## SevenDirect<sup>™</sup> Meters

# Straight to the Point



Developed for a wide range of applications, SevenDirect benchtop meters provide accurate pH, ion concentration, and conductivity measurements of almost any sample. Their ease of use, data handling options and robustness will delight discerning users.

Mastered in No Time: The intuitive user interface of the generous 7" touchscreen facilitates the measurement process by avoiding unnecessary steps and focusing on the most important information. On-screen instructions guide through the calibration process while the integrated help system provides immediate support. The EasyPlace<sup>™</sup> electrode arm ensures precise placement of the sensor.

**Tracks Your Records:** The instruments support GLP compliance by storing timestamps, sample-, sensor- and user IDs with every

measurement. Settings are protected from unwanted changes by a two level user management. Automatic data transfer to PC or printer minimizes transcription errors. The guided verification process provides a straightforward way to check system performance with a clear pass/fail indication.

**Tough Enough:** The SevenDirect meters feature a closed connector compartment to prevent corrosion and a replacable protective cover to keep the instrument safe from dust and spills even with sensors attached (IP54 in-use).



# SevenDirect<sup>™</sup> Meters The Right Solution for Your Industry

Combine SevenDirect with the right electrode out of the comprehensive InLab® portfolio for a powerful measurement system to match the challenges of your industry. Use METTLER TOLEDO calibration standards and maintenance solutions to ensure reliable performance, and expand the system with our dedicated accessories. No matter the industry—SevenDirect has features that make a difference.

#### Food and Beverage

Automated limit checks support quick decisions in quality control:

- Set upper and lower limits for measurement value and temperature.
- Screen color indicates pass or fail.

#### Chemicals

Extra protection for operators and equipment:

- Replaceable cover to protect against accidental spills.
- Glove mode for higher screen sensitivity.

#### Cosmetics

Methods take care of various sample types:

- Quickly switch between methods with pre-set parameters.
- Ensure correct sensor usage with Intelligent Sensor Management (ISM®).

#### **Position Your Sensor Precisely**



The EasyPlace<sup>™</sup> electrode arm makes sensor handling easy. Dedicated positions for calibration, measurement, cleaning and storage simplify daily operation.

#### Stirring for Reliable Results



The EasyMix<sup>™</sup> magnetic stirrer homogenizes samples for more accurate results. Its perfect fit with the EasyPlace<sup>™</sup> electrode arm saves bench space.

#### Data Management under Control



The EasyDirect<sup>™</sup> PC software simplifies data management. Collect data, generate reports and plots, export to a PC or print on a network printer.



## Meters and Measurement Specifications

|                     | pH                | mV   | Cond  | lons  | Temperature     |
|---------------------|-------------------|--|---|---|-----------------|
| SD20                | •                 | •  |   |   | •               |
| SD30                |                   |  | •   |   | •               |
| SD50                | •                 | •  |   | •   | •               |
| SD23                | •                 | •  | •   |   | •               |
| Range               | -2.000-20.000     | -2000.0-2000.0   | Conductivity:<br>0.000 μS/cm–2000 mS/cm<br>TDS: 0.00 mg/L–1000 g/L<br>Salinity: 0.00–80.00 psu<br>Resistivity: 0.00–100.0 MΩ*cm | mmol/L, mol/L, mg/L, ppm:<br>0.00000-999999%:<br>0.000-100.000<br>pX: -2.000-20.000 | –30.0–130.0 °C  |
| Resolution          | 0.1/0.01/0.001    | 1/0.1  | Auto-range, max. 0.001  | mmol/L, mol/L, mg/L,<br>ppm: 0.00001<br>%: 0.001<br>pX: 0.1/0.01                    | 0.1 °C          |
| Accuracy            | ±0.002            | ±0.1<br>(-500.0-500.0 mV)<br>±0.2<br>(-2000.0-2000.0 mV) | 0.5% of measured value  | mmol/L, mol/L, mg/L, ppm,<br>pX: ±0.002   | ±0.1 (0-100 °C) |
| Calibration methods | Linear, Segmented | -  | Linear, Manual cell constant  | Linear, Segmented   | -               |
| Calibration points  | 1 to 5            | -  | 1 or 2  | 1 to 5  | -               |

### **Order Information**

For an easy start, choose one of our ready-to-use kits which include the instrument, an application-specific sensor and calibration standards.

