famous Seríes**

## JPSJ-605F Dissolved Oxygen Meter

- Three reading modes to meet different customer measuring needs. (Smart-Read mode, Continuous-Read mode, Timed-Read mode).
- More accuracy measurement with reminder the electrode performance and calibration
- Auto upgrade hardware: Complete and simple user's operation
- Support GLP norm: More complete checking the stored information
  - > The meter requires setting operator No and records the all operating procedures.
  - It can record, view and print calibration data.
  - It can store measuring data(500 sets) which follows GLP norm.
  - Support view, print, delete stored data
- Large and light screen: displaying measurement value, temperature value, constant, measurement mode, operation date and time
- Auto temperature compensation
- Auto zero oxygen calibration and full scale calibration,
- Support barometric pressure calibration and salinity calibration
- Support USB
- Supports the function of power-off protection, protect your data

Model		JPSJ-605F		
Parameters	5	Concentration/Saturation/ $^{\circ}$ C		
	DO	0.00~45.00mg/L		
Range	DO Saturation	0.0~300.0%		
	Temperature	-5.0∼115.0℃		
	DO	±0.10 mg/L		
Accuracy	DO Saturation	±2.0%FS		
	Temperature	±0.2℃		
Stability		(±0.07mg/L)/1h		
Response Time		≤45s (90% respond at 20°C)		
Zero Error		≤0.10mg/L		
Barometric	Pressure Calibration	(77.0~110.0)kPa		
Temp Compensation		Automatic: 0.0 $\sim$ 40.0 $^\circ \mathrm{C}$		
Power		Universal power adapter (9VDC, 800mA)		
Dimension&Weight		280×215×92mm, 1kg		
Standard Configuration		DO-958-S DO Probe		



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# **Dissolved Oxygen Meter Series**

# JPBJ-608 Dissolved Oxygen Portable Meter



# JPB-607A

Portable

### **Dissolved Oxygen Portable Meter**

Model		JPBJ-608	JPB-607A	
Parameters		Concentration/saturation/ $^{\circ}\!\mathrm{C}$	Concentration/ $^{\circ}$ C	
	DO	0.0~20.0mg/L		
Range	DO Saturation	0.0~199.9%	—	
	Temperature	-5℃~110℃	<b>0.0~40.0</b> ℃	
	DO	±0.30mg	/L	
Accuracy	DO Saturation	±10%FS	_	
	Temperature	±0.5 °C		
Stability		(±0.10mg/L	.)/3h	
Response T	ïme	≤45s (90% respor	nd at 20 $^\circ C$ )	
Residual Cu	urrent	≤0.10mg/L		
Temperatu	re Compensation	Automatic: 0~40 °C		
Salinity Cal	ibration	Yes		
Zero offset /Full scale calibration		Yes		
Barometric pressure		Yes	_	
Data Storage		500 sets of data	_	
View, delet	e& print	Yes	_	
Display		Backlit LCD with operation indication	Backlit LCD	
Under-volt	age indication	Yes	_	
Communica	ation Interdace	RS-232	_	
Software		1.1DC	_	
Housing		IP65	_	
Power		Four AA batteries	Two AA batteries	
Dimension	&Weight	210×86×50mm, 0.5kg	165×75×30mm, 0.3kg	
Standard C	onfiguration	DO-958-BF DO Probe (waterproof)	DO-957 DO Probe	



# Multi-parameter Analyzer Series

Multi-parameter Meter is one meter with several measuring unit. It can measure simultaneously pH/pX, ion concentration, ion electrode potential (mV) value, conductive (conductivity, TDS, salinity), DO (concentration and saturation) and temperature, etc... It is suitable in the field of disease control, environmental protection, water quality analysis, biological agriculture, scientific research and higher education etc.... In which high-tech intelligent water quality multi-parameter analyzer adopts big touch LCD screen, English display for rapid and easy operation. It supports GLP compliance, several ion modes are provided and with multiple measuring modes. To match with data collecting software(1.1DC), it can communicate with computer. Different parameters of pH/pX, conductive and DO make multiple combination. Portable multi-parameter meter also adopts multi combination design, with intelligent power management to extend life of battery.



order to control water In pollution and protect water surface water resources, environment quality standards for different types of surface waters of the water temperature, pH value, dissolved oxygen, oxide are required. Multi-parameter analyzer is convenient.



