

# LAQUA

LAQUA 200 Series Handheld Water Quality Meters



|             |                        |                  |              |
|-------------|------------------------|------------------|--------------|
| pH          | ORP                    | Dissolved Oxygen | Conductivity |
| Resistivity | Total Dissolved Solids | Salinity         |              |



[www.horiba-laqua.com](http://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 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

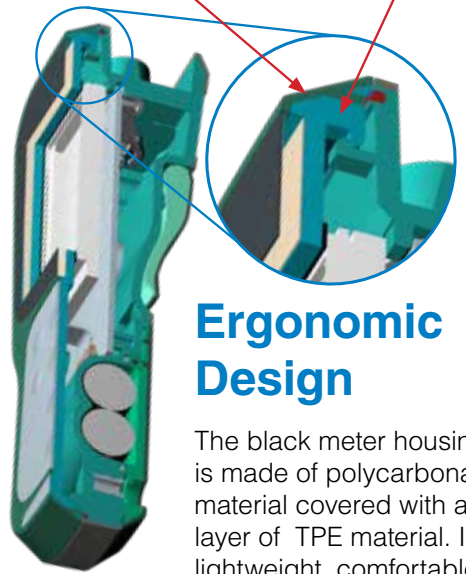
## Built-in Electrode Holder

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.

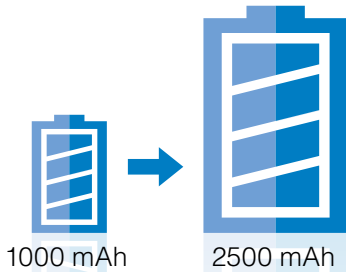


1.0 mm Thermoplastic elastomer (TPE)  
Polycarbonate



## 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.



## 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.

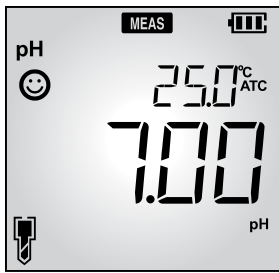
## PC / Printer Communications

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<sup>1</sup> to transfer data via data acquisition software or to upgrade<sup>2</sup> meter software or connect to a HORIBA printer using a printer (RS232) cable<sup>1</sup> to print data.

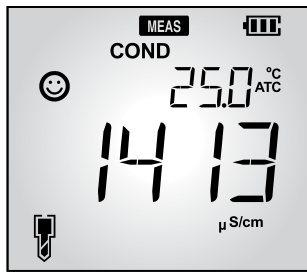
<sup>1</sup> Cables and printer are sold separately  
<sup>2</sup> Also applicable to 210 models

## Easy-to-Read Display

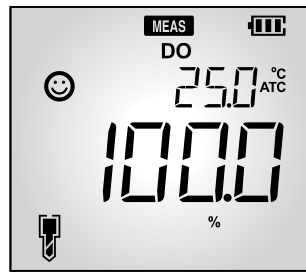
Electrode condition, reading stability, parameter, and temperature in one screen can be checked at a glance.



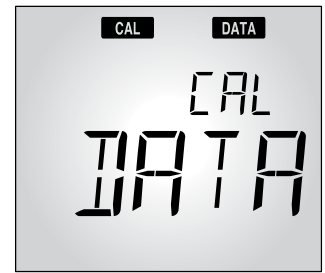
pH Display



Conductivity Display

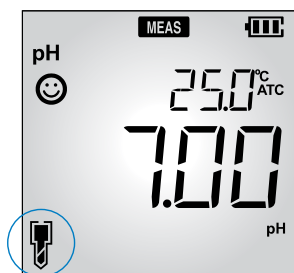


Dissolved Oxygen Display



## Calibration Data

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



## Electrode Status Indicator

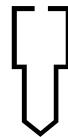
The electrode icon indicates the condition of the electrode after each calibration.



