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Product Catalogue

Water Quality Meters and Laboratory Instruments

- pH/ORP/Ion/Water Hardness Meters
- Conductivity/TDS/Salinity/Resistivity/Conductivity Ash Meters
- Dissolved Oxygen/BOD/OUR/SOUR Meters
- Turbidity Meters
- Polarimeters
- Magnetic Stirrers
- Electrodes

BANTE instruments

Bante Instruments Inc.

PHscan Series Pocket pH Tester

PHscan20 Features

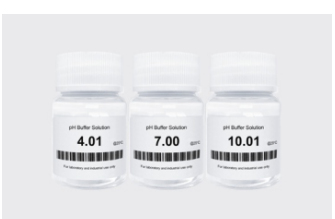
- 2 points push-button calibration with auto-buffer recognition
- Automatic temperature compensation ensures accurate readings over the entire range
- Hold function momentarily freezes reading for easy viewing and recording
- Auto-power off effectively conserves battery life
- Replaceable electrode module reduces maintenance and replacement cost

PHscan30 Features

- 1 to 3 points calibration with automatic recognition for USA and NIST buffers
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Setup menu allows setting the pH buffer set, number of calibration points, temperature unit, auto-power off, etc.
- Reset function automatically restores all settings to the factory defaults

PHscan40 Features

- BNC connector is easy to connect to different types of pH electrodes
- 1 to 3 points calibration with automatic recognition for USA and NIST buffers
- Manual temperature compensation provides a wide range of temperature input
- Auto-read function senses and locks the measurement endpoint
- Setup menu allows setting the pH buffer set, number of calibration points, temperature unit, auto-power off, etc.
- Reset function automatically restores all settings to the factory defaults



Replaceable pH Electrodes

E-PHscan-**S**

- Circular pH-sensitive membrane
- For measuring the general water samples

E-PHscan-**F**

- Flat surface pH-sensitive membrane
- For measuring surfaces of semisolid and gel samples, such as printing ink, paints, papers, textiles, creams, doughs, etc.

E-PHscan-**L**

- Circular pH-sensitive membrane
- For measuring the samples in small containers (>Ø12 mm)

E-PHscan-**P**

- Spear tip pH-sensitive membrane
- For penetrating and measuring semisolid samples, such as soil, fruits, vegetables, meat, cheese, etc.

Specifications

	Model	PHscan20	PHscan30	PHscan40
pH	Range	0.00~14.00 pH	-1.00~15.00 pH	-1.00~15.00 pH
	Resolution	0.01 pH	0.01 pH	0.01 pH
	Accuracy	±0.05 pH	±0.01 pH	±0.01 pH
	Calibration	2 points	1 to 3 points	1 to 3 points
	pH Buffer Options	4.01/7.00/10.01	4.01/6.86/7.00/9.18/10.01	4.01/6.86/7.00/9.18/10.01
Temperature	Range	0~60°C	0~60°C/32~140°F	0~100°C/32~212°F
	Resolution	1°C	0.1°C/0.1°F	0.5°C/0.5°F
	Accuracy	±1°C	±1°C/±1.8°F	—
	Offset Calibration	—	1 point, reading ±10°C	—
Other Specifications	Temperature Compensation	0~60°C, automatic	0~60°C, automatic	0~100°C, manual
	Hold Function	Manual	Manual or auto-endpoint	Manual or auto-endpoint
	Auto-Off	8 minutes after last key pressed	8 minutes after last key pressed	8 minutes after last key pressed
	Operating Temperature	0~50°C	0~50°C	0~50°C
	Display	Single-line LCD (21×21 mm)	Dual-line LCD (21×21 mm)	Dual-line LCD (21×21 mm)
	Power Requirements	3×1.5V LR44 micro alkaline batteries	2×1.5V AAA batteries	2×1.5V AAA batteries
	Battery Life	Approx. 150 hours of continuous use	Approx. 200 hours of continuous use	Approx. 200 hours of continuous use
	Dimensions	185(L)×40(Ø) mm	185(L)×40(Ø) mm	175(L)×40(Ø) mm
	Weight	100 g	100 g	100 g

Ordering Information

- PHscan20/30-**E**: Tester, pH buffer reagents
- PHscan20/30-**K**: Tester, pH buffer solutions, carrying case
- PHscan40: Tester, E201-BNC plastic-body pH electrode, pH buffer solutions, carrying case

ORPscan Series Pocket ORP Tester

Features

- 1 point offset calibration allows adjusting the displayed value to a known standard
- Relative and absolute millivolt modes ensure reliable oxidation-reduction potential measurements
- Auto-read function senses and locks the measurement endpoint
- Auto-power off effectively conserves battery life
- Reset function automatically restores all settings to the factory defaults

Ordering Information

- ORPscan10: Tester
- ORPscan20: Tester, 501 ORP electrode, solution storage bottles, carrying case

Optional ORP Electrodes

- 501: Suitable for general-purpose applications
- 504: Suitable for high temperature (<100°C/212°F) or mildly corrosive samples

Specifications

	Model	ORPscan10	ORPscan20
ORP	Range	±999 mV	±999 mV
	Resolution	1 mV	1 mV
	Accuracy	±2 mV	±2 mV
	Calibration	1 point	1 point
Other Specifications	Sensor Material	Platinum plate	Platinum pin or platinum band
	Connector	—	BNC
	Hold Function	Manual or auto-endpoint	Manual or auto-endpoint
	Auto-Off	8 minutes after last key pressed	8 minutes after last key pressed
	Operating Temperature	0~50°C	0~50°C
	Display	Dual-line LCD (21×21 mm)	Dual-line LCD (21×21 mm)
	Power Requirements	2×1.5V AAA batteries	2×1.5V AAA batteries
	Battery Life	Approximately 200 hours of continuous use	Approximately 200 hours of continuous use
	Dimensions	185(L)×40(Ø)mm	175(L)×40(Ø)mm
	Weight	100 g	100 g

ECscan Series Pocket Conductivity Tester

ECscan10 Features

- 1 point push-button calibration allows the use of a custom calibration solution
- Platinum-black conductivity cell provides quick and reliable measurement results
- Automatic temperature compensation corrects conductivity measurements to the reference temperature
- Hold function momentarily freezes reading for easy viewing and recording
- Auto-power off effectively conserves battery life
- Replaceable electrode module reduces maintenance and replacement cost

Applications

- ECscan10L : Suitable for measuring the low conductivity liquids
- ECscan10M: Suitable for measuring the general water samples
- ECscan10H : Suitable for measuring the high conductivity liquids

ECscan20/30/40 Features

- Multi-range conductivity tester contains TDS and salinity measurement modes
- 1 to 3 points calibration with automatic recognition for conductivity standards
- Automatic temperature compensation corrects conductivity measurements to the reference temperature
- Auto-read function senses and locks the measurement endpoint
- Setup menu allows setting the number of calibration points, TDS conversion factor, temperature unit, auto-power off, etc.
- Reset function automatically restores all settings to the factory defaults

Measurement Parameters

- ECscan20: Conductivity, temperature
- ECscan30: Conductivity, TDS, temperature
- ECscan40: Conductivity, TDS, salinity, temperature

Ordering Information

- ECscan10L/M/H: Tester, conductivity standard solution
- ECscan20/30/40: Tester, conductivity standard solutions, carrying case

Replaceable Conductivity Electrodes

E-ECscan-C1-**100K**

- 2-pole conductivity cell
- Suitable for ECscan10L/M/H testers

E-ECscan-C1-**10K**

- 2-pole conductivity cell
- Suitable for ECscan20/30/40 testers

Specifications

	Model	ECscan10L	ECscan10M	ECscan10H	ECscan20	ECscan30	ECscan40
Conductivity	Range	1.0~199.9 µS/cm	10~1999 µS/cm	0.1~19.99 mS/cm	0~20.00, 200.0, 2000 µS/cm, 20.00 mS/cm		
	Resolution	0.1 µS/cm	1 µS/cm	0.01 mS/cm	0.01, 0.1, 1		
	Accuracy	±1% F.S.	±1% F.S.	±1% F.S.	±1% F.S.		
	Calibration	1 point	1 point	1 point	1 to 3 points		
	Calibration Solutions	146.5 µS/cm	1413 µS/cm	12.88 mS/cm	84 µS/cm, 1413 µS/cm, 12.88 mS/cm		
TDS	Range	—	—	—	—	0~10.00, 100.0, 1000 ppm, 20.00 ppt	
	Resolution	—	—	—	—	0.01, 0.1, 1	
	Accuracy	—	—	—	—	±1% F.S.	
	TDS Factor	—	—	—	—	0.1~1.0 (default 0.5)	
Salinity	Range	—	—	—	—	—	0.00~10.00 ppt
	Resolution	—	—	—	—	—	0.01 ppt
	Accuracy	—	—	—	—	—	±1% F.S.
Temperature	Range	0~50°C			0~60°C/32~140°F		
	Resolution	1°C			0.1°C/0.1°F		
	Accuracy	±1°C			±1°C/±1.8°F		
	Offset Calibration	—			1 point, reading ±10°C		
Other Specifications	Temperature Compensation	0~50°C, automatic			0~60°C, automatic		
	Temperature Coefficient	2%/°C			2%/°C		
	Reference Temperature	25°C			25°C		
	Cell Constant	K=1			K=1		
	Hold Function	Manual			Manual or auto-endpoint		
	Auto-Off	8 minutes after last key pressed			8 minutes after last key pressed		
	Operating Temperature	0~50°C			0~50°C		
	Display	Single-line LCD (21×21 mm)			Dual-line LCD (21×21 mm)		
	Power Requirements	3×1.5V LR44 micro alkaline batteries			2×1.5V AAA batteries		
	Battery Life	Approximately 150 hours of continuous use			Approximately 200 hours of continuous use		
	Dimensions	185(L)×40(Ø) mm			185(L)×40(Ø) mm		
	Weight	100 g			100 g		

TDSscan Series Pocket TDS Tester

TDSscan10 Features

- 1 point push-button calibration allows the use of a custom calibration solution
- Hold function momentarily freezes reading for easy viewing and recording
- Auto-power off effectively conserves battery life
- Replaceable electrode module reduces maintenance and replacement cost

TDSscan20 Features

- 1 to 3 points calibration with automatic recognition for TDS standards
- Auto-read function senses and locks the measurement endpoint
- Auto-power off effectively conserves battery life
- Setup menu allows setting the number of calibration points, TDS conversion factor, etc.
- Reset function automatically restores all settings to the factory defaults

Ordering Information

- TDSscan10L/M/H: Tester, TDS standard solution
- TDSscan20: Tester, TDS standard solutions, carrying case

Specifications

	Model	TDSscan10L	TDSscan10M	TDSscan10H	TDSscan20
TDS	Range	0.5~100.0 ppm	5~1000 ppm	0.05~10.00 ppt	0~10.00, 100.0, 1000 ppm, 20.00 ppt
	Resolution	0.1 ppm	1 ppm	0.01 ppt	0.01, 0.1, 1
	Accuracy	±1% F.S.	±1% F.S.	±1% F.S.	±1% F.S.
	Calibration	1 point	1 point	1 point	1 to 3 points
Temperature	Range	0~50°C			0~60°C/32~140°F
	Resolution	1°C			0.1°C/0.1°F
	Accuracy	±1°C			±1°C/±1.8°F
	Offset Calibration	—			1 point, reading ±10°C
Other Specifications	Temperature Compensation	0~50°C, automatic			0~60°C, automatic
	TDS Factor	0.4~1.0 (default 0.5)			0.1~1.0 (default 0.5)
	Hold Function	Manual			Manual or auto-endpoint
	Auto-Off	8 minutes after last key pressed			8 minutes after last key pressed
	Operating Temperature	0~50°C			0~50°C
	Display	Single-line LCD (21×21 mm)			Dual-line LCD (21×21 mm)
	Power Requirements	3×1.5V LR44 micro alkaline batteries			2×1.5V AAA batteries
	Battery Life	Approximately 150 hours of continuous use			Approximately 200 hours of continuous use
	Dimensions	185(L)×40(Ø)mm			185(L)×40(Ø)mm
	Weight	100 g			100 g

SALscan Series Pocket Salinity Tester

Features

- Multi-parameter salinity tester contains conductivity measurement mode
- Platinum-black coated sensor provides quick and reliable measurement results
- 1 to 3 points calibration with automatic recognition for conductivity standards
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Setup menu allows setting the number of calibration points, auto-power off, etc.
- Reset function automatically restores all settings to the factory defaults

Applications

- SALscan10: Suitable for measuring the general water samples
- SALscan20: Suitable for measuring the seawater and high salinity liquids

Ordering Information

SALscan10/20: Tester, conductivity standard solutions, carrying case

Specifications

	Model	SALscan10	SALscan20
Salinity	Range	0.00~10.00 ppt	0.00~80.00 ppt
	Resolution	0.01 ppt	0.01 ppt
	Accuracy	±1% F.S.	±1% F.S.
Conductivity	Range	0~20.00, 200.0, 2000 µS/cm, 20.00 mS/cm	100.0~2000 µS/cm, 20.00, 200.0 mS/cm
	Resolution	0.01, 0.1, 1	0.01, 0.1, 1
	Accuracy	±1% F.S.	±1% F.S.
	Calibration	1 to 3 points	1 to 3 points
	Calibration Solutions	84 µS/cm, 1413 µS/cm, 12.88 mS/cm	1413 µS/cm, 12.88 mS/cm, 111.8 mS/cm
Temperature	Range	0~60°C/32~140°F	0~60°C/32~140°F
	Resolution	0.1°C/0.1°F	0.1°C/0.1°F
	Accuracy	±1°C/±1.8°F	±1°C/±1.8°F
	Offset Calibration	1 point, reading ±10°C	1 point, reading ±10°C
Other Specifications	Temperature Compensation	0~60°C, automatic	0~60°C, automatic
	Hold Function	Manual or auto-endpoint	Manual or auto-endpoint
	Auto-Off	8 minutes after last key pressed	8 minutes after last key pressed
	Operating Temperature	0~50°C	0~50°C
	Display	Dual-line LCD (21×21 mm)	Dual-line LCD (21×21 mm)
	Power Requirements	2×1.5V AAA batteries	2×1.5V AAA batteries
	Dimensions	185(L)×40(Ø)mm	185(L)×40(Ø)mm
	Weight	100 g	100 g