## DZB-708L Multi-parameter Analyzer

- The automatic trouble-shooting system.
- Combine different modules according to user's requirement.
- In food safety detection, test the pH, conductivity, temperature and various ion concentration.

We have various laboratory water quality multi-parameter meter and on-site water quality multi-parameter meter to meet different needs of measuring precision requirement.







# Multi-parameter Analyzer Series

# Precision Benchtop

DZS-708

## Multi-parameter Analyzer

Model		DZS-708	DZS-708-A	DZS-708-B	DZS-708-C	
Par	ameters	Conductivity/DO/pH/pX/℃ Cond/pH/pX/℃ DO/pH/pX/℃		Cond/DO/℃		
	рН/ рХ	-2.000~19		_		
	ORP	±199	9.99mV		-	
	Cond	<b>0.000μS/cm~199.9</b> r	m S/cm	_	0.000µS/cm~1 99.9mS/cm	
	Resistivity	0.00Ω·cm~20.00MΩ·cm		_	0.00Ω·cm~20.0 0MΩ·cm	
Range	TDS	0.000 mg/L~19.99g/L		_	0.000 mg/L~19.99g/L	
	Salinity	0.00~8.00%		_	0.00~8.00%	
	DO	0.00~19.99mg/L	_	0.00~1	9.99mg/L	
	DO saturation	0.0~199.9%	_	0.0~	199.9%	
	Response time	≤45s (90% respond at 20°C)	_	≤45s (90% res	oond at 20°C)	
	lon Concentration	(0~19990), unit: ug/L、 m	ng/L、g/L、mol/L	mmol/L	_	
	Temp		- <b>5.0~135.0</b> ℃			
	pH/ pX	0.01	/0.001		_	
	ORP	0.1	/0.01		_	
Resolution	DO	0.01mg/L		0.01mg/L		
	DO Saturation	0.10%	_	0.10%		
	Temp	<b>0.1</b> °C				
	рН/ рХ	±0.002±1 bit —			-	
	ORP	±0.0		-		
	Cond	±0.5%FS	_	±0.5%FS		
Accuracy	TDS	±0.5%FS	_	±0.5%FS		
,,	Salinity	±0.1%		_	±0.1%	
	DO	±0.50mg/L	-	±0.50mg/L		
	DO Saturation	±10.0%	<u> </u>	±1	0.0%	
	Temp	±0.5 °C ±1 bit				
Temp Co	ompensation	Auto, pH:(0.0~100.0) ℃; Conductivity: (0.0~100.0) ℃; DO: (0.0~40.0) ℃				
GLP	Standard	Yes				
loi	n Mode	Provide multiple common ion mode (such as $H^+$ , Na <sup>+</sup> , K <sup>+</sup> , NH <sub>4</sub> <sup>+</sup> , Cl <sup>-</sup> , F <sup>-</sup> etc), Custom ion mode				
Measu	uring Mode	Three Measuring Mode				
Zero offset		Yes — Yes			Yes	
Data Storage		2200 sets of data				
View delete & print						
Disnlay						
Communication Interface		RS-232 LISR				
F	Power	Universa	l power adapter (	9V. 800mA)		
Dimens	ion&Weight	250x195x100mm 2kg				
2		DIS-1D Platinum Black Co	nductivity Flectro	 de: F-201-C nH	Combination	
Standard Configuration		Flectrode: DO-958-S DO Probe: T-818-B-6 ATC Probe: Standard Buffer				





