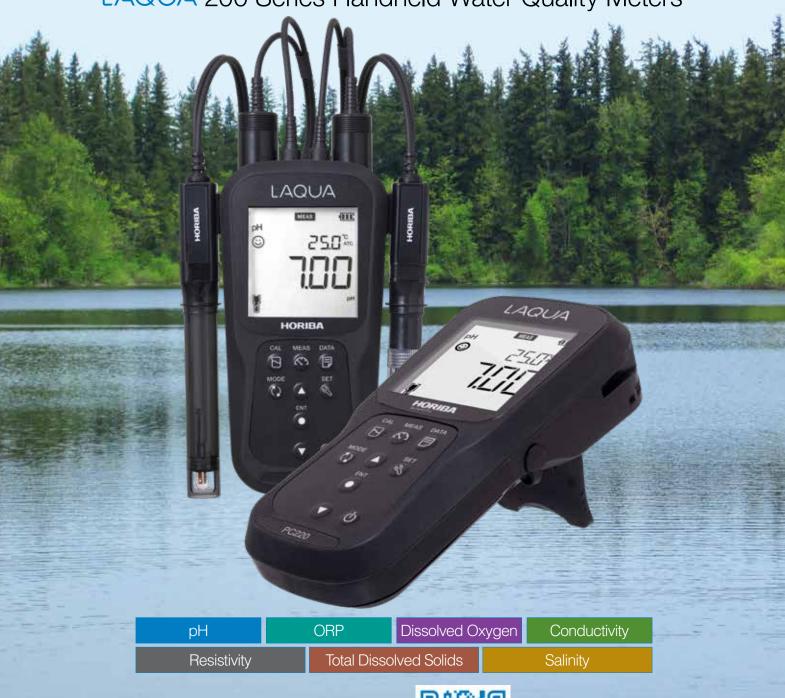


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LAQUA 200 Series Handheld Water Quality Meters







LAQUA 200 Series

Handheld Water Quality Meters

Scan code to view LAQUA 200 Series feature video online

HORIBA



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 nonslip grip and is not easily damaged by abrasion.



Backlit, Large LCD Screen

All models have scratchresistant 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.





HORIBA



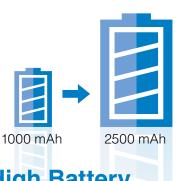
Meter shown in actual size

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.





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.



Ergonomic

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.

Design

1.0 mm Thermoplastic

elastomer (TPE)

Polycarbonate

Integrated Foldable Meter Stand

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

IP67 Waterproof and Dustproof

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

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) cable² to transfer data via data acquisition software or connect to a HORIBA printer using a printer (RS232) cable² to print data.

With electrodes connected and communication port sealed

² Cables and printer are sold separately

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

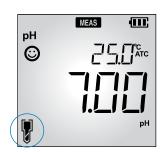
Simply press CAL button and then DATA button to view the latest calibration data.





Diagnostic Messages

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



Electrode Status Indicator

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









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; ② annunciator blinks until the reading is stable.

Auto Hold (AH) mode - the meter locks the stable reading; ② annunciator blinks until reading is stable and then HOLD lights up.

Real Time - the meter shows live readings; Both ② and HOLD annunciators are inactive.



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













Real Time



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

Electrode Cable Compartment

User Manual

and Notes Compartment

pH Electrode

Conductivity Electrode

LAQUA 200 Series Meter



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		
and an result to the second of			