DOscan10 Pocket Dissolved Oxygen Tester

Features

- Polarographic dissolved oxygen electrode is economical and durable
- Screw membrane cap design allows for easy replacement
- 1 or 2 points calibration using air-saturated water or a zero-oxygen solution
- Selectable measurement modes for dissolved oxygen concentration and % saturation
- Salinity and barometric pressure compensations eliminate measurement errors
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Auto-power off effectively conserves battery life
- Setup menu allows setting the number of calibration points, concentration unit, temperature unit, etc.
- Reset function automatically restores all settings to the factory defaults

Ordering Information

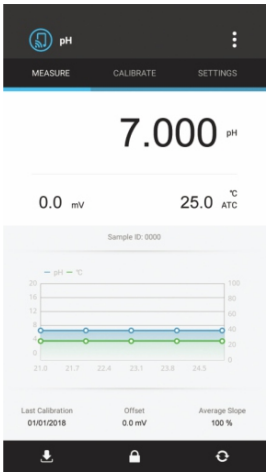
DOscan10: Tester, DO100 dissolved oxygen electrode, electrolyte solution, membrane cap, carrying case

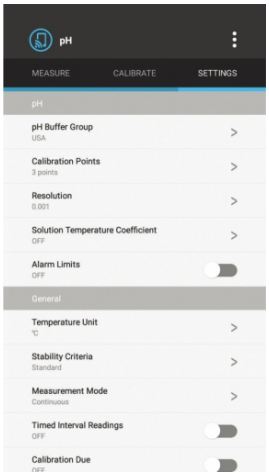
Specifications

	Model	DOscan10
DO	Range	0.0~20.0 mg/L or ppm
	Resolution	0.1 mg/L
	Accuracy	±0.5 mg/L
% saturation	Range	0.0~200.0%
	Resolution	0.1%
	Accuracy	±2.0%
Other Specifications	Calibration	1 or 2 points
	Temperature Compensation	0~40°C/32~104°F, automatic
	Barometric Pressure Correction	450~850 mmHg, manual
	Salinity Correction	0~35 g/L, manual
	Hold Function	Manual or auto-endpoint
	Auto-Off	8 minutes after last key pressed
	Operating Temperature	0~50°C
	Display	Dual-line LCD (21×21 mm)
	Power Requirements	2×1.5V AAA batteries
	Battery Life	Approximately 200 hours of continuous use
	Dimensions	175(L)×40(Ø)mm
	Weight	100 g

S Series Bluetooth Water Quality Tester

High-performance testers running on the BanteLab app (Android system), available in 6 models.





Features

S10 pH Tester
- 1 to 5 points calibration with automatic recognition for USA, NIST and DIN buffers
- Automatic electrode diagnosis shows the pH slope and zero offset
- Solution temperature coefficient compensates for pure water measurements and references the pH to 25°C

S20 ORP Tester
- 1 point offset calibration allows adjusting the displayed value to a known standard
- Relative and absolute millivolt modes ensure reliable ORP measurements

S30 Ion Tester
- 2 to 5 points calibration, including the selection of 8 concentration points
- Electrode management can store and recall up to 3 electrode parameters
- Automatic electrode diagnosis shows the calibration points and electode slopes
- Selectable ion measurement methods (direct reading, known addition/subtraction, sample addition/subtraction) and concentration units (ppm, mg/L, mol/L, mmol/L)

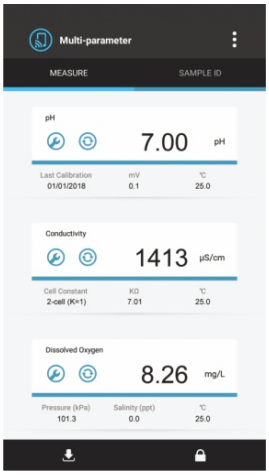
S40 Water Hardness Tester
- 2 to 5 points calibration from low to high concentrations
- Selectable water hardness unit, including german degree (°dH), english degree (°e), french degree (°fH), gpg, mg/L and mmol/L

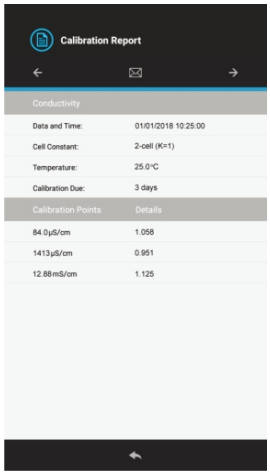
S50 Conductivity Tester
- 1 to 3 points calibration with automatic recognition for conductivity standards
- Automatic electrode diagnosis shows the calibration points and factors
- Selectable cell constant(0.1/1/10), temperature compensation type(linear/non-linear/ pure water), temperature compensation coefficient, reference temperature (20/25°C), EP/USP limit and TDS conversion factor (0.01 to 1.00)

S60 Dissolved Oxygen Tester
- 1 or 2 points calibration using the air-saturated water or zero oxygen solution
- Salinity and barometric pressure compensations eliminate the measurementerrors
- Selectable testing time and beginning/ending dissolved oxygen areused for calculating oxygen uptake rate (OUR) and specific oxygen uptake rate (SOUR)

General Features
- Automatic temperature compensation ensures accurate readingsover the entire range
- Auto-read function senses and locks the measurement endpoint
- Timed interval readings send measurement data to memory or a printer
- Limit alarm automatically alerts when measurements exceed the specified range
- Calibration due alarm reminds users to calibrate the tester regularly
- Password protection prevents unauthorized calibration and settings
- Multi-parameter measurement allows up to three testers to connect to the device and display readings simultaneously
- Reset function automatically restores all settings to the factory defaults

Ordering Information
- S10: Tester, pH buffer solutions, USB cable, power adapter, carrying case
- S20: Tester, solution storage bottles, USB cable, power adapter
- S30: Tester, ion selective electrode, 100/1000 ppm standard solutions, ionic strength adjuster, USB cable, power adapter, carrying case (cyanide and sulfide ion testers cannot provide standard solutions)
- S40: Tester, water hardness electrode, 10/100 mmol/L standard solutions, ionic strength adjuster, USB cable, power adapter, carrying case
- S50: Tester, conductivity standard solutions, USB cable, power adapter, carrying case
- S60: Tester, dissolved oxygen electrode, electrolyte solution, membrane cap, USB cable, power adapter, carrying case





USB port provides a convenient and fast charging solution

Specifications

	Model	S10
pH	Range	-2.000~20.000 pH
	Resolution	0.001, 0.01, 0.1 pH, selectable
	Accuracy	±0.002 pH
	Calibration	1 to 5 points
	pH Buffer Options	USA, NIST, DIN, 5 custom buffers
	Temperature Compensation	0~100°C/32~212°F, automatic
	Solution Temperature Coefficient	25°C
mV	Range	±2000.0 mV
	Resolution	0.1, 1 mV, selectable
	Accuracy	±0.2 mV

	Model	S20
ORP	Range	±2000.0 mV
	Resolution	0.1, 1 mV, selectable
	Accuracy	±0.2 mV
	Calibration	1 point

	Model	S30
Ion	Range	0.001~30000 (depending on the range of ISE)
	Resolution	0.001, 0.01, 0.1, 1
	Accuracy	±0.5% F.S. (monovalent), ±1% F.S. (divalent)
	Measurement Units	ppm, mg/L, mol/L, mmol/L
	Calibration	2 to 5 points
	Calibration Solutions	0.001, 0.01, 0.1, 1, 10, 100, 1000, 10000
	Temperature Compensation	0~100°C/32~212°F, manual
	Measurement Modes	Direct reading, known addition, known subtraction, sample addition, sample subtraction
	Electrode Management	1 to 3
mV	Range	±2000.0 mV
	Resolution	0.1, 1 mV, selectable
	Accuracy	±0.2 mV

	Model	S40
Water Hardness	Range	0.05~200 mmol/L, 0~1122°dH, 0~1404°e, 0~2000°fH, 0~1170 gpg, 0~8020 mg/L (Ca^{2+}), 0~20000 mg/L ($CaCO_3$), 0~11220 mg/L (CaO)
	Resolution	0.001, 0.01, 0.1, 1
	Accuracy	±1% F.S.
	Measurement Units	mmol/L, °dH, °e, °fH, gpg, mg/L (Ca^{2+}), mg/L ($CaCO_3$), mg/L (CaO)
	Calibration	2 to 5 points
	Calibration Solutions	0.01, 0.1, 1, 10, 100 mmol/L
	Temperature Compensation	0~50°C/32~122°F, manual
mV	Range	±2000.0 mV
	Resolution	0.1, 1 mV, selectable
	Accuracy	±0.2 mV

	Model	S50-M	S50-H
Conductivity	Range	0~20.00, 200.0, 2000 µS/cm, 20.00 mS/cm	100.0~2000 µS/cm, 20.00, 200.0 mS/cm
	Resolution	0.01, 0.1, 1	0.01, 0.1, 1
	Accuracy	±0.5% F.S.	±0.5% F.S.
	Calibration	1 to 3 points	1 to 3 points
	Calibration Solutions	84 µS/cm, 1413 µS/cm, 12.88 mS/cm	1413 µS/cm, 12.88 mS/cm, 111.8 mS/cm
	Temperature Compensation	0~100°C/32~212°F, automatic	0~100°C/32~212°F, automatic
	Temperature Coefficient	Linear (0.0~10.0%/°C), non-linear, USP, EP	Linear (0.0~10.0%/°C), non-linear, USP, EP
	Pure Water Compensation	Yes	Yes
	Reference Temperature	20/25°C	20/25°C
	Cell Constant	K=1	K=10
TDS	Range	0~10.00, 100.0, 1000 mg/L, 20.00 g/L	0~100.0, 1000 mg/L, 10.00, 200.0 g/L
	Resolution	0.01, 0.1, 1	0.01, 0.1, 1
	Accuracy	±1% F.S.	±1% F.S.
	TDS Factor	0.01~1.00 (default 0.5)	0.01~1.00 (default 0.5)
Salinity	Range	0.00~10.00 psu, 0.00~10.00 ppt, 0.00~1.00%	0.00~42.00 psu, 0.00~80.00 ppt, 0.00~8.00%
	Resolution	0.01	0.01
	Accuracy	±1% F.S.	±1% F.S.
Resistivity	Range	0.00~10.00 MΩ	0.00~1.00 MΩ
	Resolution	0.01, 0.1, 1	0.01, 0.1, 1
	Accuracy	±1% F.S.	±1% F.S.
Conductivity Ash	Range	0~100%	0~100%
	Resolution	0.01, 0.1, 1	0.01, 0.1, 1
	Accuracy	±1% F.S.	±1% F.S.
	Measurement Standards	ICUMSA GS2/3-17, GS1/3/4/7/8-13	ICUMSA GS2/3-17, GS1/3/4/7/8-13

	Model	S60
Dissolved Oxygen	Range	0.00~20.00 mg/L, 0.0~200.0% saturation
	Resolution	0.01 mg/L, 0.1%
	Accuracy	±0.2 mg/L, ±2.0%
	Calibration	1 or 2 points
	Temperature Compensation	0~50°C/32~122°F, automatic
	Barometric Pressure Correction	60.0~113.3 kPa/450~850 mmHg, manual
	Salinity Correction	0.0~50.0 g/L, manual
	Measurement Modes	Dissolved oxygen, BOD (biochemical oxygen demand), OUR (oxygen uptake rate), SOUR (specific oxygen uptake rate)

	S series testers	
General Specifications	Stability Criteria	Fast, standard, slow
	Measurement Modes	Continuous or auto-read measurement endpoint
	Timed Interval Readings	10, 30, 60, 300 seconds or off
	Calibration Due Alarm	1 to 99 days or off
	Data Transfer	Send to memory or printer
	Power Requirements	Built-in 3V rechargeable batteries

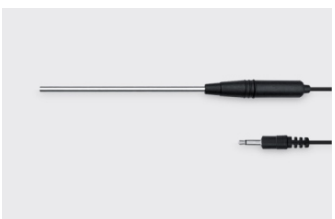
Bante2 Series Portable pH/ORP Meter

Measurement Parameters

- Bante220: pH, mV, temperature
- Bante221: pH, mV, relative mV, temperature

Bante220 Features

- 1 to 3 points calibration with automatic recognition for USA and NIST buffers
- Automatic electrode diagnosis helps user decide whether to replace the pH electrode
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Setup menu allows setting the pH buffer set, number of calibration points, temperature unit, auto-power off, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 100 data sets
- USB communication interface for data transfer or connecting a power adapter to meter



Bante221 Features

- pH
- 1 to 5 points calibration with automatic recognition for USA, NIST and DIN buffers
- Automatic electrode diagnosis shows the pH slope and zero offset
- Automatic temperature compensation ensures accurate readings over the entire range
- Calibration due alarm reminds the 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

- Other Features
- Auto-read function senses and locks the measurement endpoint
- Auto-power off effectively conserves battery life
- Setup menu allows setting the pH buffer set, number of calibration points, resolution, stability criteria, temperature unit, date and time, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 500 data sets
- USB communication interface enables easy data transfer to a PC
- Multi-mode power scheme (battery, power adapter and USB port) ensures the smooth operation of the meter