Model		D75-706	DZS-706-A	DZS-706-B	DZS-706-C
Parameters	5	Cond/DO/pH/pX/°C	Cond/ pH/pX/°C	DO/pH/pX/°C	Cond/DO/°C
	Xa /Ha	-2.0	0~20.00		_
	ORP	±19	99.9mV		_
	Conductivity	0.000µS/cm~199.9	mS/cm	_	0.000µS/cm~1 99.9mS/cm
	Resistivity	0.00Ω·cm~20.00N	√lΩ·cm	_	0.00Ω·cm~20. 00MΩ·cm
Range	TDS	0.000 mg/L~10	Og/L	_	0.000 mg/L~100g/L
	Salinity	0.00~8.00%		—	0.00~8.00%
	DO	0.00~19.99mg/L	—	0.00~1	9.99mg/L
	DO Saturation	0.0~199.9%	-	0.0~	199.9%
	Response Time	≤45s (90% respond at 20°C)	-	≤45s (90% re	spond at 20℃)
	lon Concentration	(0~19990), unit: ug/L∖	mg/L、g/L、mol/	L、mmol/L	-
	Temperature		-5.0~105.0℃		1
	рН/ рХ		0.01		_
	ORP	(	0.1mV	1	_
	Conductivity	0.001µS/cm	ו	_	0.001µS/cm
	Resistivity	<u>0.01Ω·cm</u> ;		—	<u>0.01Ω·cm ;</u>
Resolution	TDS	0.001mg/L		—	0.001mg/L
	Salinity	0.01%		-	0.01%
	DO	0.01mg/L	-	0.0	1mg/L
	DO Saturation	0.10% –		0.	10%
	remperature				
	рн/рх	±0.0			—
	ORP	±0.1%FS			-
	Conductivity	±1.0%FS	—	±1.0%FS	
	Resistivity	±1.0%FS		_	±1.0%FS
Accuracy	TDS	±1.0%FS		_	±1.0%FS
	Salinity	±0.2%		_	±0.2%
	DO	±0.30mg/L	—	±0.3	0mg/L
	DO Saturation	±10.0%FS	—	±10	.0%FS
	Temperature		±0.3 ℃ ±1 bit		
Temperature Compensation		Auto, pH: (0.0~100.0)℃;	Conductivity: (0.	0~100.0)℃; D	<b>O: (0.0~40.0)</b> ℃
Zero Offset & Full Scale Calibration		Yes — Yes			Yes
Data Storage		2200 sets of data			
View, delete and print		Yes			
Display		LCD			
Communication Interface		USB			
Software		1.1DC			
Power		Universal power adapter (9V DC, 800mA)			
Dimension	& Weight	280×215×93mm, 1kg			
Standard Configuration		DJS-1C Platinum Black Conductivity Electrode; E-201-C pH Combination Electrode: DO-958-S DO Probe: T-818-B-6 ATC Electrode: Standard Buffer			



精准引领精彩 Precision Perfect



Model		DZB-718	DZB-718-A	DZB-718-B	DZB-718-C
Parameter	S	Cond/ DO/pH/pX/℃	Cond/pH/pX/℃	DO/pH/pX/°C	Cond/DO/℃
	pH/ pX	-2.000	-2.000~19.999		—
	ORP	±199	9.99mV		_
	Conductivity	0.000µS/cm~199.9mS/cm		_	0.000µS/cm~19 9.9mS/cm
	Resistivity	0.00Ω·cm~20.00MΩ·cm		_	0.00Ω·cm~20.0 0MΩ·cm
Range	TDS	0.000 mg/L~100	)g/L	_	0.000 mg/L~100g/L
	Salinity	0.00~8.00%		_	0.00~8.00%
	DO	0.00~19.99 mg/L	—	0.00~1	.9.99 mg/L
	DO Saturation	0.0~199.9%	—	0.0^	′199.9%
	Response Time	≤45s(90% respond at 20°C)	—	≤45s(90% re	espond at 20℃)
	Ion Concentration	(0~19990), unit: ug/L、 n	ng/L、g/L、mol/I		
	Temperature		-5.0~135.0°C		
	pH/pX	0	.001		_
	ORP		).01		_
Resolution	DO	0.01mg/l	_	0.0	1mg/l
	DO Saturation	0.10%	_	0.0	10%
	Temperature	011070	0.1°C		12070
	nH/nX	+0.0	0. <u>+</u> 0		_
	ORP	±0.03%FS			_
	Conductivity	±0.5%FS		—	±0.5%FS
	Resistivity	±0.5%FS		—	±0.5%FS
Accuracy	TDS	±0.5%FS		—	±0.5%FS
	Salinity	±0.1%	1	-	±0.1%
	DO	±0.30mg/L	—	±0.3	30mg/L
	DO Saturation	±10.0%	<u> </u>	±2	10.0%
	Temperature	±0.3 C±1 bit			
Temp Com	pensation	Auto, pH: 0.0~100.0℃; COND: 0.0~100.0℃; DO: 0.0~40.0℃			
GLP Standa	ard		Yes		
Zero Offset Full Scale C	t Calibration	Yes	_		Yes
Ion Mode		Support multiple common ion mode (such as			
Measuring	Mode	Three measuring mode			
Data stora	ge	2200 sets of data			
View, delete and print		Yes			
Display		Backlit LCD			
Communication Interface		USB			
Software		1.1DC			
Housing		IP65			
Power		Four AA batteries			
Dimension	&Weight		210×100×45mm, 0	0.5kg	
Standard C	onfiguration	DJS-1DF Platinum Black Conductivity Electrode; E-201-CF pH Combination Electrode; DO-957F DO Probe (waterproof);			
		T-818-B-4F ATC Probe (waterproof); Standard Buffer			



