

LAQUA

LAQUA 200 Series Handheld Water Quality Meters







www.horiba-laqua.com



LAQUA 200 Series Handheld Water Quality Meters



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

Apart from their high impact strength, the polycarbonate and TPE materials are also longlasting 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.



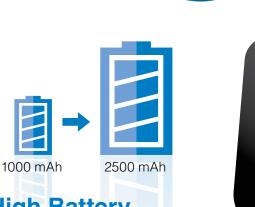
Meter shown in actual size

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.



1.0 mm Thermoplastic

elastomer (TPE)

Polycarbonate

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

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

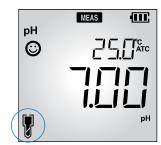
Simply press CAL button and then DATA button to view the latest calibration data.





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





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

to 5.0m)

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		
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	165 x 30 mm	
Cable Length	2.0 m	5.0 m
Replacement DO Tip / Part No.	5402 / 3200781553	

pH Meters

Model	PH210	PH220
		emp (°C/°F)
pH Range		16.00 pH
Resolution		1 pH
Accuracy		01 pH
Calibration Points		o 5), DIN (Up to 6)
pH Buffer Groups		IST, DIN
ORP Range		00 mV
Resolution	·	(), 1 mV (≥ ±1000mV)
Accuracy		3% of reading (≥ ±1000mV)
Calibration Option	Yes	
Temperature Range	-30.0 to 130.0 °C / -22.0 to 266.0 °F	
Resolution		C / °F
Accuracy	± 0.5 °C / ± 0.9 °F	
Calibration Option		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	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		es) / 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 Manual & Quick Guide	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 Manual & Quick Guide
*Meter kit with NIST pH buffers is available upon requ		- 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 ..uS/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 Meter Inputs BNC, phono Display Custom LCD with backlight Housing IP67, shock & scratch resistant, non-slip 2 x AA batteries Power Requirement 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)
Dissolved Oxygen (DO) Range		.00 mg/L 200.0%
Resolution		/L, 0.1%
Accuracy		mg/L
Salinity Compensation		0.0 ppt
Barometric Pressure		
Compensation	Yes	
DO Probe Type	Galvanic integrated with temperature sensor	
Calibration Points	Up to 2	
Temperature Range	·	/ -22.0 to 266.0 °F
Resolution		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	•	•
Auto Shut-Off (1 to 30 mins.)	•	•
Electrode Status	•	•
Diagnostic Messages	•	•
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 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			
## PH Range				
## PRIANCE PARTICIPATION				
### PARAGE CAPP PARAGE		PC210	DC220	
Resolution	Model	pH/ORP/EC/TDS/Sa	al/Res/Temp (°C/°F)	
Accouracy				
DH Buffer Groups Resolution Resolution Accuracy Calibration Option Resolution Accuracy A		±0.0	pH	
DRP Range		USA & NIST (Up t	o 5), DIN (Up to 6)	
Resolution				
Calibration Option	Resolution	0.1 mV (< ±1000 mV), 1 mV (≥ ±1000mV)	
Conductivity Range µ3/cm to 200.0 m5/cm (k=1.0)				
## Accuracy ### 15 to 30 °C C Reference Temperature				
Reference Temperature	Resolution	0.05% f	ull scale	
Temperature Coefficient	Accuracy Reference Temperature			
Cell Constants Calibration Points Up to 4 (Auto) / Up to 5 (Manual) Units Scrm, Sim (Auto Ranging) Total Dissolved Solids (TDS) Range Resolution Accuracy Accuracy TDS Curves Linear (0.440 to 1.00), ENZP88, 442, NaCl Resistivity Range Resolution Accuracy Accuracy Accuracy Accuracy Salinity Range Accuracy Accuracy Salinity Curves Accuracy Salinity Curves Salinity Curves Calibration Option Accuracy Salinity Curves Calibration Option Accuracy Accuracy Accuracy Accuracy Accuracy Accuracy Accuracy Accuracy Calibration Option Accuracy Calibration Accuracy Auto Data Log Real-time Clock Date & Time Stamp Auto Hold / Auto Stable / Real Time Offset & Average Slope Display Auto Shut-Off (1 to 30 mins.) Electrode Status Diagnostic Messages PC Communication³ Meter Inputs Display Auto Electrode Status Display Auto PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kiti (3200777852al/ Res/Temp Handheld Meter Kiti (3200777852al/ Res/Temp Handheld Meter Kiti (3200777852al/ Res/Temp Handheld Meter Kiti (32007779532) PC220-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kiti (32007779532) PC220-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kiti (32007779532)				
Units	Cell Constants	0.1, 1.0	0, 10.0	
Total Dissolved Solids (TDS) Range ppm to 100 ppt (TDS factor=0.5)				
Resolution				
TDS Curves	Resolution	0.01 ppm (mg/l	L) / 0.1 ppt (g/L)	
Resistivity Range Resolution Accuracy Salinity Range 0.000 0 cm to 20.0 M0 cm 1.05% full scale 1.06% full scale 1.06% full scale 1.15% fu		±0.1% full scale		
Resolution		Linear (0.40 to 1.00), EN2/888, 442, NaCl		
Salinity Range		0.05% f		
Salinity Range	Accuracy		·	
Resolution	Salinity Range			
Salinity Ĉurves	Resolution	0.1 ppt / 0.01%		
Calibration Option Yes 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 ● ● PC Communication¹ — ● Meter Inputs BNC, phono Display Custom LCD with backlight Housing Power Requirement ≥ 500 hours Battery Life > 500 hours Meter Dimensions Approx. 260g (with batteries) / 216g (without batteries) PC210-K Waterproof pH/ORP/EC/TDS/sal/Res/Temp Handheld Meter Kit (3				
Temperature Range				
Accuracy		-30.0 to 130.0 °C / -22.0 to 266.0 °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 ● ● PC Communication¹ — ● Printer Communication² — ● Meter Inputs BNC, phono Display Meter Inputs BNC, phono Outsom LCD with backlight Housing IP67, shock & scratch resistant, non-slip Power Requirement 2 x AA batteries > 500 hours Battery Life > 500 hours > 500 hours Meter Dimensions 160 (L) x 80 (W) x 40.60 (H) mm Approx. 260g (with batteries) / 216g (without batteries) PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit		0.1 °(C / ° F	