9301-10D Plastic-body, Platinum, Gel ORP Electrode	
Model	9301-10D
Part No.	3200922105
ORP Range	±2000 mV
Temperature Range	0 - 80°C
Liquid Junction	Porous sintered polyethylene
Temperature Sensor	Integrated
Connectors	BNC, phono
Electrode length & diameter	110 x 16 mm
Cable Length	1.0 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 100 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		
9552-20D	9552-50D	
3200780939	3200780941	
0 - 20.00 mg/L		
0 - 50 °C		
Integrated		
BNC, phono		
165 x 30 mm		
2.0 m 5.0 m		
5402 / 3200781553		
	3200780939 0 - 20.0 0 - 5i Integi BNC, p 165 x 3	



pH Meters

	PH210	PH220	
Model		emp (°C/°F)	
pH Range	-2.00 to	16.00 pH	
Resolution		t pH	
Accuracy		11 pH	
Calibration Points	USA & NIST (Up t	o 5), DIN (Up to 6)	
pH Buffer Groups		IST, DIN	
ORP Range	±200	00 mV	
Resolution	0.1 mV (< ±1000 mV), 1 mV (≥ ±1000mV)	
Accuracy	±0.3 mV (< ±1000 mV), 0.3	3% of reading (≥ ±1000mV)	
Calibration Option	Y	es	
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	Y	es	
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	•	•	
PC Communication ¹		•	
Printer Communication ²	_	•	
Meter Inputs	BNC	phono	
Display		with backlight	
Housing		ch resistant, non-slip	
Power Requirement		batteries	
Battery Life		> 500 hours	
Meter Dimensions		× 40.60 (H) mm	
Meter Weight	Approx. 260 g (with batteries) / 216 g (without batteries)		
Meter Kit*	PH210-K Waterproof pH/ORP/Temp Handheld Meter Kit (3200779526) PH210 Meter 9652-10D Gel pH electrode 4.01, 7.00, 10.01 pH Buffers (60 ml each) 2 x AA Batteries Carrying case	PH220-K Waterproof pH/ORP/Temp Handheld Meter Kit (3200779527) PH220 Meter 9652-10D Gel pH electrode 4.01, 7.00, 10.01 pH Buffers (60 ml each) 2 x AA Batteries Carrying case	
*Meter kit with NIST pH buffers is available upon requ	Manual & Quick Guide est. Add 'N' suffix to order code.	Manual & Quick Guide	

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

Conductivity Meters **EC210 EC220** Conductivity Range .µS/cm to 200.0 mS/cm (k=1.0) Resolution 0.05% full scale Accuracy ±0.6% full scale, ±1.5% full scale > 18.0 mS/cm Reference Temperature 15 to 30 °C Temperature Coefficient 0.00 to 10.00% Cell Constants 0.1, 1.0, 10.0 Up to 4 (Auto) / Up to 5 (Manual) Calibration Points Units S/cm, S/m (Auto Ranging) ppm to 100 ppt (TDS factor=0.5) Total Dissolved Solids (TDS) Range 0.01 ppm (mg/L) / 0.1 ppt (g/L) Resolution ±0.1% full scale Accuracy **TDS Curves** Linear (0.40 to 1.00), EN27888, 442, NaCl 0.000 Ω•cm to 20.0 MΩ•cm Resistivity Range Resolution 0.05% full scale ±0.6% full scale, Accuracy ±1.5% full scale > 1.80 MΩ•cm Salinity Range 0.0 to 100.0 ppt / 0.00 to 10.00 % 0.1 ppt / 0.01% Resolution Accuracy ±0.2% full scale Salinity Curves NaCl, Seawater Calibration Option Yes Temperature Range -30.0 to 130.0 °C / -22.0 to 266.0 °F Resolution 0.1 °C / °F Accuracy $\pm 0.5 \, ^{\circ}\text{C} \, / \pm 0.9 \, ^{\circ}\text{F}$ Calibration Option Yes 1000 Memory 500 Auto Data Log • Real-time Clock Date & Time Stamp Auto Hold / Auto Stable/ Real Time Auto Shut-Off (1 to 30 mins.) Electrode Status Diagnostic Messages PC Communication¹ Printer Communication² BNC, phono Meter Inputs 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 Approx. 260 g (with batteries) / 216 g (without batteries) Meter Weight EC210-K Waterproof EC/TDS/Res/Sal/Temp EC220-K Waterproof EC/TDS/Res/Sal/Temp Handheld Meter Kit (3200779528) Handheld Meter Kit (3200779529) EC210 Meter EC220 Meter 9383-10D Ti/Pt Conductivity electrode (k=1.0) 9383-10D Ti/Pt Conductivity electrode (k=1.0) Meter Kit 84 μS/cm, 1413 μS/cm, 12.88 mS/cm, & 111.8 84 µS/cm, 1413 µS/cm, 12.88 mS/cm, & 111.8 mS/cm Conductivity standards (60 ml each) mS/cm Conductivity standards (60 ml each) 2 x AA Batteries 2 x AA Batteries Carrying case Carrying case Manual & Quick Guide Manual & Quick Guide