and in the

# Multi-parameter Analyzer Series

Portable DZB-712 Base-Model

Multi-parameter Analyzer



Model		DZB-712		
Parameters		Conductivity/ DO/pH/pX/°C		
	рН/ рХ	-2.00~20.00		
	ORP	±1999.9mV		
	Conductivity	0.000µS/cm~199.9mS/cm		
	Resistivity	0.00Ω·cm~20.00MΩ·cm		
	TDS	0.000 mg/L~100g/L		
Range	Salinity	0.00~8.00%		
	DO	0.00~19.99 mg/L		
	DO Saturation	0.0~199.9%		
	Response Time	≤45s(90% respond at 20°C)		
	Ion Concentration	(0~19990), unit: ug/L、mg/L、g/L、mol/L、mmol/L		
	Temperature	-5.0~135.0℃		
	pH/ pX	0.01		
	ORP	0.1		
Resolution	DO	0.01mg/L		
	DO Saturation	0.10%		
	Temperature	0.1 °C		
	pH/pX	±0.01±1 bit		
	ORP	±0.1%FS		
	Conductivity	±1.0%FS		
	Resistivity	±1.0%FS		
Διομικαίον	TDS	±1.0%FS		
, local acy	Salinity	±0.2%		
	DO	±0.30mg/L		
	DO Saturation	±10.0%		
	Temperature	±0.3℃±1 bit		
Temp Comp	ensation	Auto, pH: 0.0~100.0℃; COND: 0.0~00.0℃; DO: 0.0~40.0℃		
GLP Standar	d	—		
Zero Offset8	<b>kFull Scale Calibration</b>	Yes		
Ion Mode		Support multiple common ion mode (such as H <sup>+</sup> ,Ag <sup>+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ,Cl <sup>-</sup> ,F etc). Custom ion mode		
Measuring Mode		3 (continuous measuring, timed measuring and balance measuring mode)		
Data storage		2200 sets of data		
View, delete and print		Yes		
Display		Backlit LCD		
Output		USB		
Housing		IP65		
Power		Four AA batteries		
Dimension&	Weight	210×100×45mm, 0.5kg		
Standard Co	nfiguration	DJS-1DF Platinum Black Conductivity Electrode; E-201-CF pH Combination Electrode; DO-957F DO Probe;		
		I-818-8-4F AIC Probe (waterproof): Standard Buffer		





**Automatic Titrator Series** 



- Specific titration software to achieve replacement of control device by computer, to display titration curve and measuring data online. With edit titration method, calculate result, store titration curve, database processing and statistic functions
  - Big touch LCD screen/replacement of computer software to display all experimental inflection point and derivative map
    - Could achieve potential titration, conductivity titration and constant titration through different unit combination
      - With pre-titration, preselected endpoint titration, blank titration or manual titration function. Could automatically generate specific titration mode