Specifications

	Model	Bante220	Bante221
pH	Range	-2.00~20.00 pH	-2.000~20.000 pH
	Resolution	0.01 pH	0.001, 0.01, 0.1 pH, selectable
	Accuracy	±0.01 pH	±0.002 pH
	Calibration	1 to 3 points	1 to 5 points
	pH Buffer Options	USA (4.01/7.00/10.01), NIST (4.01/6.86/9.18)	USA, NIST, DIN, 2 custom buffers
ORP	mV Range	±1999 mV	±1999.9 mV
	Relative mV Range	—	±1999.9 mV
	Resolution	1 mV	0.1, 1 mV, selectable
	Accuracy	±1 mV	±0.2 mV
	Calibration	—	1 point
Temperature	Range	0~105°C/32~221°F	0~105°C/32~221°F
	Resolution	0.1°C/0.1°F	0.1°C/0.1°F
	Accuracy	±0.5°C/±0.9°F	±0.5°C/±0.9°F
	Offset Calibration	1 point, reading ±10°C	1 point, reading ±10°C
Other Specifications	Temperature Compensation	0~100°C, manual or automatic	0~100°C, manual or automatic
	Stability Criteria	—	Low or high
	Calibration Due Alarm	—	1 to 31 days or off
	Slope/Offset Display	Yes	Yes
	Hold Function	Manual or auto-endpoint	Manual or auto-endpoint
	Auto-Off	30 minutes after last key pressed	10, 20 or 30 minutes after last key pressed
	Memory	100 data sets	500 data sets
	Communication Interface	USB	USB
	Connector	BNC, 3.5 mm jack socket	BNC, 3.5 mm jack socket
	Display	Custom LCD (80×60 mm)	Custom LCD (80×60 mm)
	Power Requirements	3×1.5V AA batteries or 5V DC power adapter	3×1.5V AA batteries or 5V DC power adapter
	Battery Life	Approximately 150 hours (turn off the backlight)	Approximately 150 hours (turn off the backlight)
	Dimensions	170(L)×85(W)×30(H) mm	170(L)×85(W)×30(H) mm
	Weight	300 g	300 g

Ordering Information

- Bante220/221-**CN**: Meter, E201-BNC plastic-body pH electrode, temperature probe, pH buffer solutions, electrode clip, carrying case
- Bante220/221-**UK**: Meter, P11 glass pH electrode, temperature probe, pH buffer solutions, electrode clip, carrying case
- Bante221-**ORP**: Meter, E201-BNC plastic-body pH electrode, 501 ORP electrode, temperature probe, pH buffer solutions, electrode clip, carrying case

Bante3 Series Portable pH/Ion Meter

Measurement Parameters

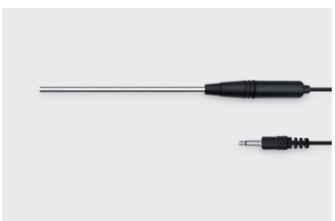
- Bante320: pH, mV, relative mV, ion concentration, temperature
- Bante321: Ion concentration, mV, temperature

Features

- pH
- 1 to 5 points calibration with automatic recognition for USA, NIST and DIN buffers
- Automatic electrode diagnosis shows the pH slope and zero offset

- 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 Concentration
- 2 to 5 points calibration, including the selection of 8 concentration points
- Automatic electrode diagnosis shows the calibration points and electrode slopes
- Selectable concentration units (ppm, mg/L, mol/L) and ionic valency



- General Features
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Calibration due alarm reminds users to calibrate the meter regularly
- Auto-power off effectively conserves battery life
- Setup menu allows setting the number of calibration points, resolution, stability criteria, temperature unit, date and time, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 500 data sets
- USB communication interface enables easy data transfer to a PC
- Multi-mode power scheme (battery, power adapter and USB port) ensures the smooth operation of the meter

Optional Ion Selective Electrodes

Ammonium (NH_4^+), bromide (br^-), cadmium (Cd^{2+}), calcium (Ca^{2+}), chloride (Cl^-), cupric (Cu^{2+}), cyanide (Cn^-), fluoride (F^-), Iodide (I^-), lead (Pb^{2+}), nitrate (NO_3^-), potassium (K^+), silver (Ag^+), sodium (Na^+), sulphide (S^{2-}), ammonia (NH_3)

Specifications

	Model		Bante320	Bante321
pH	Range	-2.000~20.000 pH	•	—
	Resolution	0.001, 0.01, 0.1 pH, selectable	•	—
	Accuracy	±0.002 pH	•	—
	Calibration	1 to 5 points	•	—
	pH Buffer Options	USA, NIST, DIN, 2 custom buffers	•	—
Ion	Range	0.001~19999 (depending on the range of ISE)	•	•
	Resolution	0.001, 0.01, 0.1, 1	•	•
	Accuracy	±0.5% F.S. (monovalent), ±1% F.S. (divalent)	•	•
	Measurement Units	ppm, mg/L, mol/L, mmol/L	•	•
	Calibration	2 to 5 points	•	•
	Calibration Solutions	0.001, 0.01, 0.1, 1, 10, 100, 1000, 10000	•	•
ORP	mV Range	±1999.9 mV	•	•
	Relative mV Range	±1999.9 mV	•	—
	Resolution	0.1, 1 mV, selectable	•	•
	Accuracy	±0.2 mV	•	•
	Calibration	1 point	•	—
Temperature	Range	0~105°C/32~221°F	•	•
	Resolution	0.1°C/0.1°F	•	•
	Accuracy	±0.5°C/±0.9°F	•	•
	Offset Calibration	1 point, reading ±10°C	•	•
Other Specifications	Temperature Compensation	0~100°C, manual or automatic	•	•
	Stability Criteria	Low or high	•	•
	Calibration Due Alarm	1 to 31 days or off	•	•
	Slope/Offset Display	Yes	•	•
	Hold Function	Manual or auto-endpoint	•	•
	Auto-Off	10, 20 or 30 minutes after last key pressed	•	•
	Memory	500 data sets	•	•
	Communication Interface	USB	•	•
	Connector	BNC, 3.5 mm jack socket	•	•
	Display	Custom LCD (80×60 mm)	•	•
	Power Requirements	3×1.5V AA batteries or 5V DC power adapter	•	•
	Battery Life	Approximately 150 hours (turn off the backlight)	•	•
	Dimensions	170(L)×85(W)×30(H) mm	•	•
	Weight	300 g	•	•

Ordering Information

- Bante320-**CN**: Meter, E201-BNC plastic-body pH electrode, temperature probe, pH buffer solutions, electrode clip, carrying case
- Bante320-**UK**: Meter, P11 glass pH electrode, temperature probe, pH buffer solutions, electrode clip, carrying case
- Bante321: Meter, ion selective electrode, temperature probe, 100/1000 ppm standard solutions, ionic strength adjuster, electrode clip, carrying case

Bante 322 Portable Water Hardness Meter

Features

- 2 to 5 points calibration from low to high concentrations
- Selectable water hardness units, including mmol/L, mg/L, german degree(°dH), english degree(°e) and french degree(°f)
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Calibration due alarm reminds users to calibrate the meter regularly
- Auto-power off effectively conserves battery life
- Setup menu allows setting the number of calibration points, stability criteria, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 500 data sets
- USB communication interface for data transfer or connecting a power adapter to meter

Ordering Information

Bante 322: Meter, ISE-WH water hardness electrode, temperature probe, 10/100 mmol/L standard solutions, ionic strength adjuster, electrode clip, carrying case

Specifications

	Model	Bante 322
Water Hardness	Range	0.05~200 mmol/L, 0~1122°dH, 0~2000°fH, 0~1404°e, 0~8020 mg/L (Ca^{2+}), 0~19999 mg/L ($CaCO_3$), 0~11220 mg/L (CaO)
	Resolution	0.001, 0.01, 0.1, 1
	Accuracy	±1% F.S.
	Calibration	2 to 5 points (0.01, 0.1, 1, 10, 100 mmol/L)
Temperature	Range	0.0~105.0°C
	Resolution	0.1°C
	Accuracy	±0.5°C
	Offset Calibration	1 point, reading ±10°C
Other Specifications	Temperature Compensation	0~50°C, manual or automatic
	Hold Function	Manual or auto-endpoint
	Auto-Off	10, 20 or 30 minutes after last key pressed
	Memory	500 data sets
	Communication Interface	USB
	Connector	BNC, 3.5 mm jack socket
	Display	Custom LCD (80×60 mm)
	Power Requirements	3×1.5V AA batteries or 5V DC power adapter
	Dimensions	170(L)×85(W)×30(H) mm
	Weight	300 g

Bante5 Series Portable Conductivity Meter

Measurement Parameters

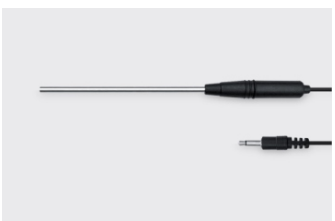
- Bante520: Conductivity, temperature
- Bante530: Conductivity, TDS, temperature
- Bante531: Conductivity, salinity, temperature
- Bante540: Conductivity, TDS, salinity, resistivity, temperature

Bante520 Features

- 1 to 3 points calibration with automatic recognition for conductivity standards
- Automatic electrode diagnosis shows the calibration points and factors
- Selectable cell constant, reference temperature, linear/non-linear and pure water compensation modes
- Automatic temperature compensation corrects conductivity measurements to the reference temperature
- Auto-read function senses and locks the measurement endpoint
- Setup menu allows setting the number of calibration points, temperature unit, auto-power off, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 100 data sets
- USB communication interface for data transfer or connecting a power adapter to meter

Bante530/531/540 Features

- 1 to 5 points calibration with automatic recognition for conductivity standards
- Automatic electrode diagnosis shows the calibration points and factors
- Selectable cell constant, reference temperature, TDS conversion factor, linear and pure water compensations, seawater and practical salinity measurement modes
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Calibration due alarm reminds users to calibrate the meter regularly
- Auto-power off effectively conserves battery life
- Setup menu allows setting the number of calibration points, stability criteria, date and time, temperature unit, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 500 data sets
- USB communication interface enables easy data transfer to a PC
- Multi-mode power scheme (battery, power adapter and USB port) ensures the smooth operation of the meter



Specifications

	Model		Bante520	Bante530	Bante531	Bante540
Conductivity	Range	0.01~20.00, 200.0, 2000µS/cm, 20.00, 200.0mS/cm	•	•	•	•
	Resolution	0.001, 0.01, 0.1, 1	•	•	•	•
	Accuracy	±0.5% F.S.	•	•	•	•
	Calibration	1 to 3 points (Bante520), 1 to 5 points (Bante530/531/540)	•	•	•	•
	Calibration Solutions	10µS/cm, 84µS/cm, 1413µS/cm, 12.88mS/cm, 111.8mS/cm	•	•	•	•
TDS	Range	0~10.00, 100.0, 1000ppm, 10.00, 200.0ppt	—	•	—	•
	Resolution	0.01, 0.1, 1	—	•	—	•
	Accuracy	±1% F.S.	—	•	—	•
	TDS Factor	0.1~1.0 (default 0.5)	—	•	—	•
Salinity	Range	0.00~42.00psu, 0.00~80.00ppt	—	—	•	•
	Resolution	0.01	—	—	•	•
	Accuracy	±1% F.S.	—	—	•	•
Resistivity	Range	0.00~20.00MΩ	—	—	—	•
	Resolution	0.01, 0.1	—	—	—	•
	Accuracy	±1% F.S.	—	—	—	•
Temperature	Range	0~105°C/32~221°F	•	•	•	•
	Resolution	0.1°C/0.1°F	•	•	•	•
	Accuracy	±0.5°C/±0.9°F	•	•	•	•
	Offset Calibration	1 point, reading ±10°C	•	•	•	•
Other Specifications	Temperature Compensation	0~100°C, manual or automatic	•	•	•	•
	Temperature Coefficient	Linear (0.0~10.0%/°C), non-linear, pure water	•	•	•	•
	Reference Temperature	20/25°C	•	•	•	•
	Cell Constant	K=0.1, 1, 10	•	•	•	•
	Stability Criteria	Low or high	—	•	•	•
	Calibration Due Alarm	1 to 31 days or off	—	•	•	•
	Hold Function	Manual or auto-endpoint	•	•	•	•
	Auto-Off	30 minutes after last key pressed (Bante520)	•	—	—	—
		10, 20 or 30 minutes after last key pressed (Bante530/531/540)	—	•	•	•
	Memory	100 data sets (Bante520), 500 data sets (Bante530/531/540)	•	•	•	•
	Communication Interface	USB	•	•	•	•
	Connector	6-pin nimi-DIN, 3.5mm jack socket	•	•	•	•
	Display	Custom LCD (80×60mm)	•	•	•	•
	Power Requirements	3×1.5V AA batteries or 5V DC power adapter	•	•	•	•
	Battery Life	Approximately 150 hours (turn off the backlight)	•	•	•	•
	Dimensions	170(L)×85(W)×30(H)mm	•	•	•	•
	Weight	300g	•	•	•	•

Ordering Information

- Bante520/530/531/540-**S** (for general water samples): Meter, CON-1 conductivity electrode, temperature probe, standard solutions, electrode clip, carrying case
- Bante520/530/531/540-**DL** (for low conductivity liquids): Meter, CON-0.1/CON-1 conductivity electrodes, temperature probe, standard solutions, electrode clip, carrying case
- Bante520/530/531/540-**DH** (for high conductivity liquids): Meter, CON-1/CON-10 conductivity electrodes, temperature probe, standard solutions, electrode clip, carrying case

Bante 8 Series Portable Dissolved Oxygen Meter

Features

- 1 or 2 points calibration using the air-saturated water or zero oxygen solution
- Salinity and barometric pressure compensations eliminate the measurement errors
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Auto-power off effectively conserves battery life.
- Setup menu allows setting the number of calibration points, resolution, concentration unit, temperature unit, stability criteria, date and time, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 500 data sets
- USB communication interface for data transfer or connecting a power adapter to meter

Ordering Information

Bante 820/821: Meter, DO100 dissolved oxygen electrode, electrolyte solution, membrane cap, electrode clip, carrying case

