HORIBA
Scientific

LAQUA

LAQUA 200 Series Handheld Water Quality Meters

pH	ORP	Dissolved Oxygen	Conductivity
Resistivity	Total Dissolved Solids	Salinity	

METERS 3 YEARS WARRANTY

MADE IN JAPAN

www.horiba-laqua.com

LAQUA 200 Series

Handheld Water Quality Meters

Impact Resistant

Eco-friendly, Shock & Scratch Resistant, & Non-slip

Apart from their high impact strength, the polycarbonate and TPE materials are also long-lasting and recyclable. The TPE provides non-slip grip and is not easily damaged by abrasion.

Backlit, Large LCD Screen

All models have scratch-resistant monochrome digital LCD (50 x 50 mm) with white LED backlight for easy viewing of readings even in dark locations.

Hands-free Testing

Attach a wrist strap* or lanyard to hang the meter or place the meter into the carrying case while in use.

Optional

Meter shown in actual size

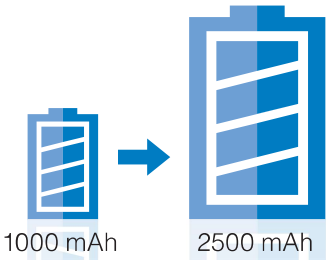
Built-in Electrode Holder

Two grooves on the meter serve as electrode holders.

Electrode adapter provides secure attachment for two electrodes so they can be easily placed in solutions.

Ergonomic Design

The black meter housing is made of polycarbonate material covered with a layer of TPE material. It is lightweight, comfortable to touch, and suitable for field applications.



High Battery Capacity

AA batteries have greater power capacity than AAA batteries. Battery life is increased by 2.5x.

9-Button Keypad Minimal Matrix

Operation buttons are reduced to the bare minimum.

IP67 Waterproof and Dustproof

Fully protected from dust and capable of withstanding water immersion up to 1 meter depth for 30 mins.

Integrated Foldable Meter Stand

A collapsible meter stand is integrated at the back of the meter for convenient usage and storage.

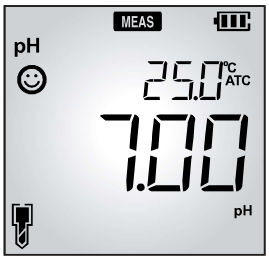
PC / Printer Communications

The 220 models are GLP-compliant: calibration and measurement data are captured with date and time stamp. Connect any 220 model to a computer using a PC (USB) cable[1] to transfer data via data acquisition software or to upgrade[2] meter software or connect to a HORIBA printer using a printer (RS232) cable[1] to print data.

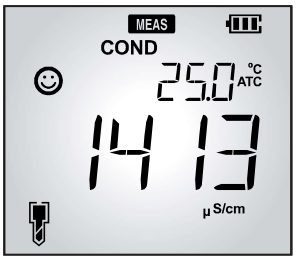
[1] Cables and printer are sold separately
[2] Also applicable to 210 models

Easy-to-Read Display

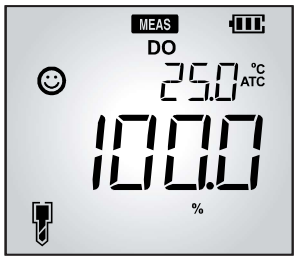
Electrode condition, reading stability, parameter, and temperature in one screen can be checked at a glance.



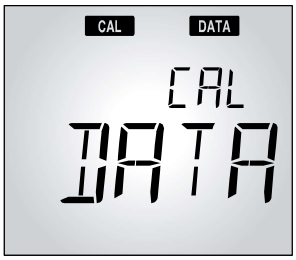
pH Display



Conductivity Display



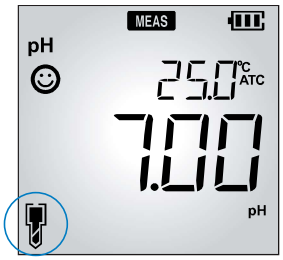
Dissolved Oxygen Display



Calibration Data

Simply press CAL button and then DATA button to view the latest calibration data.