Measuring System	Potential (included)	Range	±1999.0 mV, 0.00~14.00 pH
		Resolution	0.1mV, 0.01pH
		Accuracy	±0.03%FS, ±0.01pH±1 bit
	Constant (optional)	Range	(0~199.9) μA、 (0~19.99) μA、 (0~1.999) μA、
			(0~0.199) μA
		Polarization voltage	30mV、50mV、100mV
		Accuracy	Control titration sensitive: ±5%FS;
			Polarized current inspection error: ±2.5%FS
	Conductivity (optional)	Range	0.000µS/cm~199.9mS/cm
		Resolution	0.001µS/cm
		Accuracy	±1.0%FS
	Temp	Range	-5.0~105.0 °C
		Resolution	0.1°C
		Accuracy	±0.3℃±1 bit
Titration System	Repetitivity of Titration analysis		0.2%
	Titration volumetric Accuracy		10ml burette: ±0.025ml;
			20ml burette: ±0.035ml
	Burette Resolution		10ml burette: 1/10000;
			20ml burette: 2/10000
	Infusion or supplementary speed of burette		(50±10)s (when burette is full scale)
Control	Large, touch LCD screen		Easy to operate
	Computer software control		Could make titration analysis on computer's
Device			virtual titration operational interface and
			achieve remote control
Stability			(±0.3mV±1 bit)/3h
Data storage			Could store titration curve and data
View, delete&print			Yes
Power			AC(220±22)V; (50±1)Hz
Dimension & Weight			360×300×300mm, 10kg





## **Automatic Titrator Series**

## **ZDJ-4B** Auto Potential Titrator

- Large and bright screen
- Easy to change valve and burette for integration, avoid solution mutual interference
- Nice appearance for stirrer built-in the titrator
- Titration transmission device adopts linear motor Design
- With its anti leakage device

Model	ZDJ-4B
Measurement range	pH: (0.00~14.00)pH
	mV: (-1800.0~1800.0)mV
	Temp: (-5.0~105.0)℃
Resolution	pH: 0.01pH; mV: 0.1mV; Temp: 0.1 $^\circ \!$
Accuracy	pH: ±0.01pH±1bit
	mV: ±0.03%(full scale)
	Temp: ±0.3℃
Accuracy of burette volume	10ml burette: ±0.025ml
	20ml burette: ±0.035ml
Burette Resolution	1/20000
Infusion solution or feeding speed of burette	55±10s(where burette is full scale)
Repeatability of titration analyzer	0.2%
Repeatability accuracy	≤0.2mV
Stability	±0.3 mV±1bit/3h
Control titration sensitive	±2mV

Model	ZDJ-5 (coulomb)
Measuring range	±1999.9 mV
Electrolysis current	1、10、50mA
Electrolysis current accuracy	±0.25% (reading) (Max. load is 500Ω)
Repeatability of Titration analysis	≤ 0.5% (Minimum 3s)
Power	AC (220±22)V; (50±1)Hz
Dimension&Weight	360×300×300mm, 10kg

**ZDJ-5** Coulomb Titrator

It can store titration curve and data.

- It has RS-232 bi-directional port and has power failure protection function.
- It can be connected with TP-16, TP-24 and TP-40 printer. Also, it can print measuring data, titration curve and calculation results.
- It uses specific titration software to achieve replacement of control device by computer, to display titration curve and measuring data online. Also, It functions as titration modes editing, calculation, storage of titration curve, database dealing and statistics.


### **Automatic Titrator Series**



- LCD display and English operation interface which can show measuring parameters and results.
- It has pre-titration, preset endpoint titration, blank titration or manual titration functions. It can form specific titration modes according to the user's habit.
- There are several different titration modes with different sensors: acid base titration, redox titration, precipitation titration, complexometry titration and non-aqueous titration.
- The stirring system adopts PWM modulation technique and applies software to reduce the noise.
- It has RS-232 communication port and can be connected with TP-16 printer to print measuring data, titration curve and calculation results.
- Specific Rex titration software can be used to connect with PC and the results can be shown on the screen. Also, the titration modes can be edited and modified for remote control and calculation of several statistics.
- The titrator adopts the specific material which is against perchloric acid corrosion and can conduct several titration reactions.