Specifications

	Model	Bante 820	Bante 821
DO	Range	0.00~20.00 mg/L, 0.0~200.0% saturation	0.00~20.00 mg/L, 0.0~200.0% saturation
	Resolution	0.01 mg/L, 0.1%	0.01 mg/L, 0.1%
	Accuracy	±0.5 mg/L, ±2.0%	±0.2 mg/L, ±2.0%
Other Specifications	Calibration	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	60.0~112.5 kPa/450~850 mmHg, manual	60.0~112.5 kPa/450~850 mmHg, manual
	Salinity Correction	0.0~50.0 ppt, manual	0.0~50.0 ppt, manual
	Stability Criteria	—	Low or high
	Calibration Due Alarm	—	1 to 31 days or off
	Hold Function	Manual or auto-endpoint	Manual or auto-endpoint
	Auto-Off	30 minutes after last key pressed	10, 20 or 30 minutes after last key pressed
	Memory	100 data sets	500 data sets
	Communication Interface	USB	USB
	Connector	6-pin nimi-DIN	6-pin nimi-DIN
	Display	Custom LCD (80×60 mm)	Custom LCD (80×60 mm)
	Power Requirements	3×1.5V AA batteries or 5V DC power adapter	3×1.5V AA batteries or 5V DC power adapter
	Dimensions	170(L)×85(W)×30(H) mm	170(L)×85(W)×30(H) mm
	Weight	300 g	300 g

Bante 9 Series Portable Multiparameter Water Quality Meter

Measurement Parameters

- Bante 900P: pH, mV, relative mV, ion concentration, conductivity, TDS, salinity, resistivity, DO, temperature
- Bante 901P: pH, mV, conductivity, TDS, temperature
- Bante 902P: pH, mV, relative mV, conductivity, TDS, salinity, resistivity, temperature
- Bante 903P: pH, mV, relative mV, DO, temperature
- Bante 904P: Conductivity, TDS, salinity, resistivity, DO, temperature

Ordering Information

- Bante 900P:
  Meter, pH/conductivity/DO electrodes, temperature probe, pH buffer reagents, conductivity standard solutions, DO electrolyte solution, DO membrane cap, electrode clip, carrying case
- Bante 901P/902P:
  Meter, pH/conductivity electrodes, temperature probe, pH buffer reagents, conductivity standard solutions, electrode clip, carrying case
- Bante 903P:
  Meter, pH/DO electrodes, temperature probe, pH buffer solutions, DO electrolyte solution, DO membrane cap, electrode clip, carrying case
- Bante 904P:
  Meter, conductivity/DO electrodes, temperature probe, conductivity standard solutions, DO electrolyte solution, DO membrane cap, electrode clip, carrying case

Features

- pH
- Multiparameter water quality meter is equipped with a 3.5 inches backlit LCD display
- 1 to 5 points calibration with automatic recognition for USA, NIST and DIN buffers
- Automatic electrode diagnosis shows the pH slope and zero offset

- 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 Concentration
- 2 to 5 points calibration, including the selection of 8 concentration points
- Automatic electrode diagnosis shows the calibration points and electrode slopes
- Selectable concentration units (ppm, mg/L, mol/L) and ionic valency

- Conductivity/TDS/Salinity/Resistivity
- 1 to 5 points calibration with automatic recognition for conductivity standards
- Selectable cell constant, reference temperature, TDS conversion factor, linear and pure water compensations, seawater and practical salinity measurement modes
- Automatic electrode diagnosis shows the calibration points and factors

- Dissolved Oxygen
- 1 or 2 points calibration using the air-saturated water or zero oxygen solution
- Salinity and barometric pressure compensations eliminate the measurement errors

- General Features
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Calibration due alarm reminds users to calibrate the meter regularly
- Auto-power off effectively conserves battery life
- Setup menu allows setting the number of calibration points, resolution, stability criteria, temperature unit, date and time, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 500 data sets
- USB communication interface enables easy data transfer to a PC
- Multi-mode power scheme (battery, power adapter and USB port) ensures the smooth operation of the meter

Specifications

	Model		Bante900P	Bante901P	Bante902P	Bante903P	Bante904P
pH	Range	-2.000~20.000 pH	•	•	•	•	—
	Resolution	0.001, 0.01, 0.1 pH, selectable	•	•	•	•	—
	Accuracy	±0.002 pH	•	•	•	•	—
	Calibration	1 to 5 points	•	•	•	•	—
	pH Buffer Options	USA, NIST, DIN, 2 custom buffers	•	•	•	•	—
ORP	Range	±1999.9 mV	•	•	•	•	—
	Resolution	0.1, 1 mV, selectable	•	•	•	•	—
	Accuracy	±0.2 mV	•	•	•	•	—
	Calibration	1 point	•	—	•	•	—
Ion	Range	0.001~19999 (deponding on the range of ISE)	•	—	—	—	—
	Resolution	0.001, 0.01, 0.1, 1	•	—	—	—	—
	Accuracy	±0.5% F.S. (monovalent), ±1% F.S. (divalent)	•	—	—	—	—
	Measurement Units	ppm, mg/L, mol/L, mmol/L	•	—	—	—	—
	Calibration	2 to 5 points (0.001, 0.01, 0.1, 1, 10, 100, 1000, 10000)	•	—	—	—	—
Conductivity	Range	0.01~20.00, 200.0, 2000 µS/cm, 20.00, 200.0 mS/cm	•	•	•	—	•
	Resolution	0.001, 0.01, 0.1, 1	•	•	•	—	•
	Accuracy	±0.5% F.S.	•	•	•	—	•
	Calibration	1 to 5 points	•	•	•	—	•
	Calibration Solutions	10 µS/cm, 84 µS/cm, 1413 µS/cm, 12.88 mS/cm, 111.8 mS/cm	•	•	•	—	•
	Temperature Coefficient	Linear (0.0~10.0%/°C), pure water	•	•	•	—	•
	Reference Temperature	20/25°C	•	•	•	—	•
	Cell Constant	K=0.1, 1, 10 or custom	•	•	•	—	•
TDS	Range	0~10.00, 100.0, 1000 ppm, 10.00, 200.0 ppt	•	•	•	—	•
	Resolution	0.01, 0.1, 1	•	•	•	—	•
	Accuracy	±1% F.S.	•	•	•	—	•
	TDS Factor	0.1~1.0 (default 0.5)	•	•	•	—	•
Salinity	Range	0.00~42.00 psu, 0.00~80.00 ppt	•	—	•	—	•
	Resolution	0.01	•	—	•	—	•
	Accuracy	±1% F.S.	•	—	•	—	•
Resistivity	Range	0.00~20.00 MΩ	•	—	•	—	•
	Resolution	0.01, 0.1	•	—	•	—	•
	Accuracy	±1% F.S.	•	—	•	—	•
DO	Range	0.00~20.00 mg/L, 0.0~200.0% saturation	•	—	—	•	•
	Resolution	0.01 mg/L, 0.1%	•	—	—	•	•
	Accuracy	±0.2 mg/L, ±2.0%	•	—	—	•	•
	Calibration	1 or 2 points	•	—	—	•	•
	Barometric Pressure Correction	60.0~112.5 kPa/450~850 mmHg, manual	•	—	—	•	•
	Salinity Correction	0.0~50.0 ppt, manual	•	—	—	•	•
General Spec.	Temperature Compensation	0~100°C/32~212°F, manual or automatic	•	•	•	•	•
	Memory	500 data sets, USB communication interface	•	•	•	•	•
	Power Requirements	3×1.5V AA batteries or 5V DC power adapter	•	•	•	•	•
	Dimensions and Weight	170(L)×85(W)×30(H) mm, 300 g	•	•	•	•	•

A Series Laboratory pH/ORP/Ion Meter

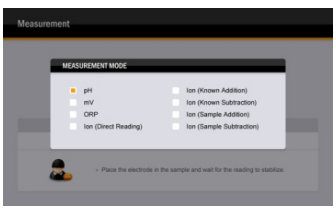
Measurement Parameters

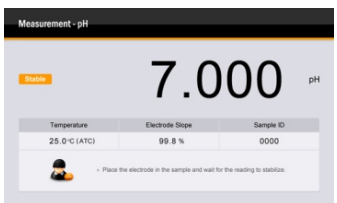
- A120: pH, mV, relative mV, temperature
- A130: pH, mV, relative mV, ion concentration, water hardness, temperature
- A131: Ion concentration, water hardness, mV, temperature

Features

- pH
- 1 to 5 points calibration with automatic recognition for USA, NIST and DIN buffers
- Automatic electrode diagnosis shows the pH slope and zero offset
- Solution temperature coefficient compensates for pure water measurements and references the pH to 25°C

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

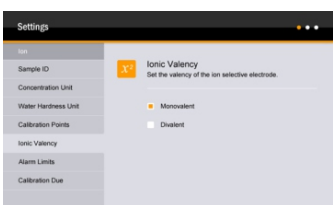


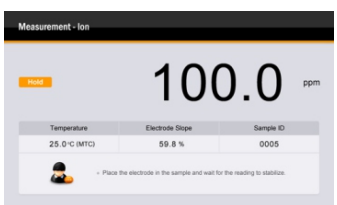


- Ion Concentration
- 2 to 5 points calibration, including the selection of 8 concentration points
- Electrode management can store and recall up to 3 electrode parameters
- Automatic electrode diagnosis shows the calibration points and electrode slopes
- Selectable ion measurement methods (direct reading, known addition, known subtraction, sample addition, sample subtraction) and concentration units (ppm, mg/L, mol/L, mmol/L)

- Water Hardness
- 2 to 5 points calibration from low to high concentrations
- Selectable measurement units (german degree, english degree, french degree, mmol/L, mg/L) are used for professional water hardness measurements

- General Features
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Timed interval readings send measurement data to a PC or printer
- Limit alarm automatically alerts when measurements exceed the specified range
- Calibration due alarm reminds users to calibrate the meter regularly
- Password protection prevents unauthorized calibration and settings
- Expanded memory stores or recalls up to 1000 data sets
- Reset function automatically restores all settings to the factory defaults





Specifications

	Model		A120	A130	A131
pH	Range	-2.000~20.000 pH	•	•	—
	Resolution	0.001, 0.01, selectable	•	•	—
	Accuracy	±0.002 pH	•	•	—
	Calibration	1 to 5 points	•	•	—
	pH Buffer Options	USA, NIST, DIN, 5 custom buffers	•	•	—
ORP	mV Range	±2000.0 mV	•	•	•
	Relative mV Range	±2000.0 mV	•	•	—
	Resolution	0.1 mV	•	•	•
	Accuracy	±0.2 mV	•	•	•
	Calibration	1 point	•	•	—
Ion	Range	0.001~30000 (depending on the range of ISE)	—	•	•
	Resolution	0.001, 0.01, 0.1, 1	—	•	•
	Accuracy	±0.5% F.S. (monovalent), ±1% F.S. (divalent)	—	•	•
	Measurement Units	ppm, mg/L, mol/L, mmol/L	—	•	•
	Calibration	2 to 5 points (0.001, 0.01, 0.1, 1, 10, 100, 1000, 10000)	—	•	•
	Measurement Methods	Direct reading, known addition, known subtraction, sample addition, sample subtraction	—	•	•
	Electrode Management	1 to 3	—	•	•
Water Hardness	Range	0.05~200 mmol/L, 0~1122°dH, 0~1404°e, 0~2000°fH, 0~8000 mg/L (Ca^{2+})	—	•	•
	Resolution	0.001, 0.01, 0.1, 1	—	•	•
	Accuracy	±1% F.S.	—	•	•
	Calibration	2 to 5 points (0.01, 0.1, 1, 10, 100 mmol/L)	—	•	•
Temperature	Range	0~105°C/32~221°F	•	•	•
	Resolution	0.1°C/0.1°F	•	•	•
	Accuracy	±0.5°C/±0.9°F	•	•	•
	Offset Calibration	1 point, reading ±10°C	•	•	•
Other Specifications	Temperature Compensation	0~100°C, manual or automatic	•	•	•
	Solution Temperature Coefficient	25°C	•	•	—
	Stability Criteria	Standard or high-accuracy	•	•	•
	Calibration Due Alarm	1 to 31 days or off	•	•	•
	Interval Readings	10, 30, 60 seconds, 10, 30 minutes or off	•	•	•
	Password Protection	4 digits	•	•	•
	Memory	1000 data sets	•	•	•
	Communication Interface	USB	•	•	•
	Connector	BNC, 3.5 mm jack socket	•	•	•
	Display	7 inches TFT LCD	•	•	•
	Power Requirements	12V DC power adapter	•	•	•
	Dimensions	240(L)×220(W)×80(H) mm	•	•	•
	Weight	1.7 kg	•	•	•

Ordering Information

- A120/130-**CN**: Meter, E201-BNC plastic-body pH electrode, temperature probe, pH buffer reagents, electrode holder, power adapter
- A120/130-**UK**: Meter, P11 glass pH electrode, temperature probe, pH buffer reagents, electrode holder, power adapter
- A131: Meter, ion selective electrode, temperature probe, 100/1000 ppm standard solutions, ionic strength adjuster, electrode holder, power adapter

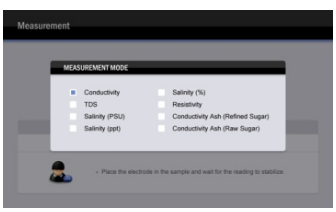
A Series Laboratory Conductivity/TDS/Salinity/Resistivity Meter

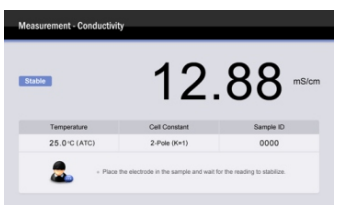
Measurement Parameters

- A150: Conductivity, TDS, salinity, resistivity, conductivity ash, temperature
- A151: Conductivity, TDS, salinity, resistivity, temperature