VIDEO



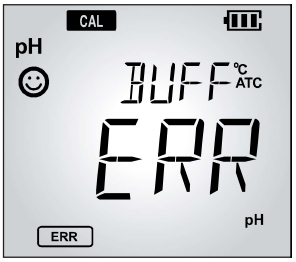
Electrode Status Indicator

The electrode icon indicates the condition of the electrode after each calibration.

Excellent

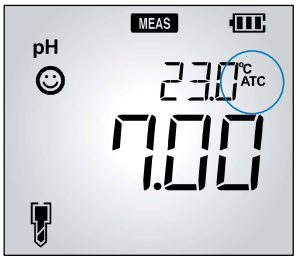
Very Good

Fair

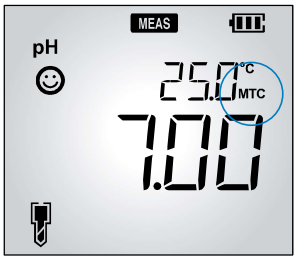


Diagnostic Messages

Self-diagnosing meters display measurement and meter issues for fast fault finding and troubleshooting.



Temperature sensor connected



Temperature sensor disconnected

Temperature Sensor Indicator

When the temperature sensor is connected to the meter, ATC is displayed. Otherwise MTC is displayed.

Measurement modes: Auto Stable, Auto Hold, Real Time

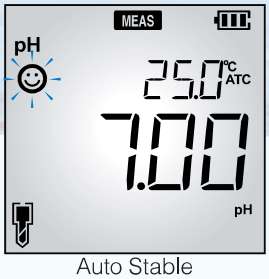
Auto Stable (AS) mode - the meter shows live readings; ☺ annunciator blinks until the reading is stable.

Auto Hold (AH) mode - the meter locks the stable reading; ☺ annunciator blinks until reading is stable and then HOLD lights up.

Real Time - the meter shows live readings; Both ☺ and HOLD annunciators are inactive.

Visit the **HORIBA LAQUA Singapore** Channel on YouTube and subscribe to see more of our videos.

VIDEO

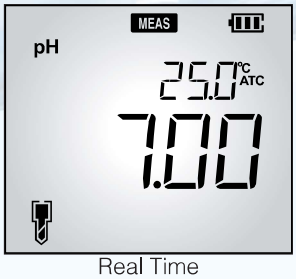


Auto Stable

VIDEO

Auto Hold

VIDEO



Real Time

Rugged Carrying Case

The durable case keeps your meter, electrodes, solutions, and accessories secured, organized, and protected during quick field testing on the go or storage.

9652-10D / 20D Plastic-body, Double Junction, Gel pH Electrodes

Model	9652-10D	9652-20D
Part No.	3200786359	3200786361
pH Range	0 - 14 pH	
Temperature Range	0 - 80 °C	
Liquid Junction	Porous sintered polyethylene	
Temperature Sensor	Integrated	
Connectors	BNC, phono	
Electrode Length & Diameter	150 x 16 mm	
Cable Length	1.0 m	2.0 m

9383-10D Plastic-body, Titanium/Platinum Black Conductivity Cell

Model	9383-10D
Part No.	3200780927
Cell Constant	1 cm^{-1}
Conductivity Range	1 µS/cm to 200 mS/cm
Temperature Range	0 - 80 °C
Temperature Sensor	Integrated
Connectors	BNC, phono
Electrode Length & Diameter	150 x 16 mm
Cable Length	1.0 m

9552-20D / 50D Galvanic DO Probes

Model	9552-20D	9552-50D
Part No.	3200780939	3200780941
DO Range	0 - 20.00 mg/L	
Temperature Range	0 - 50 °C	
Temperature Sensor	Integrated	
Connectors	BNC, phono	
Electrode Length & Diameter	164 x 30 mm	
Cable Length	2.0 m	5.0 m
Replacement DO Tip / Part No.	5402 / 3200781553	