Model		ZDJ-4A	
Parameters		pH, mV(ORP),Temp	
Measurement	рН	(0.00~14.00)pH	
Range	mV	(-1800.0~1800.0)mV	
	Temp	(-5.0~105.0)℃	
	рН	0.01pH	
Resolution	mV	0.1mV	
	Temp	0.1°C	
	рН	±0.01pH±1bit	
Accuracy	mV	±0.03%(FS)	
	Temp	±0.3℃	
	Repetitivity of Titration analysis	0.2%	
Burette Drive	Control titration sensitive	±2mV	
	Titration volumetric Accuracy	10ml burette: ±0.025ml; 20ml: ±0.035ml	
	Burette Resolution	10ml burette: 1/10000; 20ml: 2/10000	
Infusion or supplementary speed of burette		(5±10)s (when burette is full scale)	
Stability		±0.3 mV±1bit/3h	
Control titration sensitive		±2mV	
Stability		(±0.3mV±1bit)	
Power		AC(220±22)V; (50±1)Hz	
Dimension&Weight		340×400×400mm, 10kg	





## **Automatic Titrator Series**



- It can control titration endpoint according to preset potential.
- It can pre-control potential adjustment.
- It adopts solenoid valve for controlling dropping liquid.
- It has manual, automatic and constant pH (potential) titration modes.
- It is equipped with delay circuit of titration endpoint.
- It is suitable for potential titration for laboratory volumetric analysis.
- It is equipped with JB-1A stirrer.

Model	ZD-2	
Parameters	mV(ORP)/pH	
Measuring Range	±1400mV, 0.00~14.00 pH	
Resolution	1mV, 0.01pH	
Accuracy	±5mV, ±0.03pH±1 bit	
<b>Control Titration Sensitive</b>	±5mV, ±0.1pH	
Stability	±0.01pH/3h	
Display	LCD	
Power	AC(220±22)V; (50±1)Hz	
Dimension & Weight	300×235×100mm, 3kg	

### **ZDY-500** Auto Constant Titrator

- Have the function of manual and automatic titration.
- The polarization voltage selection, end point selection, and detection sensitivity selection function.
- The current measurement has four level 10<sup>-9</sup> A, 10<sup>-8</sup> A, 10<sup>-7</sup> A, 10<sup>-6</sup> A, to adapt to the different chemical analysis

Model	ZDY-500	
Titration Range	(0~10)ml, (0~25)ml	
Polarization Voltage	30mV, 50mV, 100mV	
	Control sensibility of Titration End-point: $\pm$ 5%FS	
Basic error	Detection error of polarization current: $\pm$ 2.5%FS	
	Repeatability error of Capacity analysis: 0.2% Reading	
Detection sensitivity of polarization current	2.0X10 <sup>-9</sup> , 2.0X10 <sup>-8</sup> , 2.0X10 <sup>-7</sup> , 2.0X10 <sup>-6</sup> A/grid	
<b>Set Endpoint level</b> 10, 20, 30, 40, 50, 60, 70, 80, 90, 100		
Display	LCD	
Power	AC(220±22)V; (50±1)Hz	
Dimension&Weight 300×235×100mm, 3kg		





### Karl Fischer Moisture Analyzer Series



#### [KLS-411 Main Features]

- Large screen LCD display.
- Coulometry method, adopt non-membrane electrode, it is suitable for most of the samples, especially moisture measurement of polluting samples.
- Has shift end point control function, can automatically determine the shift caused by leakage of trace moisture.
- The reagent is a new-type Lei-ci K-F reagent, which is low toxic, less polluting and multi-use disposable.

#### [KLS-412 Main Features]

- Large screen LCD display.
- Coulometry method, adopt membrane electrode, it is suitable for reagents with low conductivity, aldehyde ketone samples, and moisture measurement of smaller amounts.
- Has shift end point control function, can automatically determine the shift caused by leakage of trace moisture.
- The reagent is a new-type Lei-ci K-F reagent, which is low toxic. less polluting and multi-use disposable.