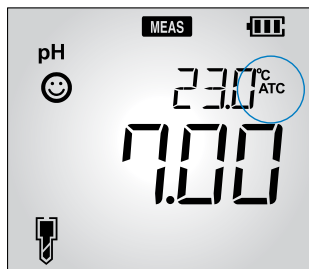
Excellent



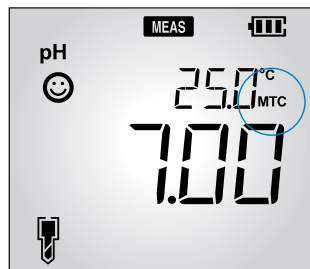
Very Good



Good



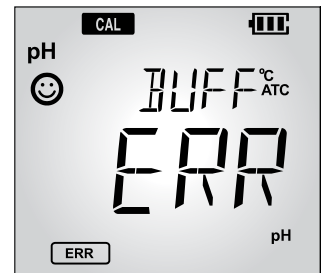
Temperature sensor connected



Temperature sensor disconnected

## Temperature Sensor Indicator

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



## Diagnostic Messages

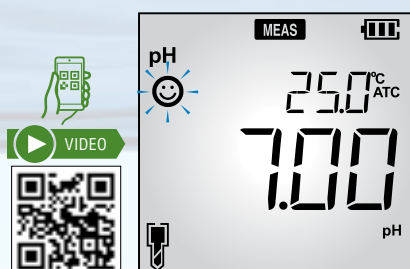
Self-diagnosing meters display measurement and meter issues for fast fault finding and troubleshooting.

## Measurement modes: Auto Stable, Auto Hold, Real Time

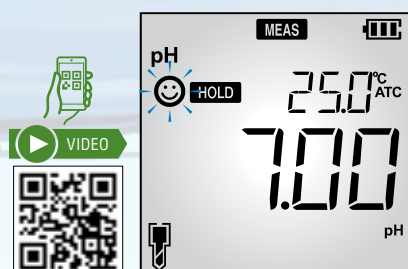
**Auto Stable (AS) mode** - the meter shows live readings; 😊 annunciator blinks until the reading is stable.

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

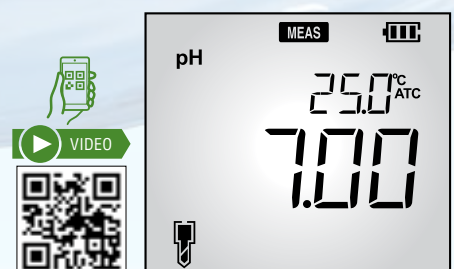
**Real Time** - the meter shows live readings; Both 😊 and **HOLD** annunciators are inactive.



Auto Stable



Auto Hold



Real Time

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

## 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 <sup>-1</sup>   |
| 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  |
|-------------------------------------|--|--|
|                                     | pH/ORP/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 (< ±1000 mV), 0.3% of reading (≥ ±1000mV)  |  |
| 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                 | ●  | ●  |
| Software Upgrade <sup>1</sup>       | ●  | ●  |
| PC Communication <sup>1</sup>       | —  | ●  |
| Printer Communication <sup>2</sup>  | —  | ●  |
| 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*                          | <b>PH210-K Waterproof pH/ORP/Temp Handheld Meter Kit (3200779526)</b> <ul style="list-style-type: none"> <li>• PH210 Meter</li> <li>• 9652-10D Gel pH electrode</li> <li>• 4.01, 7.00, 10.01 pH Buffers (60 ml each)</li> <li>• 2 x AA Batteries</li> <li>• Carrying case</li> <li>• Manual &amp; Quick Guide</li> </ul> | <b>PH220-K Waterproof pH/ORP/Temp Handheld Meter Kit (3200779527)</b> <ul style="list-style-type: none"> <li>• PH220 Meter</li> <li>• 9652-10D Gel pH electrode</li> <li>• 4.01, 7.00, 10.01 pH Buffers (60 ml each)</li> <li>• 2 x AA Batteries</li> <li>• Carrying case</li> <li>• Manual &amp; Quick Guide</li> </ul> |