Features

- 1 to 3 points calibration with automatic recognition for conductivity standards
- Selectable cell constant (0.1/1/10) for matching the connected electrode and recalling the calibration factor
- Selectable reference temperature, TDS conversion factor, linear/non-linear/pure water compensations, seawater and practical salinity measurement modes
- Automatic temperature compensation corrects conductivity measurements to the reference temperature
- Auto-read function senses and locks the measurement endpoint
- Timed interval readings send measurement data to a PC or printer
- Limit alarm automatically alerts when measurements exceed the specified range
- Calibration due alarm reminds users to calibrate the meter regularly
- Calibration log shows the date, time, calibration point and factor
- Password protection prevents unauthorized calibration and settings
- Expanded memory stores or recalls up to 1000 data sets
- Reset function automatically restores all settings to the factory defaults



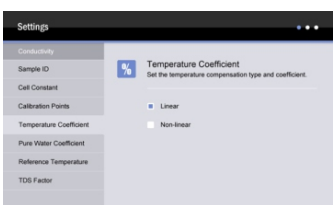


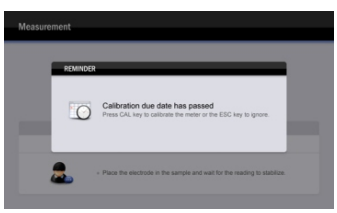
Optional Conductivity Electrodes

- CON-0.1: Suitable for measuring the low conductivity liquids (<10 µS/cm)
- CON-1 : Suitable for measuring the general water samples
- CON-10 : Suitable for measuring the high conductivity liquids (>20 mS/cm)

Ordering Information

- A150/151-**S**: Meter, CON-1 conductivity electrode, temperature probe, conductivity standard solutions, electrode holder, power adapter
- A150/151-**DL**: Meter, CON-0.1 and CON-1 conductivity electrodes, temperature probe, conductivity standard solutions, electrode holder, power adapter
- A150/151-**DH**: Meter, CON-1 and CON-10 conductivity electrodes, temperature probe, conductivity standard solutions, electrode holder, power adapter





Specifications

	Model		A150	A151
Conductivity	Range	0.01~20.00, 200.0, 2000 µS/cm, 20.00, 200.0 mS/cm	•	•
	Resolution	0.001, 0.01, 0.1, 1	•	•
	Accuracy	±0.5% F.S.	•	•
	Calibration	1 to 3 points	•	•
	Calibration Solutions	10 µS/cm, 84 µS/cm, 1413 µS/cm, 12.88 mS/cm, 111.8 mS/cm	•	•
TDS	Range	0~10.00, 100.0, 1000 mg/L, 10.00, 200.0 g/L	•	•
	Resolution	0.01, 0.1, 1	•	•
	Accuracy	±1% F.S.	•	•
	TDS Factor	0.1~1.0 (default 0.5)	•	•
Salinity	Range	0.00~80.00 ppt, 0.00~42.00 psu, 0.00~8.00%	•	•
	Resolution	0.01, 0.1, 1	•	•
	Accuracy	±1% F.S.	•	•
Resistivity	Range	0.00~30.00 MΩ	•	•
	Resolution	0.01, 0.1, 1	•	•
	Accuracy	±1% F.S.	•	•
Conductivity Ash	Range	0~100%	•	—
	Resolution	0.01, 0.1, 1	•	—
	Accuracy	±1% F.S.	•	—
	Measurement Standards	ICUMSA GS2/3-17, GS1/3/4/7/8-13	•	—
Temperature	Range	0~105°C/32~221°F	•	•
	Resolution	0.1°C/0.1°F	•	•
	Accuracy	±0.5°C/±0.9°F	•	•
	Offset Calibration	1 point, reading ±10°C	•	•
Other Specifications	Temperature Compensation	0~100°C, manual or automatic	•	•
	Temperature Coefficient	Linear (0.0~10.0%/°C), non-linear, pure water	•	•
	Reference Temperature	20/25°C	•	•
	Cell Constant	K=0.1, 1, 10	•	•
	Stability Criteria	Standard or high-accuracy	•	•
	Calibration Due Alarm	1 to 31 days or off	•	•
	Interval Readings	10, 30, 60 seconds, 10, 30 minutes or off	•	•
	Password Protection	4 digits	•	•
	Memory	1000 data sets	•	•
	Communication Interface	USB	•	•
	Connector	6-pin nimi-DIN, 3.5 mm jack socket	•	•
	Display	7 inches TFT LCD	•	•
	Power Requirements	12V DC power adapter	•	•
	Dimensions	240(L)×220(W)×80(H) mm	•	•
	Weight	1.7 kg	•	•

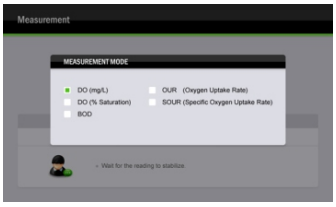
A Series Laboratory DO/BOD/OUR/SOUR Meter

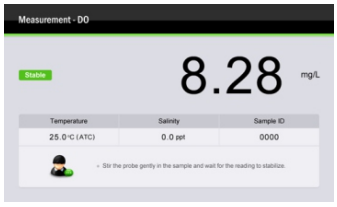
Measurement Parameters

- A180: Dissolved oxygen, BOD, oxygen uptake rate, specific oxygen uptake rate
- A181: Dissolved oxygen

Features

- 1 or 2 points calibration using the air-saturated water or zero oxygen solution
- Salinity and barometric pressure compensations eliminate the measurement errors
- Selectable testing time, beginning/ending DO are used for calculating OUR and SOUR
- Auto-read function senses and locks the measurement endpoint
- Timed interval readings send measurement data to a PC or printer
- Limit alarm automatically alerts when measurements exceed the specified range
- Calibration due alarm reminds users to calibrate the meter regularly
- Password protection prevents unauthorized calibration and settings
- Expanded memory stores or recalls up to 1000 data sets
- Reset function automatically restores all settings to the factory defaults





Ordering Information

A180/181: Meter, DO100 dissolved oxygen electrode, electrolyte solution, membrane cap, electrode holder, power adapter

Specifications

	Model		A180	A181
DO	Range	0.00~20.00 mg/L, 0.0~200.0% saturation	•	•
	Resolution	0.01 mg/L, 0.1%	•	•
	Accuracy	±0.2 mg/L, ±2.0%	•	•
Other Specifications	Calibration	1 or 2 points	•	•
	Temperature Compensation	0~50°C/32~122°F, automatic	•	•
	Barometric Pressure Correction	60.0~113.3 kPa/450~850 mmHg, manual	•	•
	Salinity Correction	0.0~50.0 g/L, manual	•	•
	BOD/OUR/SOUR Measurement	For model A180 only	•	—
	Stability Criteria	Standard or high-accuracy	•	•
	Calibration Due Alarm	1 to 31 days or off	•	•
	Interval Readings	10, 30, 60 seconds, 10, 30 minutes or off	•	•
	Memory	1000 data sets	•	•
	Communication Interface	USB	•	•
	Connector	6-pin nimi-DIN	•	•
	Display	7 inches TFT LCD	•	•
	Power Requirements	12V DC power adapter	•	•
	Dimensions	240(L)×220(W)×80(H)mm	•	•
	Weight	1.7 kg	•	•

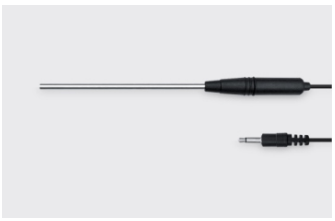
Bante 210/920 Benchtop pH/ORP Meter

Measurement Parameters

- Bante 210: pH, mV, temperature
- Bante 920: pH, mV, relative mV, temperature

Bante 210 Features

- 1 to 3 points calibration with automatic recognition for USA and NIST buffers
- Automatic electrode diagnosis helps user decide whether to replace the pH electrode
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Setup menu allows setting the pH buffer set, number of calibration points, temperature unit, etc.
- Reset function automatically restores all settings to the factory defaults



Bante 920 Features

- pH
- 1 to 5 points calibration with automatic recognition for USA, NIST and DIN buffers
- Automatic electrode diagnosis shows the pH slope and zero offset
- Automatic temperature compensation ensures accurate readings over the entire range
- Calibration due alarm reminds users 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

- Other Features
- Auto-read function senses and locks the measurement endpoint
- Setup menu allows setting the pH buffer set, number of calibration points, resolution, stability criteria, temperature unit, date and time, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 500 data sets
- USB communication interface for data transfer and timed interval readings

Specifications

	Model	Bante210	Bante920
pH	Range	-1.00~15.00 pH	-2.000~20.000 pH
	Resolution	0.01 pH	0.001, 0.01, 0.1 pH, selectable
	Accuracy	±0.01 pH	±0.002 pH
	Calibration	1 to 3 points	1 to 5 points
	pH Buffer Options	USA (4.01/7.00/10.01), NIST (4.01/6.86/9.18)	USA, NIST, DIN, 2 custom buffers
ORP	mV Range	±1999 mV	±1999.9 mV
	Relative mV Range	—	±1999.9 mV
	Resolution	1 mV	0.1, 1 mV, selectable
	Accuracy	±1 mV	±0.2 mV
	Calibration	—	1 point
Temperature	Range	0~105°C/32~221°F	0~105°C/32~221°F
	Resolution	0.1°C/0.1°F	0.1°C/0.1°F
	Accuracy	±1°C/±1.8°F	±0.5°C/±0.9°F
	Offset Calibration	1 point, reading ±10°C	1 point, reading ±10°C
Other Specifications	Temperature Compensation	0~100°C, manual or automatic	0~100°C, manual or automatic
	Stability Criteria	—	Low or high
	Calibration Due Alarm	—	1 to 31 days or off
	Slope/Offset Display	—	Yes
	Hold Function	Manual or auto-endpoint	Manual or auto-endpoint
	Memory	—	500 data sets
	Communication Interface	—	USB
	Connector	BNC, 3.5 mm jack socket	BNC, 3.5 mm jack socket
	Display	Custom LCD (120×60 mm)	Custom LCD (125×100 mm)
	Power Requirements	9V DC power adapter	5V DC power adapter
	Dimensions	210(L)×205(W)×75(H) mm	210(L)×188(W)×60(H) mm
	Weight	1.5 kg	1.5 kg

Ordering Information

- Bante210/920-**CN**: Meter, E201-BNC plastic-body pH electrode, temperature probe, pH buffer reagents, electrode holder, USB cable (for Bante920 only), power adapter
- Bante210/920-**UK**: Meter, P11 glass pH electrode, temperature probe, pH buffer reagents, electrode holder, USB cable (for Bante920 only), power adapter
- Bante920-**ORP**: Meter, E201-BNC plastic-body pH electrode, 501 ORP electrode, temperature probe, pH buffer reagents, electrode holder, USB cable, power adapter

Bante 930/931 Benchtop pH/Ion Meter

Measurement Parameters

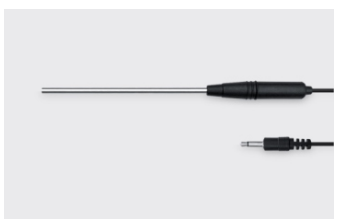
- Bante 930: pH, mV, relative mV, ion concentration, temperature
- Bante 931: Ion concentration, mV, temperature

Features

- pH
- 1 to 5 points calibration with automatic recognition for USA, NIST and DIN buffers
- Automatic electrode diagnosis shows the pH slope and zero offset

- 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 Concentration
- 2 to 5 points calibration, including the selection of 8 concentration points
- Direct ion concentration readout simplifies the measurement process
- Automatic electrode diagnosis shows the calibration points and electrode slopes
- Selectable concentration units (ppm, mg/L, mol/L) and ionic valency



- General Features
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Calibration due alarm reminds users to calibrate the meter regularly
- Setup menu allows setting the number of calibration points, resolution, stability criteria, temperature unit, date and time, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 500 data sets
- USB communication interface for data transfer and timed interval readings

Optional Ion Selective Electrodes

Ammonium (NH_4^+), bromide (br^-), cadmium (Cd^{2+}), calcium (Ca^{2+}), chloride (Cl^-), cupric (Cu^{2+}), cyanide (Cn^-), fluoride (F^-), Iodide (I^-), lead (Pb^{2+}), nitrate (NO_3^-), potassium (K^+), silver (Ag^+), sodium (Na^+), sulphide (S^{2-}), ammonia (NH_3)

Specifications

	Model		Bante 930	Bante 931
pH	Range	-2.000~20.000 pH	•	—
	Resolution	0.001, 0.01, 0.1 pH, selectable	•	—
	Accuracy	±0.002 pH	•	—
	Calibration	1 to 5 points	•	—
	pH Buffer Options	USA, NIST, DIN, 2 custom buffers	•	—
Ion	Range	0.001~19999 (deponding on the range of ISE)	•	•
	Resolution	0.001, 0.01, 0.1, 1	•	•
	Accuracy	±0.5% F.S. (monovalent), ±1% F.S. (divalent)	•	•
	Measurement Units	ppm, mg/L, mol/L, mmol/L	•	•
	Calibration	2 to 5 points	•	•
	Calibration Solutions	0.001, 0.01, 0.1, 1, 10, 100, 1000, 10000	•	•
ORP	mV Range	±1999.9 mV	•	•
	Relative mV Range	±1999.9 mV	•	—
	Resolution	0.1, 1 mV, selectable	•	•
	Accuracy	±0.2 mV	•	•
	Calibration	1 point	•	—
Temperature	Range	0~105°C/32~221°F	•	•
	Resolution	0.1°C/0.1°F	•	•
	Accuracy	±0.5°C/±0.9°F	•	•
	Offset Calibration	1 point, reading ±10°C	•	•
Other Specifications	Temperature Compensation	0~100°C, manual or automatic	•	•
	Stability Criteria	Low or high	•	•
	Calibration Due Alarm	1 to 31 days or off	•	•
	Slope/Offset Display	Yes	•	•
	Hold Function	Manual or auto-endpoint	•	•
	Memory	500 data sets	•	•
	Communication Interface	USB	•	•
	Connector	BNC, 3.5 mm jack socket	•	•
	Display	Custom LCD (125×100 mm)	•	•
	Power Requirements	5V DC power adapter	•	•
	Dimensions	210(L)×188(W)×60(H) mm	•	•
	Weight	1.5 kg	•	•