Specification	KLS-411	KLS-412	
Measurement Range	10ug-20mg	10ug-20mg	
Accuracy	±0.5%FS	±(5%Measurement point+3)ug	
Power Supply	(220±22)V, (50±1)Hz		
Size(mm)/N.W.(Kg)	300*235*100/3kg		



### [Main Features]

- Large screen LCD display, according to the current fluctuations, will automatically enter into slow titration state.
- The reagent is a new-type Lei-ci K-F reagent, which is low toxic, less polluting and multi-use disposable.
- Set endpoint more accuracy, more convenient to users.

### [Specifications]

- Measurement Range: 100µg~250mg
- Repeatability Error: ±3%
- Polarization current: 1µA
- Endpoint Range: 40~120mV
- Test solution temp: 5~30°C
- Size(mm): Measuring System 280\*210\*120 Titration System 210\*100\*90
- Weight: 5kg





## Karl Fischer Moisture Analyzer Series

	·			
ZDY-502	Model		ZDY-502	
Maistura Titrator			0.1mg~250mg (mg、mg/L、	
woisture intrator	Moisture Measurement	ivieasuring Range	%, ppm and many units)	
		Resolution	0.1mg	
	Polarization	Grade	1 µ A, 50 µ A	
	Current	Accuracy	$\pm$ 0.2 $\mu$ A , $\pm$ 10 $\mu$ A	
	Titration drive	Burette	10ml burette: $\pm$ 0.025ml	
And And And And		Permissible Error		
Tono To I Concertain		Repeatability of	0.5%	
trees to the second		titration analysis	0.5%	
	Power		AC(220±22)V; (50±1)Hz	
	Dimension & Weight		360×300×300mm, 10kg	

- Non-polluting analytic measurement process; Prevent leakage device and prevent suck-back waste device; Automatic inflow and outflow solution, and automatic mixture of KF reagent, which can prevent users from touching KF reagent directly and makes the operation secure and convenient.
- Several titrating modes to meet analysis of different sample: Pre-titration, Auto-titration, Manual titration, Constant titration, KF titer titration, etc.
- Conversational operation, complete the setup and operation of titration easily.
- Convenient automation titration system
  - a. Valve-burette integration design, which is easy replacement and effectively avoid interferences between different solutions in different titration.
  - b. It can set system time, operator No., burette type, burette coefficient, stirrer speed, output types, etc.
  - c. Titration end-point reminder.
- Firmware upgrades function which can reduce your titration cost.
- Control methods of titrator: dot matrix LCD, Key operation, simultaneously or respectively control through computer software
- Live display related test methods and measuring results.
- Several titrating modes: Pre-titration, Auto-titration, Manual titration, Constant titration, KF titer titration, etc.
- Automatic inflow and outflow solution, and automatic mixture of KF reagent, which can prevent users from touching KF reagent directly and makes the operation secure and convenient.
- Titrating solution overflow protection
- It has detecting and reminding functions of KF reagent failure
- USB and RS-232 printing interface. Realize communication through special titrating software by connecting computer.

Food	Water content in meat products	
Medicine	Water content in pharmaceutical intermediates	
Daily Chemical	Water analysis of cosmetic, organic solvent or surfactant	
Petroleum Products	Moisture content control	
Agriculture	Water analysis of fertilizer, pesticide emulsifier	