Multi-Parameter Meters

Model	PD210	PD220
	pH/ORP/DO/Temp (°C/°F)	
pH Range	-2.00 to 16.00 pH	
Resolution	0.01 pH	
Accuracy	±0.01 pH	
Calibration Points	USA & NIST (Up to 5), DIN (Up to 6)	
pH Buffer Groups	USA, NIST, DIN	
ORP Range	±2000 mV	
Resolution	0.1 mV (< ±1000 mV), 1 mV (≥ ±1000mV)	
Accuracy	±0.3 mV or (< ±1000 mV), 0.3% of reading (≥ ±1000mV)	
Calibration Option	Yes	
Dissolved Oxygen (DO) Range	0.0 to 20.00 mg/L 0.0 to 200.0%	
Resolution	0.01 mg/L, 0.1%	
Accuracy	±0.1 mg/L	
Salinity Compensation	0.0 to 40.0 ppt	
Barometric Pressure Compensation	Yes	
DO Probe Type	Galvanic integrated with temperature sensor	
Calibration Points	Up to 2	
Temperature Range	-30.0 to 130.0 °C / -22.0 to 266.0 °F	
Resolution	0.1 °C / °F	
Accuracy	± 0.5 °C / ± 0.9 °F	
Calibration Option	Yes	
Memory	500	1000
Auto Data Log	●	●
Real-time Clock	—	●
Date & Time Stamp	—	●
Auto Hold / Auto Stable / Real Time	●	●
Offset & Average Slope Display	●	●
Calibration Alarm (1 to 90 days)	●	●
Auto Shut-Off (1 to 30 mins.)	●	●
Electrode Status	●	●
Diagnostic Messages	●	●
Software Upgrade[1]	●	●
PC Communication[1]	—	●
Printer Communication[2]	—	●
Meter Inputs	BNC, phono	
Display	Custom LCD with backlight	
Housing	IP67, shock & scratch resistant, non-slip	
Power Requirement	2 x AA batteries	
Battery Life	> 500 hours	
Meter Dimensions	160 (L) x 80 (W) x 40.60 (H) mm	
Meter Weight	Approx. 260 g (with batteries) / 216 g (without batteries)	
Meter Kit*	**PD210-K Waterproof pH/ORP/DO/Temp Handheld Meter Kit (3200779534)** • PD210 Meter • 9652-20D Gel pH electrode, 2 m cable • 9552-20D Galvanic DO probe, 2 m cable • 4.01, 7.00, 10.01 pH Buffers (60 ml each) • 2 x AA Batteries • Electrode Adapter • Carrying case • Manual	**PD220-K Waterproof pH/ORP/DO/Temp Handheld Meter Kit (3200779535)** • PD220 Meter • 9652-20D Gel pH electrode, 2 m cable • 9552-20D Galvanic DO probe, 2 m cable • 4.01, 7.00, 10.01 pH Buffers (60 ml each) • 2 x AA Batteries • Electrode Adapter • Carrying case • Manual

*Meter kit with NIST pH buffers is available upon request. Add 'N' suffix to order code.
[1]Via PC (USB) cable PN 3200779639
[2]Via Printer (RS232) cable PN 3200779638

● Available — Not available

pH Buffers

Part No.	Model	Description
3999960015	501-S	NIST pH Buffers Kit (pH 4.01, 6.86, 9.18 buffers & 3.33 M KCl, 250 ml each)
3999960016	502-S	USA pH Buffers Kit (pH 4.01, 7.00, 10.01 buffers & 3.33 M KCl, 250 ml each)
3999960028	500-2	pH 1.68 Buffer at 25 °C, 500 ml
3999960029	500-4	pH 4.01 Buffer at 25 °C, 500 ml
3999960030	500-686	pH 6.86 Buffer at 25 °C, 500 ml
3999960031	500-7	pH 7.00 Buffer at 25 °C, 500 ml
3999960032	500-9	pH 9.18 Buffer at 25 °C, 500 ml
3999960033	500-10	pH 10.01 Buffer at 25 °C, 500 ml
3999960034	500-12	pH 12.46 Buffer at 25 °C, 500 ml

ORP Powders

Part No.	Model	Description
3200043618	160-51	89 mV at 25 °C for 250 ml (10 sachets/pack)
3200043617	160-22	258 mV at 25 °C for 250 ml (10 sachets/pack)