DO Meters			
Model	DO210	DO220 p (°C/°F)	
		.00 mg/L	
Dissolved Oxygen (DO) Range		200.0%	
Resolution		ı/L, 0.1%	
Accuracy		mg/L	
Salinity Compensation	0.0 to 4	10.0 ppt	
Barometric Pressure	V	es	
Compensation			
DO Probe Type	Galvanic integrated with temperature sensor		
Calibration Points	·	to 2	
Temperature Range		/ -22.0 to 266.0 °F	
Resolution		C/°F	
Accuracy		/ ± 0.9 °F	
Calibration Option		98	
Memory	500	1000	
Auto Data Log	•	•	
Real-time Clock	_	•	
Date & Time Stamp	_	•	
Auto Hold / Auto Stable / Real Time	•	•	
Auto Shut-Off (1 to 30 mins.)	•	•	
Electrode Status	•	•	
Diagnostic Messages	•	•	
PC Communication ¹	_	•	
Printer Communication ²	— PNC		
Meter Inputs		phono	
Display	Custom LCD with backlight IP67, shock & scratch resistant, non-slip		
Housing Power Requirement		batteries	
Battery Life			
Meter Dimensions		> 500 hours 160 (L) x 80 (W) x 40.60 (H) mm	
Meter Weight		es) / 216 g (without batteries)	
Meter Kit with Galvanic DO probe, 2m cable	DO210-K Waterproof DO/Temp Handheld Meter Kit (3200779530) DO210 Meter 2 x AA Batteries Carrying case Manual & Quick Guide 9552-20D Galvanic DO probe, 2m cable	DO220-K Waterproof DO/Temp Handheld Meter Kit (3200779531) DO220 Meter 2 x AA Batteries Carrying case Manual & Quick Guide 9552-20D Galvanic DO probe, 2m cable	
Meter Kit with Galvanic DO probe, 5m cable	DO210-K05 Waterproof DO/Temp Handheld Meter Kit (4000009167)	DO220-K05 Waterproof DO/Temp Handheld Meter Kit (4000009168)	