### **[**Typical Applications **]**

### "INESA" can provide tailored solutions for you.



## **Environmental Protection Analyzer Series**



Model		COD-571	COD-572	
Specification				
Range -		0~1500mg/l	0.0~100.0mg/L,	
	COD	0 1500mg/L	100.0~1000mg/L	
	Electrolysis		10 - 0 / 20 - 0 / 40 - 0	
	current divide	_	1011A/2011A/4011A	
	Basic accuracy	≤150mg/L: ±8% reading ±1 mg/L;		
Accuracy		≥150mg/L: ±8% reading	±2%FS	
	Repeatability	3% reading	1%FS	
Stability		±2% (reading )/15min	—	
Measuring Principle		Dichromate colorimetric method	Coulometric titration	
Digestion Method		Sealing reflux method (could dispelling	Reflux method	
		21 samples simultaneously)		
Digestion Temperature		Room-temperature~165 $^\circ \!$	Reflux method	
Digestion Time		0~120min		
Calibration		Two-point calibration (zero and full	Calibration not need standard	
		scale calibration)	solution	
Data Storage200 data with time-and-date stamp100 data with time-		100 data with time-and-date stamp		
View, dele	ew, delete & print Yes			
Display LCD				
Power		AC(220±22)V, (50±1)Hz		
Dimension (mm),Weight(kg)		COD-571: 270×280×125, 2	200,225,400,2	
		COD-571-1: 330×228×132, 4	300×235×100, 3	



### **Environmental Protection Analyzer Series**



### Water Quality Multi-parameter Meter

- Four wavelengths are available. With software upgrade, it can expand several environmental test programs;
- Allow users to edit calibration results and optimize calibration curve which can improve work efficiency;
- The protection grade is IP65, match with six-pore portable digester, multiple power supply mode, easy to carry.
- Humanized design, freely choose timer input and keyboard input.



## SJB-801

### Portable Heavy Metal Analyzer

- 4.3 inch highlight color LCD display, Menu operation.
- It adopts anodic stripping voltammetry that is more portable and low cost than atomic absorption spectrophotometry.
- With glassy carbon electrode system, this is accurate, low detection limit, suitable for precise measurement.
- With screen-printed electrode test system, plug and play, suitable for rapid detection on the spot.
- In food safety testing, mainly used in detection of cadmium in rice and heavy metals (as zinc, cadmium, arsenic, mercury, etc) analysis in drinking water.



# **Water Purification System**



Model	GT-30	GT-15L/20L/30L	GT1-15L/20L/30L	GT1-60L
Source of water	Tape water conductivity≤400 μS/cm, Water pressure≥1kg/cm²	Tape water conductivity ≤ 350 μS/cm, Water pressure >1kg/cm <sup>2</sup>		
Water production rate	30L/h (25℃)	15L/20L/30L/h (25℃) 60L/h (25℃)		60L/h (25℃)
Maximum velocity of water	1.5L/min			
Display range of Water quality	Pure water (0.0~100.0) $\mu$ S/cm $_{2}$ ultra-pure water (0.0 $\sim$ 18.2) M $\Omega^{2}$ cm			
Pure water production conductivity	≤ 10µS/cm			
Ultra-pure water production resistivity	(15~18.2)MΩ <sup>.</sup> cm	18.2 MΩ cm (10~17)MΩ cm ≥1 MΩ c		≥1 MΩ <sup>.</sup> cm
Microbial	<1CFU/ml			
Micro particles (≥0.22μm)	<1/ml			
Heavy metal ions	<0.1ppb			
Display	LCD			
Environmental Temp	5~40℃			
Power	AC(220±22)V, (50±1)Hz			
Dimension&Weight	400×570×600mm, 31kg			



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### Please see Electrochemical Sensor Chapter for details

#### **BestLab Spear** BestLab General BestLab Surface ROHS BestLab General-L BestLab Semi-Micro High-Special Shape Precision pH Electrode Special Special Occasions Applications BestLab Water BestLab Super BestLab ClickOK BestLab PureWater **BestLab Boiling** BestLab RoHS BestLab HF





#### BestLab PureWater

Application: Pure water, DI water with low conductivity. Measuring range: (0-11)pH Temperature Range: (0-80 °C) Zero potential: 7±0.5pH Material: Glass Dimension: φ12X185mm Connector: S7 Reference structure: Long-life structure







## Bestlab Series Ion Electrode





BestLab Chlorion (Cl<sup>-</sup>) Measuring range: 5.0X10<sup>-5</sup>M-1.0M 1.8ppm-35500ppm pH Range: (2-12) pH Common interfering ion:Br<sup>-</sup>;I<sup>-</sup>;S<sup>2-</sup> Temperature Range: (0-80°C) Material: Import epoxy resin Dimension: φ12X120mm



# **Other Series**



**Electrochemical Specific Standard Reagents and Working Reagents** 