Ordering Information

- Bante 930-**CN**: Meter, E201-BNC plastic-body pH electrode, temperature probe, pH buffer reagents, electrode holder, USB cable, power adapter
- Bante 930-**UK**: Meter, P11 glass pH electrode, temperature probe, pH buffer reagents, electrode holder, USB cable, power adapter
- Bante 931: Meter, ion selective electrode, temperature probe, 100/1000 ppm standard solutions, ionic strength adjuster, electrode holder, USB cable, power adapter

Bante 932 Benchtop Water Hardness Meter

Features

- 2 to 5 points calibration from low to high concentrations
- Selectable water hardness units, including mmol/L, mg/L, german degree(°dH), english degree(°e) and french degree(°f)
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Calibration due alarm reminds users to calibrate the meter regularly
- Setup menu allows setting the number of calibration points, stability criteria, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 500 data sets
- USB communication interface enables easy data transfer to a PC

Ordering Information

Bante 932: Meter, ISE-WH water hardness electrode, temperature probe, 10/100 mmol/L standard solutions, ionic strength adjuster, electrode holder, USB cable, power adapter

Specifications

	Model	Bante 932
Water Hardness	Range	0.05~200 mmol/L, 0~1122°dH, 0~2000°fH, 0~1404°e, 0~8020 mg/L (Ca^{2+}), 0~19999 mg/L ($CaCO_3$), 0~11220 mg/L (CaO)
	Resolution	0.001, 0.01, 0.1, 1
	Accuracy	±1% F.S.
	Calibration	2 to 5 points (0.01, 0.1, 1, 10, 100 mmol/L)
Temperature	Range	0.0~105.0°C
	Resolution	0.1°C
	Accuracy	±0.5°C
	Offset Calibration	1 point, reading ±10°C
Other Specifications	Temperature Compensation	0~50°C, manual or automatic
	Stability Criteria	Low or high
	Calibration Due Alarm	1 to 31 days or off
	Memory	500 data sets
	Communication Interface	USB
	Connector	BNC, 3.5 mm jack socket
	Display	Custom LCD (125×100 mm)
	Power Requirements	5V DC power adapter
	Dimensions	210(L)×188(W)×60(H) mm
	Weight	1.5 kg

Bante 510/950 Benchtop Conductivity Meter

Measurement Parameters

- Bante 510: Conductivity, TDS, temperature
- Bante 950: Conductivity, TDS, salinity, resistivity, temperature

Bante 510 Features

- 1 to 3 points calibration with automatic recognition for conductivity standards
- Selectable cell constant (0.1/1/10), temperature coefficient and TDS conversion factor
- Automatic temperature compensation corrects conductivity measurements to the reference temperature
- Auto-read function senses and locks the measurement endpoint
- Setup menu allows setting the number of calibration points, temperature unit, etc.
- Reset function automatically restores all settings to the factory defaults

Bante 950 Features

- 1 to 5 points calibration with automatic recognition for conductivity standards
- Automatic electrode diagnosis shows the calibration points and factors
- Selectable cell constant, reference temperature, TDS conversion factor, linear and pure water compensations, seawater and practical salinity measurement modes
- Automatic temperature compensation corrects conductivity measurements to the reference temperature
- Auto-read function senses and locks the measurement endpoint
- Calibration due alarm reminds users to calibrate the meter regularly
- Setup menu allows setting the number of calibration points, stability criteria, date and time, temperature unit, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 500 data sets
- USB communication interface for data transfer and timed interval readings

Optional Conductivity Electrodes

- CON-0.1: Suitable for measuring the low conductivity liquids (<10 µS/cm)
- CON-1 : Suitable for measuring the general water samples
- CON-10 : Suitable for measuring the high conductivity liquids (>20 mS/cm)

Specifications

	Model	Bante510	Bante950
Conductivity	Range	0.01~20.00, 200.0, 2000µS/cm, 20.00, 200.0mS/cm	0.01~20.00, 200.0, 2000µS/cm, 20.00, 200.0mS/cm
	Resolution	0.001, 0.01, 0.1, 1	0.001, 0.01, 0.1, 1
	Accuracy	±1% F.S.	±0.5% F.S.
	Calibration	1 to 3 points	1 to 5 points
	Calibration Solutions	10µS/cm, 84µS/cm, 1413µS/cm, 12.88mS/cm, 111.8mS/cm	10µS/cm, 84µS/cm, 1413µS/cm, 12.88mS/cm, 111.8mS/cm
TDS	Range	0~10.00, 100.0, 1000ppm, 10.00, 200.0ppt	0~10.00, 100.0, 1000ppm, 10.00, 200.0ppt
	Resolution	0.01, 0.1, 1	0.01, 0.1, 1
	Accuracy	±1% F.S.	±1% F.S.
	TDS Factor	0.1~1.0 (default 0.5)	0.1~1.0 (default 0.5)
Salinity	Range	—	0.00~42.00psu, 0.00~80.00ppt
	Resolution	—	0.01
	Accuracy	—	±1% F.S.
Resistivity	Range	—	0.00~20.00MΩ
	Resolution	—	0.01, 0.1
	Accuracy	—	±1% F.S.
Temperature	Range	0~105°C/32~221°F	0~105°C/32~221°F
	Resolution	0.1°C/0.1°F	0.1°C/0.1°F
	Accuracy	±1°C/±1.8°F	±0.5°C/±0.9°F
	Offset Calibration	1 point, reading ±10°C	1 point, reading ±10°C
Other Specifications	Temperature Compensation	0~100°C, manual or automatic	0~100°C, manual or automatic
	Temperature Coefficient	Linear (0.0~10.0%/°C)	Linear (0.0~10.0%/°C), pure water
	Reference Temperature	25°C	20/25°C
	Cell Constant	K=0.1, 1, 10 or custom	K=0.1, 1, 10 or custom
	Stability Criteria	—	Low or high
	Calibration Due Alarm	—	1 to 31 days or off
	Calibration Factor Display	—	Yes
	Hold Function	Manual or auto-endpoint	Manual or auto-endpoint
	Memory	—	500 data sets
	Communication Interface	—	USB
	Connector	6-pin nimi-DIN, 3.5mm jack socket	6-pin nimi-DIN, 3.5mm jack socket
	Display	Custom LCD (120×60mm)	Custom LCD (125×100mm)
	Power Requirements	9V DC power adapter	5V DC power adapter
	Dimensions	210(L)×205(W)×75(H)mm	210(L)×188(W)×60(H)mm
	Weight	1.5kg	1.5kg

Ordering Information

- Bante510/950-**S**: Meter, CON-1 conductivity electrode, temperature probe, standard solutions, electrode holder, USB cable (for Bante950 only), power adapter
- Bante510/950-**DL**: Meter, CON-0.1/CON-1 conductivity electrodes, temperature probe, standard solutions, electrode holder, USB cable (for Bante950 only), power adapter
- Bante510/950-**DH**: Meter, CON-1/CON-10 conductivity electrodes, temperature probe, standard solutions, electrode holder, USB cable (for Bante950 only), power adapter

Bante 810/980 Benchtop Dissolved Oxygen Meter

Bante 810 Features

- 1 or 2 points calibration using the air-saturated water or zero oxygen solution
- Salinity and barometric pressure compensations eliminate the measurement errors
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Setup menu allows setting the number of calibration points, concentration unit, temperature unit, etc.
- Reset function automatically restores all settings to the factory defaults

Ordering Information

Bante 810: Meter, DO100 dissolved oxygen electrode, electrolyte solution, membrane cap, electrode holder, power adapter

Bante 980 Features

- 1 or 2 points calibration using the air-saturated water or zero oxygen solution
- Salinity and barometric pressure compensations eliminate the measurement errors
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Calibration due alarm reminds users to calibrate the meter regularly
- Setup menu allows setting the number of calibration points, resolution, stability criteria, temperature unit, concentration unit, date and time, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 500 data sets
- USB communication interface for data transfer and timed interval readings

Ordering Information

Bante 980: Meter, DO100 dissolved oxygen electrode, electrolyte solution, membrane cap, electrode holder, USB cable, power adapter

Specifications

	Model	Bante 810	Bante 980
DO	Range	0.0~20.0 mg/L or ppm	0.00~20.00 mg/L or ppm
	Resolution	0.1 mg/L	0.01, 0.1 mg/L, selectable
	Accuracy	±0.5 mg/L	±0.2 mg/L
% saturation	Range	0.0~200.0%	0.0~200.0%
	Resolution	0.1%	0.1, 1%, selectable
	Accuracy	±2.0%	±2.0%
Temperature	Range	0~60°C/32~140°F	0~60°C/32~140°F
	Resolution	0.1°C/0.1°F	0.1°C/0.1°F
	Accuracy	±1°C/±1.8°F	±0.5°C/±0.9°F
	Offset Calibration	1 point, reading ±10°C	1 point, reading ±10°C
Other Specifications	Dissolved Oxygen Calibration	1 or 2 points	1 or 2 points
	Temperature Compensation	0~40°C, automatic	0~50°C, automatic
	Barometric Pressure Correction	60.0~112.5 kPa/450~850 mmHg, manual	60.0~112.5 kPa/450~850 mmHg, manual
	Salinity Correction	0~35 g/L, manual	0.0~50.0 ppt, manual
	Stability Criteria	—	Low or high
	Calibration Due Alarm	—	1 to 31 days or off
	Hold Function	Manual or auto-endpoint	Manual or auto-endpoint
	Memory	—	500 data sets
	Communication Interface	—	USB
	Connector	6-pin nimi-DIN	6-pin nimi-DIN
	Display	Custom LCD (120×60 mm)	Custom LCD (125×100 mm)
	Power Requirements	9V DC power adapter	5V DC power adapter
	Dimensions	210(L)×205(W)×75(H) mm	210(L)×188(W)×60(H) mm
	Weight	1.5 kg	1.5 kg

Bante 9 Series Benchtop Multiparameter Water Quality Meter

Measurement Parameters

- Bante 900: pH, mV, relative mV, ion concentration, conductivity, TDS, salinity, resistivity, DO, temperature
- Bante 901: pH, mV, conductivity, TDS, temperature
- Bante 902: pH, mV, relative mV, conductivity, TDS, salinity, resistivity, temperature
- Bante 903: pH, mV, relative mV, DO, temperature
- Bante 904: Conductivity, TDS, salinity, resistivity, DO, temperature

Ordering Information

- Bante 900:
  Meter, pH/conductivity/DO electrodes, temperature probe, pH buffer reagents, conductivity standard solutions, DO electrolyte solution, DO membrane cap, electrode holder, USB cable, power adapter

- Bante 901/902:
  Meter, pH/conductivity electrodes, temperature probe, pH buffer reagents, conductivity standard solutions, electrode holder, USB cable, power adapter

- Bante 903:
  Meter, pH/DO electrodes, temperature probe, pH buffer reagents, DO electrolyte solution, DO membrane cap, electrode holder, USB cable, power adapter

- Bante 904:
  Meter, conductivity/DO electrodes, temperature probe, conductivity standard solutions, DO electrolyte solution, DO membrane cap, electrode holder, USB cable, power adapter

Features

- pH
- Multiparameter water quality meter is equipped with a 6.5 inches backlit LCD display
- 1 to 5 points calibration with automatic recognition for USA, NIST and DIN buffers
- Automatic electrode diagnosis shows the pH slope and zero offset

- 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 Concentration
- 2 to 5 points calibration, including the selection of 8 concentration points
- Automatic electrode diagnosis shows the calibration points and electrode slopes
- Selectable concentration units (ppm, mg/L, mol/L) and ionic valency

- Conductivity/TDS/Salinity/Resistivity
- 1 to 5 points calibration with automatic recognition for conductivity standards
- Selectable cell constant, reference temperature, TDS conversion factor, linear and pure water compensations, seawater and practical salinity measurement modes
- Automatic electrode diagnosis shows the calibration points and factors

- Dissolved Oxygen
- 1 or 2 points calibration using the air-saturated water or zero oxygen solution
- Salinity and barometric pressure compensations eliminate the measurement errors

- General Features
- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-read function senses and locks the measurement endpoint
- Calibration due alarm reminds users to calibrate the meter regularly
- Setup menu allows setting the number of calibration points, resolution, stability criteria, temperature unit, date and time, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 500 data sets
- USB communication interface for data transfer and timed interval readings