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 Communication¹ — ● Printer Communication¹ — ● Printer Communication² — ● Meter Inputs BNC, phono ● Display Custom LCD with backlight Housing IP67, shock & scratch resistant, non-slip Power Requirement > 500 hours Battery Life > 500 hours 160 (L) x 80 (W) x 40.60 (H) mm Meter Dimensions Approx. 260g (with batteries) / 216g (without batteries) PC210-K Waterproof pH/ORP/EC/TDS/Sal/Res/Temp Handheld Meter Kit (3200779532) Res/Temp Handheld Meter Kit (3200779532)				
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 Communication¹ Printer Communication² Meter Inputs Display Meter Inputs Display Custom LCD with backlight Housing Power Requirement Battery Life Solo hours Meter Dimensions Meter Dimensions Meter Weight PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) Res/Temp Handheld Meter Kit (3200779532)				
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 Communication¹ Printer Communication² Meter Inputs BNC, phono Display Custom LCD with backlight Housing Power Requirement Battery Life Battery Life Meter Dimensions Meter Weight PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) PC220-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) PC220-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532)		•	•	
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 Communication¹ Printer Communication² — Meter Inputs BNC, phono Display Housing Power Requirement Battery Life Battery Life Bettery Life Meter Dimensions Meter Weight PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) PC220-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532)		<u> </u>		
Offset & Average Slope Display Calibration Alarm (1 to 90 days) Auto Shut-Off (1 to 30 mins.) Electrode Status Diagnostic Messages PC Communication¹ —		•	•	
Auto Shut-Off (1 to 30 mins.) Electrode Status Diagnostic Messages PC Communication¹ Printer Communication² Meter Inputs Display Custom LCD with backlight Housing Power Requirement Battery Life Meter Dimensions Meter Weight PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532)	Offset & Average Slope Display	•	•	
Electrode Status Diagnostic Messages PC Communication¹ Printer Communication² Meter Inputs Display Custom LCD with backlight Housing Power Requirement Battery Life Battery Life Meter Dimensions Meter Weight PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) PC20-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532)		•	•	
Diagnostic Messages PC Communication¹ Printer Communication² Meter Inputs BNC, phono Display Custom LCD with backlight Housing Power Requirement Battery Life Battery Life Battery Life Meter Dimensions Meter Weight PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■				
Printer Communication ² Meter Inputs Display Custom LCD with backlight Housing Power Requirement Battery Life Battery Life Meter Dimensions Meter Weight PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) BNC, phono Custom LCD with backlight Pl67, shock & scratch resistant, non-slip 2 x AA batteries > 500 hours 160 (L) x 80 (W) x 40.60 (H) mm Approx. 260g (with batteries) / 216g (without batteries) PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532)	Diagnostic Messages	•	•	
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. 260g (with batteries) / 216g (without batteries) PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) PC220-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532)		_	•	
Display Custom LCD with backlight Housing Power Requirement 2 x AA batteries Battery Life > 500 hours Meter Dimensions Meter Weight Approx. 260g (with batteries) / 216g (without batteries) PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) Res/Temp Handheld Meter Kit (3200779532)		- DNC	nhono	
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. 260g (with batteries) / 216g (without batteries) PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) Res/Temp Handheld Meter Kit (3200779532)				
Battery Life > 500 hours Meter Dimensions 160 (L) x 80 (W) x 40.60 (H) mm Meter Weight Approx. 260g (with batteries) / 216g (without batteries) PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) Res/Temp Handheld Meter Kit (3200779532)	Housing	IP67, shock & scrato	ch resistant, non-slip	
Meter Dimensions 160 (L) x 80 (W) x 40.60 (H) mm Meter Weight Approx. 260g (with batteries) / 216g (without batteries) PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) PC220-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532)	Power Requirement Rattery Life			
Meter Weight Approx. 260g (with batteries) / 216g (without batteries) PC210-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532) Approx. 260g (with batteries) / 216g (without batteries) PC220-K Waterproof pH/ORP/EC/TDS/Sal/ Res/Temp Handheld Meter Kit (3200779532)	Meter Dimensions			
Res/Temp Handheld Meter Kit (3200779532) Res/Temp Handheld Meter Kit (3200779532)	Meter Weight			
 9652-10D Gel pH electrode 9383-10D Ti/Pt Conductivity electrode (k=1.0) 4.01 & 7.00 pH Buffers (60 ml each) 1413 μS/cm & 12.88 mS/cm Conductivity standards (60 ml each) 2 x AA Batteries Electrode Adapter Carrying case 9652-10D Gel pH electrode 9383-10D Ti/Pt Conductivity electrode 4.01 & 7.00 pH Buffers (60 ml each) 1413 μS/cm & 12.88 mS/cm Conductivity standards (60 ml each) 2 x AA Batteries Electrode Adapter Carrying case 	Meter Kit*	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) 1413 μS/cm & 12.88 mS/cm Conductivity standards (60 ml each) 2 x AA Batteries Electrode Adapter Carrying case	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) 1413 μS/cm & 12.88 mS/cm Conductivity standards (60 ml each) 2 x AA Batteries Electrode Adapter Carrying case	
Manual & Quick Guide Manual & Quick Guide *Meter kit with NIST pH buffers is available upon request. Add 'N' suffix to order code. *Meter kit with NIST pH buffers is available upon request. Add 'N' suffix to order code.	*Meter kit with NIST nH buffers is available upon	Manual & Quick Guide Trequest 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