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

<sup>1</sup>Via PC (USB) cable PN 3200779639

<sup>2</sup>Via Printer (RS232) cable PN 3200779638

● Available — Not available

## Conductivity Meters



| Model                              | EC210   | EC220   |
|------------------------------------|---|---|
|                                    | EC/TDS/Res/Sal/Temp (°C/°F)   |   |
| 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  |   |
| Calibration Points                 | Up to 4 (Auto) / Up to 5 (Manual)   |   |
| Units                              | S/cm, S/m (Auto Ranging)  |   |
| Total Dissolved Solids (TDS) Range | ..ppm to 100 ppt (TDS factor=0.5)   |   |
| Resolution                         | 0.01 ppm (mg/L) / 0.1 ppt (g/L)   |   |
| Accuracy                           | ±0.1% full scale  |   |
| TDS Curves                         | Linear (0.40 to 1.00), EN27888, 442, NaCl   |   |
| Resistivity Range                  | 0.000 Ω•cm to 20.0 MΩ•cm  |   |
| Resolution                         | 0.05% full scale  |   |
| Accuracy                           | ±0.6% full scale,<br>±1.5% full scale > 1.80 MΩ•cm  |   |
| Salinity Range                     | 0.0 to 100.0 ppt / 0.00 to 10.00 %  |   |
| Resolution                         | 0.1 ppt / 0.01%   |   |
| 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                           | ± 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                | ●   | ●   |
| Software Upgrade <sup>1</sup>      | ●   | ●   |
| PC Communication <sup>1</sup>      | —   | ●   |
| Printer Communication <sup>2</sup> | —   | ●   |
| 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                          | <b>EC210-K Waterproof EC/TDS/Res/Sal/Temp Handheld Meter Kit (3200779528)</b> <ul style="list-style-type: none"> <li>• EC210 Meter</li> <li>• 9383-10D Ti/Pt Conductivity electrode (k=1.0)</li> <li>• 84 µS/cm, 1413 µS/cm, 12.88 mS/cm, &amp; 111.8 mS/cm Conductivity standards (60 ml each)</li> <li>• 2 x AA Batteries</li> <li>• Carrying case</li> <li>• Manual &amp; Quick Guide</li> </ul> | <b>EC220-K Waterproof EC/TDS/Res/Sal/Temp Handheld Meter Kit (3200779529)</b> <ul style="list-style-type: none"> <li>• EC220 Meter</li> <li>• 9383-10D Ti/Pt Conductivity electrode (k=1.0)</li> <li>• 84 µS/cm, 1413 µS/cm, 12.88 mS/cm, &amp; 111.8 mS/cm Conductivity standards (60 ml each)</li> <li>• 2 x AA Batteries</li> <li>• Carrying case</li> <li>• Manual &amp; Quick Guide</li> </ul> |

<sup>1</sup>Via PC (USB) cable PN 3200779639

<sup>2</sup>Via Printer (RS232) cable PN 3200779638

## DO Meters



| Model                               | DO210   | DO220   |
|-------------------------------------|---|---|
|                                     | DO/Temp (°C/°F)   |   |
| Dissolved Oxygen (DO) Range         | 0.0 to 20.00 mg/L<br>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 | ●   | ●   |
| Auto Shut-Off (1 to 30 mins.)       | ●   | ●   |
| Electrode Status                    | ●   | ●   |
| Diagnostic Messages                 | ●   | ●   |
| Software Upgrade <sup>1</sup>       | ●   | ●   |
| PC Communication <sup>1</sup>       | —   | ●   |
| Printer Communication <sup>2</sup>  | —   | ●   |
| 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                           | <b>DO210-K Waterproof DO/Temp Handheld Meter Kit (3200779530)</b> <ul style="list-style-type: none"> <li>• DO210 Meter</li> <li>• 9552-20D Galvanic DO probe, 2 m cable</li> <li>• 2 x AA Batteries</li> <li>• Carrying case</li> <li>• Manual &amp; Quick Guide</li> </ul> | <b>DO220-K Waterproof DO/Temp Handheld Meter Kit (3200779531)</b> <ul style="list-style-type: none"> <li>• DO220 Meter</li> <li>• 9552-20D Galvanic DO probe, 2 m cable</li> <li>• 2 x AA Batteries</li> <li>• Carrying case</li> <li>• Manual &amp; Quick Guide</li> </ul> |