Conductivity Standards

Part No.	Model	Description
3999960017	503-S	Conductivity Standards Kit (84 µS/cm, 1413 µS/cm, 12.88 mS/cm & 111.8 mS/cm, 250 ml each)
3999960035	500-21	84 µS/cm Conductivity Standard at 25 °C, 500 ml
3999960036	500-22	1413 µS/cm Conductivity Standard at 25 °C, 500 ml
3999960037	500-23	12.88 mS/cm Conductivity Standard at 25 °C, 500 ml
3999960038	500-24	111.8 mS/cm Conductivity Standard at 25 °C, 500 ml

pH Electrode Cleaning Solutions

Part No.	Model	Description
3014028653	220	Cleaning solution for removing inorganic sample residues, 50 ml x 2 pcs
3200530494	230	Cleaning solution for removing inorganic and organic sample residues, Solution A (30 ml) & Solution B (100 ml)
3200366771	250	Cleaning solution for removing proteins, 400 ml

Electrodes*

Part No.	Model	Description
3200786359	9652-10D	Plastic-body, gel-filled pH electrode with integrated temperature sensor and 1 m cable
3200786361	9652-20D	Plastic-body, gel-filled pH electrode with integrated temperature sensor and 2 m cable
3014046710	9300-10D	ORP electrode with flat platinum tip and temperature sensor
3200780927	9383-10D	Plastic-body, Titanium / Platinum black (k=1.0) conductivity cell with integrated temperature sensor and 1 m cable
3200780939	9552-20D	Galvanic DO probe with integrated temperature sensor and 2 m cable
3200780941	9552-50D	Galvanic DO probe with integrated temperature sensor and 5 m cable
3200781553	5402	Replacement DO tip for 9552-20D and 9552-50D

Accessories

Part No.	Model	Description
3014028368	X-51	Digital simulator for pH, mV, Ion, DO & temperature
3014028370	X-52	Digital simulator for conductivity & temperature
3014030146	-	Printer for GLP / GMP compliance, 120V US version (printer cable is sold separately)
3014030147	-	Printer for GLP / GMP compliance, 230V EU version (printer cable is sold separately)
3200779638	-	25-pin D-Sub Printer (RS232) cable (meter to printer), 1.5 m
3014030149	-	Printer paper, 20 rolls
3014030150	-	Printer ink ribbon, 5pcs/pack
3200779640	-	Electrode adapter
3200779639	-	PC (USB) cable with free data acquisition software in USB flash drive to connect meter and computer, 1.5 m

*Electrodes carry 6-month warranty against manufacturing defects.

501-S NIST pH Buffers Kit

502-S USA pH Buffers Kit

ORP Powders

X-51 Digital Simulator

X-52 Digital Simulator

Printer

PC (USB) cable
(Meter to Computer)

Electrode Adapter

25-pin D-Sub Printer
(RS232) cable
(Meter to Printer)

Replacement DO
tip 5402

Visit HORIBA's website!

Water Quality Analyzers

www.horiba-laqua.com

With over 60 years of engineering excellence, HORIBA's diverse range of water quality analyzers and electrodes are ideal for everyday laboratory needs through to the most demanding of applications. Visit our website for a wealth of useful information and water quality measurement tips to help you obtain the best results in your work.

Benchtop Meters

Developed using extensive feedback from users, our new LAQUA meters deliver the best solution for water quality analysis. Our LAQUA website features an online 'Selection Guide' to enable you to find the perfect LAQUA meter and electrode for your needs.

Pocket Meters

Analyzing water quality is simplified when using our LAQUAtwin range of meters. Designed to produce accurate and reliable results. Anyone, anywhere, at any time can measure samples easily with a LAQUAtwin meter. See just how good they are at our website.

Electrodes

Various electrodes to match any application. A wide range of products for both benchtop and portable systems are available, including easy and reliable standard models, application-focused models for small samples or large containers, and special electrodes for specific sample characteristics.

Application Notes

LAQUAtwin pocket meters offer quick and convenient alternative to analyze important parameters with high accuracy. Several application notes are available at (http://goo.gl/znwE6j) detailing the use of LAQUAtwin and the results achieved for the respective applications. Additional application notes will be added when available.

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