Specifications

	Model		Bante900	Bante901	Bante902	Bante903	Bante904
pH	Range	-2.000~20.000 pH	•	•	•	•	—
	Resolution	0.001, 0.01, 0.1 pH, selectable	•	•	•	•	—
	Accuracy	±0.002 pH	•	•	•	•	—
	Calibration	1 to 5 points	•	•	•	•	—
	pH Buffer Options	USA, NIST, DIN, 2 custom buffers	•	•	•	•	—
ORP	Range	±1999.9 mV	•	•	•	•	—
	Resolution	0.1, 1 mV, selectable	•	•	•	•	—
	Accuracy	±0.2 mV	•	•	•	•	—
	Calibration	1 point	•	—	•	•	—
Ion	Range	0.001~19999 (deponding on the range of ISE)	•	—	—	—	—
	Resolution	0.001, 0.01, 0.1, 1	•	—	—	—	—
	Accuracy	±0.5% F.S. (monovalent), ±1% F.S. (divalent)	•	—	—	—	—
	Measurement Units	ppm, mg/L, mol/L, mmol/L	•	—	—	—	—
	Calibration	2 to 5 points (0.001, 0.01, 0.1, 1, 10, 100, 1000, 10000)	•	—	—	—	—
Conductivity	Range	0.01~20.00, 200.0, 2000 µS/cm, 20.00, 200.0 mS/cm	•	•	•	—	•
	Resolution	0.001, 0.01, 0.1, 1	•	•	•	—	•
	Accuracy	±0.5% F.S.	•	•	•	—	•
	Calibration	1 to 5 points	•	•	•	—	•
	Calibration Solutions	10 µS/cm, 84 µS/cm, 1413 µS/cm, 12.88 mS/cm, 111.8 mS/cm	•	•	•	—	•
	Temperature Coefficient	Linear (0.0~10.0%/°C), pure water	•	•	•	—	•
	Reference Temperature	20/25°C	•	•	•	—	•
	Cell Constant	K=0.1, 1, 10 or custom	•	•	•	—	•
TDS	Range	0~10.00, 100.0, 1000 ppm, 10.00, 200.0 ppt	•	•	•	—	•
	Resolution	0.01, 0.1, 1	•	•	•	—	•
	Accuracy	±1% F.S.	•	•	•	—	•
	TDS Factor	0.1~1.0 (default 0.5)	•	•	•	—	•
Salinity	Range	0.00~42.00 psu, 0.00~80.00 ppt	•	—	•	—	•
	Resolution	0.01	•	—	•	—	•
	Accuracy	±1% F.S.	•	—	•	—	•
Resistivity	Range	0.00~20.00 MΩ	•	—	•	—	•
	Resolution	0.01, 0.1	•	—	•	—	•
	Accuracy	±1% F.S.	•	—	•	—	•
DO	Range	0.00~20.00 mg/L, 0.0~200.0% saturation	•	—	—	•	•
	Resolution	0.01 mg/L, 0.1%	•	—	—	•	•
	Accuracy	±0.2 mg/L, ±2.0%	•	—	—	•	•
	Calibration	1 or 2 points	•	—	—	•	•
	Barometric Pressure Correction	60.0~112.5 kPa/450~850 mmHg, manual	•	—	—	•	•
	Salinity Correction	0.0~50.0 ppt, manual	•	—	—	•	•
General Spec.	Temperature Compensation	0~100°C/32~212°F, manual or automatic	•	•	•	•	•
	Memory	500 data sets, USB communication interface	•	•	•	•	•
	Power Requirements	5V DC power adapter	•	•	•	•	•
	Dimensions and Weight	210(L)×188(W)×60(H)mm, 1.5kg	•	•	•	•	•

BI-620 Industrial pH Controller

Features

- 1 to 3 points calibration with auto-buffer recognition
- Selectable pH buffer set, including the USA and NIST options
- Automatic temperature compensation ensures accurate readings over the entire range
- Automatic electrode diagnosis helps the user decide whether to replace the sensor
- Setup menu allows setting the number of calibration points, alarm limits, hysteresis value, 4 to 20 mA output, etc.
- Reset function automatically restores all settings to the factory defaults

Ordering Information

BI-620: Controller, IE-20T industrial pH electrode, pH buffer reagents

Specifications

	Model	BI-620
pH	Range	-1.00~15.00 pH
	Resolution	0.01 pH
	Accuracy	±0.01 pH
	Calibration	1 to 3 points
	pH Buffer Options	USA (4.01/7.00/10.01), NIST (4.01/6.86/9.18)
mV	Range	±1000 mV
	Resolution	1 mV
	Accuracy	±1 mV
Temperature	Range	0~100°C/32~212°F
	Resolution	0.1°C/0.1°F
	Accuracy	±1°C/±1.8°F
	Offset Calibration	1 point, reading ±10°C
Communication	Signal Output	4~20 mA
	Load	Max. 500 Ω
	Low or High Alarm	0.00~14.00 pH, selectable
	Communication Interface	RS485
	Connection Terminals	Detachable screw terminals
Other Specifications	Temperature Compensation	0~100°C, automatic
	Environmental Conditions	Ambient temperature<60°C, relative humidity<80%
	Power Requirements	DC 24V
	Dimensions	96(L)×96(W)×75(H) mm
	Weight	350 g

BI-650 Industrial Conductivity Controller

Features

- 1 to 3 points calibration with automatic recognition for conductivity standards
- Selectable cell constant, temperature coefficient and TDS conversion factor
- Automatic temperature compensation ensures accurate readings over the entire range
- Setup menu allows setting the number of calibration points, alarm limits, hysteresis value, 4 to 20 mA output, etc.
- Reset function automatically restores all settings to the factory defaults

Optional Conductivity Electrodes

- IE-50LT : Suitable for measuring the pure water (<10 µS/cm)
- IE-50MT: Suitable for measuring the general water samples
- IE-50HT : Suitable for measuring the high conductivity liquids (>20 mS/cm)

Ordering Information

BI-650: Controller, IE-50MT industrial conductivity electrode

Specifications

	Model	BI-650
Conductivity	Range	0.01~20.00, 200.0, 2000 µS/cm, 20.00, 200.0 mS/cm
	Resolution	0.001, 0.01, 0.1, 1
	Accuracy	±1% F.S.
	Calibration	1 to 3 points (84 uS/cm, 1413 uS/cm, 12.88 mS/cm, 111.8 mS/cm)
TDS	Range	0~10.00, 100.0, 1000 ppm, 10.00, 200.0 ppt
	Resolution	0.01, 0.1, 1
	Accuracy	±1% F.S.
	TDS Factor	0.1~1.0 (default 0.5)
Temperature	Range	0~100°C/32~212°F
	Resolution	0.1°C/0.1°F
	Accuracy	±1°C/±1.8°F
	Offset Calibration	1 point, reading ±10°C
Communication	Signal Output	4~20 mA
	Load	Max. 500 Ω
	Low or High Alarm	0.02 µS/cm~20.0 mS/cm, selectable
	Communication Interface	RS485
	Connection Terminals	Detachable screw terminals
Other Specifications	Temperature Compensation	0~100°C, automatic
	Environmental Conditions	Ambient temperature<60°C, relative humidity<80%
	Power Requirements	DC 24V
	Dimensions	96(L)×96(W)×75(H) mm
	Weight	350 g

BI-680 Industrial Dissolved Oxygen Controller

Features

- 1 or 2 points calibration using the air-saturated water or zero oxygen solution
- Salinity and barometric pressure compensations eliminate the measurement errors
- Automatic temperature compensation ensures accurate readings over the entire range
- Setup menu allows setting the number of calibration points, measurement unit, alarm limits, hysteresis value, 4 to 20 mA output, etc.
- Reset function automatically restores all settings to the factory defaults

Ordering Information

BI-680: Controller, IE-80T industrial dissolved oxygen electrode, electrolyte solution, membrane cap

Specifications

	Model	BI-680
DO	Range	0.00~20.00 mg/L
	Resolution	0.01 mg/L
	Accuracy	±0.5 mg/L
% Saturation	Range	0.0~200.0%
	Resolution	0.1%
	Accuracy	±2.0%
Temperature	Range	0~60°C/32~140°F
	Resolution	0.1°C/0.1°F
	Accuracy	±1°C/±1.8°F
	Offset Calibration	1 point, reading ±10°C
Communication	Signal Output	4~20 mA
	Load	Max. 500 Ω
	Low or High Alarm	0.00~20.00 mg/L, selectable
	Communication Interface	RS485
	Connection Terminals	Detachable screw terminals
Other Specifications	Dissolved Oxygen Calibration	1 or 2 points
	Temperature Compensation	0~40°C, automatic
	Barometric Pressure Correction	60.0~112.5 kPa/450~850 mmHg, manual
	Salinity Correction	0.0~35.0 g/L, manual
	Power Requirements	DC 24V
	Dimensions	96(L)×96(W)×75(H) mm
	Weight	350 g

TB100 Portable Turbidity Meter

Features

- High-performance turbidity meter meets the design criteria in ISO 7027
- 2 to 5 points calibration using the Formazin Standards
- Selectable 4 turbidity units, including the NTU, FNU, EBC and ASBC
- Single measurement mode automatically senses and locks a stable reading
- Continuous measurement mode can be used for indexing or matching the sample vials
- Auto-power off effectively conserves battery life
- Setup menu allows setting the number of calibration points, resolution, date and time, etc.
- Reset function automatically restores all settings to the factory defaults
- Expanded memory stores or recalls up to 100 data sets
- USB communication interface for data transfer or connecting a power adapter to meter

Ordering Information

TB100: Meter, turbidity standards (0.02, 200, 500, 1000 NTU), sample vials, lint-free cloth, carrying case

Specifications

	Model	TB100
Turbidity	Principle	ISO 7027 nephelometric method (90°)
	Range	0~1100 NTU, 0~275 EBC, 0~9999 ASBC
	Resolution	0.01 (0~99 NTU), 0.1 (100~999 NTU), 1 (1000~1100 NTU)
	Accuracy	±2% of reading (0~500 NTU), ±3% of reading (501~1100 NTU)
	Calibration	2 to 5 points
	Calibration Standards	0.02, 10, 200, 500, 1000 NTU
Other Specifications	Light Source	Infrared-emitting diode (850 nm wavelength)
	Detector	Silicon photodiode
	Stray Light	<0.02 NTU
	Sample Vial	60 (H)×25 (Ø) mm
	Sample Volume	20 mL
	Memory	100 data sets
	Communication Interface	USB
	Operating Temperature	0~50°C
	Display	Custom LCD (60×40 mm)
	Power Requirements	3×1.5V AA batteries or 5V DC power adapter
	Dimensions	180 (L)×85 (W)×70 (H) mm
	Weight	300 g

TB200 Benchtop Turbidity Meter

Ordering Information

TB200: Meter, turbidity standards (0.02, 200, 500, 1000 NTU), sample vials, lint-free cloth, power adapter

Measurement Parameters

Turbidity, total suspended solids (TSS)

Features

- 2 to 7 points calibration using the Formazin Standards
- Selectable 4 turbidity units, including the NTU, FNU, EBC and ASBC
- TSS conversion factor ensures the accurate measurement of total suspended solids
- Auto-read function senses and locks a stable reading
- Setup menu allows setting the date and time, measurement mode, resolution, etc.
- Password protection prevents unauthorized calibration and settings
- Expanded memory stores or recalls up to 200 data sets
- Reset function automatically restores all settings to the factory defaults
- USB communication interface enables easy transfer of data from the meter to a PC

Specifications

	Model	TB200
Turbidity	Range	0~2000 NTU, 0~500 EBC, 0~9999 ASBC
	Resolution	0.01 (0~99 NTU), 0.1 (100~999 NTU), 1 (1000~2000 NTU)
	Accuracy	±2% of reading (0~500 NTU), ±3% of reading (501~2000 NTU)
	Calibration	2 to 7 points
	Calibration Standards	0.02, 10, 200, 500, 1000, 1500, 2000 NTU
TSS	Range	Deponding on the TSS conversion factor
	Accuracy	3% of reading
Other Specifications	Light Source	Infrared-emitting diode (850 nm wavelength)
	Detector	Silicon photodiode
	Stray Light	<0.02 NTU
	Sample Vial	60(H)×25(Ø)mm
	Memory	200 data sets
	Communication Interface	USB
	Operating Temperature	0~50°C
	Display	4.5 inches TFT LCD
	Power Requirements	12V DC power adapter
	Dimensions	250(L)×177(W)×96(H)mm
	Weight	1.2 kg

POL-100 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 instrument is installed with a 589nm light source. Switch on the power, the polarized light beam passes through the polarizer filter. The operator can observe distinct visual fields through the eyepiece. Place the sample tube into the measurement chamber and rotate the vernier knob until the visual fields appear the equal brightness. Read and record the measured values from the vernier scale.

Ordering Information

POL-100/WXG-4: Polarimeter, glass sample tubes (100 and 200 mm), sealing rings

Specifications

Model	POL-100	WXG-4
Range	±180°	±180°
Scale Value	1°	1°
Vernier	0.05°	0.05°
Magnifier	3X	3X
Light Source	LED and interference filter	Sodium lamp
Optical Wavelength	589nm	589nm
Sample Tube Length	Up to 200 mm	Up to 200 mm
Power Requirements	AC 220V/50Hz	AC 220V/50Hz
Dimensions	500(L)×135(W)×330(H)mm	500(L)×135(W)×330(H)mm
Weight	5kg	5kg

POL-200 Semiautomatic Polarimeter

Measurement Parameters

Optical rotation, specific rotation, concentration, international sugar scale (°Z)

Features

- Multiparameter semiautomatic polarimeter is installed with a 5.6 inches touch screen
- LED and interference filters provide a reliable and long-life light source
- Zero point calibration can adjust and eliminate measurement errors
- Built-in temperature sensor automatically compensates for and converts measurements to the specific rotation value
- Selectable tube length options include 100 mm, 200 mm, or a manually entered value
- Expanded memory stores and recalls up to 100 data sets
- Reset function automatically restores all settings to the factory defaults
- On-screen operation guide helps users to quickly use the polarimeter

Ordering Information

POL-200: Polarimeter, glass sample tubes (100 and 200 mm), sealing rings

Specifications

Model	POL-200
Range	±90°/±130°Z
Resolution	0.005°
Accuracy	±0.02°/±0.05°Z
Calibration	1 to 3 points
Temperature Correction	0~50°C
Light Source	LED and interference filter
Optical Wavelength	589 nm
Sample Tube Length	Up to 200 mm
Data Storage	100 data sets
Communication Interface	USB
Display	5.6 inches TFT touch screen
Power Requirements	AC 220V/50Hz
Dimensions	550(L)×300(W)×220(H)mm
Weight	7.5 kg

JB-1A Mini Magnetic Stirrer

Features

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

Specifications

Model	JB-1A
Stirring Volume	0~2000 mL
Stirring Speed	0~1250 rpm
Top Plate Size	Ø145 mm
Top Plate Material	PC
Stir Bar Size	30(L)×7(Ø) mm
Power Requirements	AC 220V/50Hz
Dimensions	185(Ø)×75(H) mm
Weight	0.6 kg