Multi-Parameter Meters	, o defice i la la lola i valor Quality	
	CHAIR.	
1 10		
Model	PD210	PD220
pH Range		/Temp (°C/°F) 16.00 pH
Resolution		1 pH
Accuracy		D1 pH
Calibration Points		to 5), DIN (Up to 6)
pH Buffer Groups		IIST, DIN
ORP Range		00 mV
Resolution	0.1 mV (< ±1000 m\	/), 1 mV (≥ ±1000mV)
Accuracy		3% of reading (≥ ±1000mV)
Calibration Option		/es
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	Yes	
Compensation 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	-30.0 to 130.0 °C / -22.0 to 266.0 °F	
Accuracy	± 0.5 °C / ± 0.9 °F	
Calibration Option	± 0.5 °C / ± 0.9 °F 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	•	•
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 > 500 hours	
Battery Life		
Meter Dimensions) x 40.60 (H) mm
Meter Weight 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	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 caseManual & Quick Guide	Carrying caseManual & Quick Guide
	• Ivianuai & Quick Guide	■ Ivianual & Quick Guide

^{*}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

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 Powd	ers		
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)	
Conductivi	ty Standard	ls	
Part No.	Model	Description	
3999960017	503-S	Conductivity Standards Kit (84 μ S/cm, 1413 μ S/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 Electro	de 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	
Accessorie	es		
Part No.	Model	Description	
3014028368	X-51	Digital simulator for pH, mV, lon, 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.



502-S USA pH Buffers Kit









X-51 Digital Simulator

X-52 Digital Simulator



Printer





PC (USB) cable (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 shockresistant 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.





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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