# **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
- $^{\circ}$  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

## \$30 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)

## **\$40** 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

#### \$50 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

#### \$60 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 and 1000 ppm standard solutions, ionic strength adjuster, USB cable, power adapter, carrying case (cyanide and sulfide ion testers are supplied without solutions)
- S40: Tester, water hardness electrode, 10 and 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	\$10
	Range	-2.00020.000 pH
	Resolution	0.001, 0.01, 0.1, selectable
	Accuracy	±0.002 pH
玉	Calibration	15 points
	pH Buffer Options	$ \text{USA} \ (1.68/4.01/7.00/10.01/12.45), \ \text{NIST} \ (1.68/4.01/6.86/9.18/12.45), \ \text{DIN} \ (1.09/4.65/6.79/9.23/12.75), \ 5 \ \text{custom buffers} $
	Temperature Compensation	0100°C/32212°F, automatic
	Solution Temperature Coefficient	25°C
	Range	-2000.02000.0 mV
Λm	Resolution	0.1, 1, selectable
	Accuracy	±0.2 mV

	Model	S20
ORP	Range	-2000.02000.0 mV
	Resolution	0.1, 1, selectable
	Accuracy	±0.2 mV
	Calibration	1 point

	Model	S30
	Range	0.00130000 (depending on the electrode range)
	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
트	Calibration	25 points
	Calibration Solutions	0.001, 0.01, 0.1, 1, 10, 100, 1000, 10000
	Temperature Compensation	0100°C/32212°F, manual
	Measurement Modes	Direct reading, known addition/subtraction, sample addition/subtraction
	Electrode Management	13
Λm	Range	-2000.02000.0 mV
	Resolution	0.1, 1, selectable
	Accuracy	±0.2 mV

	Model	S40
	Range	$0.05200\text{mmol/L},01122^{\circ}\text{dH},01404^{\circ}\text{e},02000^{\circ}\text{fH},01170\text{gpg},08020\text{mg/L}(\text{Ca}^{2*}),020000\text{mg/L}(\text{CaCO}_{3}),011220\text{mg/L}(\text{CaO}_{2}),02000\text{mg/L}(\text{CaO}_{3}),011220\text{mg/L}(\text{CaO}_{3}),0$
ω.	Resolution	0.001, 0.01, 0.1, 1
dnes	Accuracy	±1% F.S.
握	Measurement Units	mmol/L, °dH, °e, °fH, gpg, mg/L ( $Ca^{2+}$ ), mg/L ( $CaCO_3$ ), mg/L ( $CaO$ )
Vate	Calibration	25 points
	Calibration Solutions	0.01, 0.1, 1, 10, 100 mmol/L
	Temperature Compensation	050°C/32122°F, manual
	Range	-2000.02000.0 mV
1	Resolution	0.1, 1, selectable
	Accuracy	±0.2 mV

	Model	S50-M	\$50-H
	Range	$020.00$ , $200.0$ , $2000\mu\text{S/cm}$ , $20.00\text{mS/cm}$	$100.02000\mu\text{S/cm},20.00,200.0\text{mS/cm}$
	Resolution	0.01, 0.1, 1	0.01, 0.1, 1
	Accuracy	±0.5% F.S.	±0.5% F.S.
>	Calibration	13 points	13 points
E K	Calibration Solutions	84 µS/cm, 1413 µS/cm, 12.88 mS/cm	1413 µS/cm, 12.88 mS/cm, 111.8 mS/cm
립	Temperature Compensation	0100°C/32212°F, automatic	0100°C/32212°F, automatic
3	Temperature Coefficient	Linear (0.010.0%/°C), non-linear, USP, EP	Linear (0.010.0%/°C), non-linear, USP, EP
	Pure Water Compensation	Yes	Yes
	Reference Temperature	20/25°C	20/25°C
	Cell Constant	K=1	K=10
	Range	010.00, 100.0, 1000 mg/L, 20.00 g/L	0100.0, 1000 mg/L, 10.00, 200.0 g/L
8	Resolution	0.01, 0.1, 1	0.01, 0.1, 1
	Accuracy	±1% F.S.	±1% F.S.
	TDS Factor	0.011.00 (default 0.5)	0.011.00 (default 0.5)
>	Range	0.0010.00 psu, 0.0010.00 ppt, 0.001.00%	0.0042.00 psu, 0.0080.00 ppt, 0.008.00%
Salinit	Resolution	0.01	0.01
SO.	Accuracy	±1% F.S.	±1% F.S.
≥	Range	$0.0010.00M\Omega$	$0.001.00M\Omega$
Resistivity	Resolution	0.01, 0.1, 1	0.01, 0.1, 1
2	Accuracy	±1% F.S.	±1% F.S.
Ash	Range	0100%	0100%
ŽĮ.	Resolution	0.01, 0.1, 1	0.01, 0.1, 1
gnet	Accuracy	±1% F.S.	±1% F.S.
5	Measurement Methods	ICUMSA GS2/3-17, GS1/3/4/7/8-13	ICUMSA GS2/3-17, GS1/3/4/7/8-13

	Model	S60
	Range	0.0020.00 mg/L, 0.0200.0% saturation
	Resolution	0.01, 0.1
gen	Accuracy	±0.2 mg/L, ±2.0%
Dissolved Oxy	Calibration	12 points
	Temperature Compensation	050°C/32122°F, automatic
	Barometric Pressure Correction	60.0113.3 kPa/450850 mmHg, manual
	Salinity Correction	0.050.0 g/L, manual
	Additional Applications	BOD (biochemical oxygen demand), OUR (oxygen uptake rate), SOUR (specific oxygen uptake rate)

General Specifications	
Stability Criteria	Fast/Standard/Strict
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 Supply	Built-in 3V rechargeable batteries