<sup>1</sup>Via PC (USB) cable PN 3200779639

<sup>2</sup>Via Printer (RS232) cable PN 3200779638

● Available — Not available



## Multi-Parameter Meters



| Model                               | PC210   | PC220   |
|-------------------------------------|---|---|
|                                     | pH/ORP/EC/TDS/Sal/Res/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 (< ±1000 mV), 0.3% of reading (≥ ±1000mV)   |   |
| Calibration Option                  | Yes   |   |
| 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  |   |
| Calibration Points                  | Up to 4 (Auto) / Up to 5 (Manual)   |   |
| Units                               | S/cm, S/m (Auto Ranging)  |   |
| Total Dissolved Solids (TDS) Range  | ..ppm to 100 ppt (TDS factor=0.5)   |   |
| Resolution                          | 0.01 ppm (mg/L) / 0.1 ppt (g/L)   |   |
| Accuracy                            | ±0.1% full scale  |   |
| TDS Curves                          | Linear (0.40 to 1.00), EN27888, 442, NaCl   |   |
| Resistivity Range                   | 0.000 Ω•cm to 20.0 MΩ•cm  |   |
| Resolution                          | 0.05% full scale  |   |
| Accuracy                            | ±0.6% full scale,<br>±1.5% full scale > 1.80 MΩ•cm  |   |
| Salinity Range                      | 0.0 to 100.0 ppt / 0.00 to 10.00 %  |   |
| Resolution                          | 0.1 ppt / 0.01%   |   |
| 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                            | ± 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 <sup>1</sup>       | ●   | ●   |
| PC Communication <sup>1</sup>       | —   | ●   |
| Printer Communication <sup>2</sup>  | —   | ●   |
| 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)  |   |
| Meter Kit*                          | <b>PC210-K Waterproof pH/ORP/EC/TDS/Sal/Res/Temp Handheld Meter Kit (3200779532)</b> <ul style="list-style-type: none"> <li>• PC210 Meter</li> <li>• 9652-10D Gel pH electrode</li> <li>• 9383-10D Ti/Pt Conductivity electrode (k=1.0)</li> <li>• 4.01 &amp; 7.00 pH Buffers (60 ml each)</li> <li>• 1413 µS/cm &amp; 12.88 mS/cm Conductivity standards (60 ml each)</li> <li>• 2 x AA Batteries</li> <li>• Electrode Adapter</li> <li>• Carrying case</li> <li>• Manual &amp; Quick Guide</li> </ul> | <b>PC220-K Waterproof pH/ORP/EC/TDS/Sal/Res/Temp Handheld Meter Kit (3200779533)</b> <ul style="list-style-type: none"> <li>• PC220 Meter</li> <li>• 9652-10D Gel pH electrode</li> <li>• 9383-10D Ti/Pt Conductivity electrode (k=1.0)</li> <li>• 4.01 &amp; 7.00 pH Buffers (60 ml each)</li> <li>• 1413 µS/cm &amp; 12.88 mS/cm Conductivity standards (60 ml each)</li> <li>• 2 x AA Batteries</li> <li>• Electrode Adapter</li> <li>• Carrying case</li> <li>• Manual &amp; Quick Guide</li> </ul> |

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

<sup>1</sup>Via PC (USB) cable PN 3200779639

<sup>2</sup>Via Printer (RS232) cable PN 3200779638

● Available — Not available

## 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 (< ±1000 mV), 0.3% of reading (≥ ±1000mV)  |  |
| Calibration Option                  | Yes  |  |
| Dissolved Oxygen (DO) Range         | 0.0 to 20.00 mg/L<br>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 <sup>1</sup>       | ●  | ●  |
| PC Communication <sup>1</sup>       | —  | ●  |
| Printer Communication <sup>2</sup>  | —  | ●  |
| 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*                          | <b>PD210-K Waterproof pH/ORP/DO/Temp Handheld Meter Kit (3200779534)</b> <ul style="list-style-type: none"> <li>• PD210 Meter</li> <li>• 9652-20D Gel pH electrode, 2 m cable</li> <li>• 9552-20D Galvanic DO probe, 2 m cable</li> <li>• 4.01, 7.00, 10.01 pH Buffers (60 ml each)</li> <li>• 2 x AA Batteries</li> <li>• Electrode Adapter</li> <li>• Carrying case</li> <li>• Manual &amp; Quick Guide</li> </ul> | <b>PD220-K Waterproof pH/ORP/DO/Temp Handheld Meter Kit (3200779535)</b> <ul style="list-style-type: none"> <li>• PD220 Meter</li> <li>• 9652-20D Gel pH electrode, 2 m cable</li> <li>• 9552-20D Galvanic DO probe, 2 m cable</li> <li>• 4.01, 7.00, 10.01 pH Buffers (60 ml each)</li> <li>• 2 x AA Batteries</li> <li>• Electrode Adapter</li> <li>• Carrying case</li> <li>• Manual &amp; Quick Guide</li> </ul> |

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

<sup>1</sup>Via PC (USB) cable PN 3200779639

<sup>2</sup>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  |



501-S NIST pH Buffers Kit



502-S USA pH Buffers Kit

| 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) |



ORP Powders

| 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 |



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

\*Electrodes carry 6-month warranty against manufacturing defects.

Water Quality Analyzers

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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