MS Series Hotplate Magnetic Stirrer

Features

- High-performance hotplate magnetic stirrer comes with a temperature probe
- Large LCD display clearly shows the timer, temperature and running status
- Automatic constant temperature through a connected sensor
- 1 point offset calibration ensures the accurate temperature control
- Push-button speed control effectively prevents hot liquids from splashing and potentially harming the operator
- Adjustable heating temperature, stirring times and speeds

Ordering Information

- MS200: Stirrer, stir bar
- MS300/400: Stirrer, stir bar, temperature probe, stand set

Specifications

Model	MS200	MS300	MS400
Stirring Volume	0~2000 mL		
Stirring Speed	0~1250 rpm		
Heater	—	380W	450W
Hotplate Temperature	—	Max. 300°C	Max. 400°C
Timer Range	Up to 999 minutes		
Top Plate Size	135(L)×135(W) mm		
Top Plate Material	Stainless steel		
Display	Custom LCD (95×35 mm)		
Power Requirements	AC 220V/50Hz		
Environmental Conditions	<50°C, relative humidity < 80%		
Dimensions	230(L)×180(W)×120(H) mm		
Weight	2.2 kg		

MS400C Hotplate Magnetic Stirrer

Features

- Ceramic coated top plate is easy to clean
- Large LCD display clearly shows the running time, temperature and stirring speed
- Push-button speed control prevents the stir bar from accidentally stalling
- External temperature sensor controls the heater to either heat up or maintain the temperature at the set value
- Single point temperature calibration

Specifications

Model	MS400C
Stirring Volume	0~2000 mL
Stirring Speed	0~2500 rpm
Heater	300W
Hotplate Temperature	Max. 300°C
Timer Range	Up to 999 minutes
Top Plate Size	135 (L) × 135 (W) mm
Top Plate Material	Ceramic coating
Display	Custom LCD (95 × 35 mm)
Power Requirements	AC 220V/50Hz
Environmental Conditions	< 50°C, relative humidity < 80%
Dimensions	230 (L) × 180 (W) × 120 (H) mm
Weight	2.2 kg

Ordering Information

MS400C: Stirrer, stir bar, temperature probe, stand set

P Series Glass pH Electrode

P11
Glass pH electrode, suitable for measuring the non-high temperature liquids

Range	0~14 pH
Operating Temperature	0~80°C, 32~176°F
Reference	AgCl, single junction
Liquid Junction	Annular ceramic
Body Type	Glass
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

P11-LiCl
Glass pH electrode, suitable for measuring the non-aqueous samples

Range	0~14 pH
Operating Temperature	0~80°C, 32~176°F
Reference	AgCl, double junction
Liquid Junction	Ceramic
Body Type	Glass
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

P11-HA
Glass pH electrode, suitable for measuring the high alkalines samples

Range	0~14 pH
Operating Temperature	0~100°C, 32~212°F
Reference	Ag/AgCl, single junction
Liquid Junction	Ceramic
Body Type	Glass
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

P11-NA
Glass pH electrode, suitable for measuring the biofuels

Range	0~14 pH
Operating Temperature	0~60°C, 32~140°F
Reference	Ag/AgCl, double junction
Liquid Junction	Ceramic
Body Type	Glass
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

P12
Glass pH electrode, suitable for measuring the sample in the test tube

Range	0~14 pH
Operating Temperature	0~80°C, 32~176°F
Reference	AgCl, single junction
Liquid Junction	Frit ceramic
Body Type	Glass
Connector	BNC, 1m cable
Dimensions	150(L)×6(Ø)mm

P13
Glass pH electrode, suitable for measuring the micro-volume samples

Range	0~14 pH
Operating Temperature	0~80°C, 32~176°F
Reference	AgCl, single junction
Liquid Junction	Frit ceramic
Body Type	Glass
Connector	BNC, 1m cable
Dimensions	90(L)×4.3(Ø)mm

P15
Glass pH electrode, suitable for measuring the low conductivity liquids

Range	0~11 pH
Operating Temperature	0~50°C, 32~122°F
Reference	HgCl, single junction
Liquid Junction	Annular ceramic
Body Type	Glass
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

P16
Glass pH electrode, suitable for measuring the liquids with Tris buffers

Range	0~14 pH
Operating Temperature	0~50°C, 32~122°F
Reference	HgCl, single junction
Liquid Junction	Frit ceramic
Body Type	Glass
Connector	BNC, 1m cable
Dimensions	90(L)×6(Ø)mm

P18
Glass pH electrode, suitable for measuring the slurrie and soil

Range	0~14 pH
Operating Temperature	0~80°C, 32~176°F
Reference	AgCl, single junction
Liquid Junction	Annular ceramic
Body Type	Glass
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

P19
Glass pH electrode, suitable for measuring the semisolids

Range	0~14 pH
Operating Temperature	0~80°C, 32~176°F
Reference	AgCl, single junction
Liquid Junction	Frit ceramic
Body Type	Glass
Connector	BNC, 1m cable
Dimensions	40(L)×6(Ø)mm

P21
Glass pH electrode, suitable for measuring the colloids

Range	0~14 pH
Operating Temperature	0~80°C, 32~176°F
Reference	AgCl, double junction
Liquid Junction	Sleeve
Body Type	Glass
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

P22
Glass pH electrode, suitable for measuring the high temperature samples

Range	0~14 pH
Operating Temperature	0~130°C, 32~266°F
Reference	AgCl, double junction
Liquid Junction	Porous teflon
Body Type	Glass
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

E Series Laboratory pH Electrode

E201-BNC
General purpose pH electrode, suitable for measuring the liquids

Range	0~14 pH
Operating Temperature	0~60°C, 32~140°F
Reference	AgCl, single junction
Liquid Junction	Fiber
Body Type	Epoxy
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

E202-BNC
Flat surface pH electrode, suitable for measuring the semisolids

Range	0~14 pH
Operating Temperature	0~60°C, 32~140°F
Reference	AgCl, single junction
Liquid Junction	Teflon
Body Type	Epoxy
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

E203-BNC
General purpose pH electrode with a built-in temperature sensor (10KΩ)

Range	0~14 pH
Operating Temperature	0~60°C, 32~140°F
Reference	AgCl, single junction
Liquid Junction	Fiber
Body Type	Epoxy
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

5 Series Laboratory ORP Electrode

501
General purpose ORP electrode, suitable for the sample with a strong redox potential

Sensor Type	Platinum pin
Operating Temperature	0~80°C, 32~176°F
Reference	Ag/AgCl
Liquid Junction	Teflon
Body Type	Epoxy
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

502
General purpose ORP electrode, suitable for the sample with a weak redox potential

Sensor Type	Platinum band
Operating Temperature	0~80°C, 32~176°F
Reference	Ag/AgCl
Liquid Junction	Teflon
Body Type	Epoxy
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

504
Glass ORP electrode, suitable for high temperature samples (<100°C/212°F)

Sensor Type	Platinum band
Operating Temperature	0~100°C, 32~212°F
Reference	Ag/AgCl
Liquid Junction	Annular ceramic
Body Type	Glass
Connector	BNC, 1m cable
Dimensions	120(L)×12(Ø)mm

Electrode Selection Table

Accurate pH measurement depends on selecting the appropriate pH electrode. The chart below outlines the application range of each sensor for reference only.

	Model	P11	P12	P13	P16	P18	P19	P20	P21	E201	E202
Samples	Agar										•
	Alkalines (high)	•									
	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										
	Soil					•	•				
	Surface										•
	Test Tubes		•		•						
	Tris Buffer				•						
	Viscose Samples										•

IE-20T Industrial pH Electrode

Features

- General purpose pH electrode with a built-in temperature sensor
- 3/4 inch thread is easy to install

Range	0~14 pH
Operating Temperature	0~60°C, 32~140°F
Reference	Ag/AgCl
Liquid Junction	Teflon
Body Type	PPS/PC
Cable Length	5m
Dimensions	150(L)×29.5(Ø)mm

Ion Selective Electrode

Features

- Combination ion selective electrode
- No reference electrode needed
- Solid state sensors Ideal for unskilled operatives

Specifications

Model	Ion	Limits (ppm)	Interferences	pH Range	Operating Temperature
ISE-NH4	Ammonium	0.1~18000	Ca^{2+}, Na^{+}, K^{+}	2~7	5~50°C, 41~122°F
ISE-Br	Bromide	0.4~81000	I^{-}, S^{2-}, CN^{-}, Cl^{-}	1~12	5~50°C, 41~122°F
ISE-Cd	Cadmium	0.1~11200	Cu^{2+}, Hg^{2+}, Ag^{+}	3~7	5~50°C, 41~122°F
ISE-Ca	Calcium	0.02~40100	Ba^{2+}, Cu^{2+}, Sr^{2+}	3.5~11	5~50°C, 41~122°F
ISE-Cl	Chloride	1~35000	I^{-}, Br^{-}, CN^{-}, S^{2-}	1~12	5~50°C, 41~122°F
ISE-Cu	Copper	0.06~6400	Hg^{2+}, Ag^{+}, S^{2-}	2~7	5~50°C, 41~122°F
ISE-CN	Cyanide	0.03~260	I^{-}, Br^{-}, S^{2-}	11~13	5~50°C, 41~122°F
ISE-F	Fluoride	0.02~1900	OH^{-}	4~8	5~50°C, 41~122°F
ISE-I	Iodide	0.06~127000	S^{2-}, CN^{-}	2~12	5~50°C, 41~122°F
ISE-Pb	Lead	0.2~20800	Hg^{2+}, Ag^{+}, Cu^{2+}	3~7	5~50°C, 41~122°F
ISE-NO3	Nitrate	0.4~62000	Cl^{-}, NO^{2-}	2~11	5~50°C, 41~122°F
ISE-K	Potassium	0.04~39000	Cs^{+}, NH_4^{+}	1~9	5~50°C, 41~122°F
ISE-Ag	Silver	0.01~107900	Hg^{2+}	1~9	5~50°C, 41~122°F
ISE-Na	Sodium	0.002~69000	Ag^{+}, Li^{+}, K^{+}, Ti^{+}	9~12	5~80°C, 41~176°F
ISE-S	Sulfide	0.003~32000	Hg^{2+}, Ag^{+}	13~14	5~50°C, 41~122°F
ISE-NH3	Ammonia	0.01~17000	Hydrazine	11~13	5~50°C, 41~122°F

Water Hardness Electrode

Features

- Combination water hardness electrode
- No filling solution required
- Long lifetime

Specifications

Model	ISE-WH
Concentration	0.05~200 mmol/L
pH Range	2~11
Operating Temperature	5~50°C, 41~122°F
Interferences	Ba^{2+}, Cd^{2+}, Cu^{2+}
Cable Length	1m
Connector	BNC

CON Series
Laboratory Conductivity Electrode

CON-0.1
Platinum conductivity electrode, suitable for measuring the pure water

Range	0~100 µS/cm
Cell Constant	K=0.1
Operating Temperature	0~80°C, 32~176°F
Body Type	Glass
Cable Length	1m
Connector	6-pin nimi-DIN
Dimensions	120(L)×12(Ø)mm

CON-1
Platinum conductivity electrode, suitable for general purpose applications

Range	10 µS/cm~20 mS/cm
Cell Constant	K=1.0
Operating Temperature	0~80°C, 32~176°F
Body Type	Glass
Cable Length	1m
Connector	6-pin nimi-DIN
Dimensions	120(L)×12(Ø)mm

CON-10
Platinum conductivity electrode, suitable for measuring the high conductivity liquids

Range	100 µS/cm~200 mS/cm
Cell Constant	K=10
Operating Temperature	0~80°C, 32~176°F
Body Type	Glass
Cable Length	1m
Connector	6-pin nimi-DIN
Dimensions	120(L)×12(Ø)mm

IE-50T Series
Industrial Conductivity Electrode

Features
- Platinum conductivity electrode with a built-in temperature sensor
- Stainless steel housing is sturdy and not easily breakable
- 3/4 inch thread is easy to install

Specifications

Model	IE-50LT	IE-50MT	IE-50HT
Range	0~100 µS/cm	0~20 mS/cm	0~200 mS/cm
Cell Constant	K=0.1	K=1.0	K=10
Operating Temperature	0~80°C, 32~176°F		
Body Type	Stainless steel		
Cable Length	5m		
Dimensions	130(L)×26(Ø)mm		

CON-FC
Conductivity flow cell, suitable for use with the CON-0.1 conductivity electrode to measure pure water samples with a conductivity of less than 10 µS/cm

DO100 Laboratory Dissolved Oxygen Electrode

Features
- Polarographic dissolved oxygen electrode with a built-in temperature sensor
- Screw cap design makes membrane replacement quick and easy

Sensor Includes
- Electrolyte solution (30 mL)
- Membrane cap

Specifications

Model	DO100
Sensor Type	Polarographic
Range	0~20 mg/L
Operating Temperature	0~50°C, 32~122°F
Response Time	95% of final reading in 30 seconds, 98% in 45 seconds
Minimum Sample Flow	20 cm per second
Cable Length	3m
Connector	6-pin nimi-DIN
Dimensions	150 (L) × 12 (Ø) mm

IE-80T Industrial Dissolved Oxygen Electrode

Features
- Polarographic dissolved oxygen electrode with a built-in temperature sensor
- 3/4 inch thread is easy to install

Sensor Includes
- Electrolyte solution (30 mL)
- Membrane cap

Specifications

Model	IE-80T
Sensor Type	Polarographic
Range	0~20 mg/L
Operating Temperature	0~50°C, 32~122°F
Response Time	95% of final reading in 30 seconds, 98% in 45 seconds
Minimum Sample Flow	20 cm per second
Cable Length	6m
Connector	—
Dimensions	150 (L) × 29.5 (Ø) mm

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