Multi-Parameter Meters		
main raidineter meters	00	000
	1/6/1/2	
	- 100	1 00 11
	PC210	PC220
Model		sal/Res/Temp (°C/°F)
pH Range	-2.00 to	16.00 pH
Resolution Accuracy		1 pH D1 pH
Calibration Points	USA & NIST (Up	to 5), DIN (Up to 6)
pH Buffer Groups ORP Range		IIST, DIN 00 mV
Resolution		/), 1 mV (≥ ±1000mV)
Accuracy	±0.3 mV (< ±1000 mV), 0.	3% of reading (≥ ±1000mV)
Calibration Option Conductivity Range		'es .0 mS/cm (k=1.0)
Resolution	0.05%	full scale
Accuracy Reference Temperature		5 full scale > 18.0 mS/cm
Reference Temperature Temperature Coefficient		30 °C 10.00%
Cell Constants	0.1, 1.	.0, 10.0
Calibration Points Units		Up to 5 (Manual) Auto Ranging)
Total Dissolved Solids (TDS) Range	ppm to 100 pp	t (TDS factor=0.5)
Resolution		(L) / 0.1 ppt (g/L)
Accuracy TDS Curves		full scale , EN27888, 442, NaCl
Resistivity Range	0.000 Ω•cm t	to 20.0 MΩ∙cm
Resolution		full scale full scale,
Accuracy		e > 1.80 MΩ•cm
Salinity Range		/ 0.00 to 10.00 %
Resolution Accuracy		t / 0.01% full scale
Salinity Curves		Seawater
Calibration Option Temperature Range		'es /-22.0 to 266.0 °F
Resolution		7-22.0 to 200.0 T
Accuracy	± 0.5 °C	/ ± 0.9 °F
Calibration Option Memory	500	'es 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	•	•
PC Communication ¹	_	•
Printer Communication ² Meter Inputs	— RNC	phono
Display		with backlight
Housing		ch resistant, non-slip
Power Requirement Battery Life	> 500	batteries) hours
Meter Dimensions	160 (L) x 80 (W) x 40.60 (H) mm
Meter Weight	Approx. 260g (with batterie PC210-K Waterproof pH/ORP/EC/TDS/Sal/	es) / 216g (without batteries) PC220-K Waterproof pH/ORP/EC/TDS/Sal/
Mator Vit*	Res/Temp Handheld Meter Kit (3200779532) PC210 Meter 9652-10D Gel pH electrode 9383-10D Ti/Pt Conductivity electrode (k=1.0) 4.01 & 7.00 pH Buffers (60 ml each)	Res/Temp Handheld Meter Kit (3200779533) PC220 Meter 9652-10D Gel pH electrode 9383-10D Ti/Pt Conductivity electrode (k=1.0) 4.01 & 7.00 pH Buffers (60 ml each)
Meter Kit*	 1413 µS/cm & 12.88 mS/cm Conductivity standards (60 ml each) 2 x AA Batteries Electrode Adapter Carrying case Manual & Quick Guide 	 1413 µS/cm & 12.88 mS/cm Conductivity standards (60 ml each) 2 x AA Batteries Electrode Adapter Carrying case Manual & Quick Guide
*Meter kit with NIST pH buffers is available upon		- IVIAITUAL & QUICK GUIUE

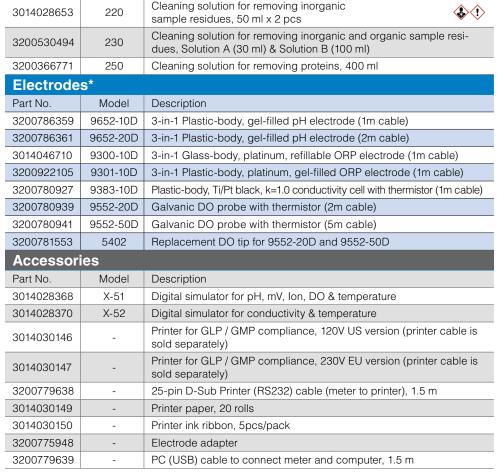
^{*}Meter kit with NIST pH buffers is available upon request. Add 'N' suffix to order code. 'Via PC (USB) cable PN 3200779639 ²Via Printer (RS232) cable PN 3200779638

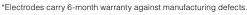


^{*}Meter kit with NIST pH buffers is available upon request. Add 'N' suffix to order code.

¹Via PC (USB) cable PN 3200779639 ²Via Printer (RS232) cable PN 3200779638

Accessorie	es & Soli	utions
pH Buffers	S	
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 m 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
399960030	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
399960033	500-10	pH 10.01 Buffer at 25 °C, 500 ml
3999960034	500-12	pH 12.46 Buffer at 25 °C, 500 ml
ORP Standard Solution & Powders		
Part No.	Model	Description
4000047848	500-225	ORP Standard Solution 225 mV at 25°C (500ml)
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

Description

Model

Part No.



502-S USA pH Buffers Kit





ORP Standard Solution 225 mV





X-51 Digital Simulator

X-52 Digital Simulator







(Meter to Computer)

Electrode Adapter







Replacement DO tip 5402

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 need.



Handheld Meters

In the lab, in the field or anywhere you need it. LAQUA Handheld meters are designed for use with one hand and with an IP67 waterproof rating and shock-resistant casing. Meters can be used for long periods, even in dark places, making it ideal for field measurements in rivers and lakes.



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.





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.





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









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