| Instrument                           | Kit                       | Scope of Delivery  | Material No. |
|--------------------------------------|---------------------------|--|--------------|
| pH Meter<br>SevenDirect              | Basic<br>Instrument       | Instrument, power supply, protective cover, Get-Started-Guide, electrode holder<br>EasyPlace™  |              |
| SD20                                 | Kit                       | SD20, plus pH electrode InLab Expert Pro-ISM and 3×2 calibration buffer sachets (pH 4.01, 7.00 and 9.21 or 10.01)  | 30671554     |
|                                      | Stirrer Kit               | SD20 Kit plus EasyMix magnetic stirrer   | 30671555     |
|                                      | HA Kit                    | SD20 Kit, with InLab Routine Pro-ISM instead of InLab Expert Pro-ISM   | 30671556     |
|                                      | Organic Kit               | SD20 Kit, with InLab Science Pro-ISM instead of InLab Expert Pro-ISM   | 30671557     |
|                                      | Pure H <sub>2</sub> O Kit | SD20 Kit, with InLab Pure Pro-ISM instead of InLab Expert Pro-ISM  | 30671558     |
|                                      | Solids Kit                | SD20 Kit, with InLab Solids Pro-ISM instead of InLab Expert Pro-ISM  | 30671559     |
|                                      | Viscous Kit               | SD20 Kit, with InLab Viscous Pro-ISM instead of InLab Expert Pro-ISM   | 30671560     |
|                                      | Low Vol Kit               | SD20 Kit, with InLab Micro Pro-ISM instead of InLab Expert Pro-ISM   | 30671561     |
| pH/lon meter<br>SevenDirect<br>SD50  | Basic<br>Instrument       | Instrument, power supply, protective cover, Get-Started-Guide, electrode holder<br>EasyPlace™  | 30671552     |
|                                      | Kit                       | SD50, plus pH electrode InLab Expert Pro-ISM and 3×2 calibration buffer sachets (pH 4.01, 7.00 and 9.21 or 10.01)  | 30671544     |
|                                      | F-ion Kit                 | SD50, plus PerfectION™ F sensor  | 30671545     |
|                                      | HA Kit                    | SD50 Kit, with InLab Routine Pro-ISM instead of InLab Expert Pro-ISM   | 30671546     |
|                                      | Organic Kit               | SD50 Kit, with InLab Science Pro-ISM instead of InLab Expert Pro-ISM   | 30671547     |
|                                      | Pure H <sub>2</sub> O Kit | SD50 Kit, with InLab Pure Pro-ISM instead of InLab Expert Pro-ISM  | 30671548     |
|                                      | Low Vol Kit               | SD50 Kit, with InLab Micro Pro-ISM instead of InLab Expert Pro-ISM   | 30671549     |
| Cond meter<br>SevenDirect<br>SD30    | Basic<br>Instrument       | Instrument, power supply, protective cover, Get-Started-Guide, electrode holder<br>EasyPlace™  | 30671551     |
|                                      | Kit                       | SD30, plus conductivity sensor InLab 731-ISM and $2 \times 2$ conductivity standard sachets (1413 µS/cm and 12.88 mS/cm)   | 30671562     |
|                                      | Pure H <sub>2</sub> O Kit | SD30 kit, with InLab 741-ISM instead of InLab 731-ISM and 2 conductivity standard sachets (84 µS/cm)   | 30671563     |
| pH/Cond meter<br>SevenDirect<br>SD23 | Basic<br>Instrument       | Instrument, power supply, protective cover, Get-Started-Guide, electrode holder<br>EasyPlace™ with holder for up to three sensors  | 30671553     |
|                                      | Kit                       | SD23, plus pH electrode InLab expert Pro-ISM, conductivity sensor InLab 731-ISM, $3 \times 2$ pH buffer (pH 4.01, 7.00 and 9.21 or 10.01) sachets and $2 \times 2$ conductivity standards (1413 µS/cm and 12.88 mS/cm) | 30671567     |
|                                      | Pure H <sub>2</sub> O Kit | SD23, plus pH electrode InLab Pure Pro-ISM, conductivity sensor InLab 741-ISM, 3×2 pH buffer (pH 4.01, 7.00 and 9.21 or 10.01) sachets and 2 conductivity standards (84 µS/cm)   | 30671568     |

| Description                                     | Order No. |
|---|-----------|
| EasyPlace: Electrode arm                        | 30671569  |
| (included in standard delivery)                 |           |
| Protective cover                                | 30671529  |
| (included in standard delivery)                 |           |
| Power supply 18 W                               | 30671580  |
| (included in standard delivery)                 |           |
| Barcode Scanner                                 | 30417466  |
| Licence for EasyDirect™ pH software             | 30323214  |
| USB A-B cable 1.8 m for EasyDirect™             | 51191926  |
| EasyMix magnetic stirrer                        | 30671570  |
| ISM <sup>®</sup> cable 1.2 m, BNC/RCA-MultiPin™ | 30281896  |

| pH Buffers   | Order No. |
|--|-----------|
| pH 7.00 buffer solution in sachets, $30 \times 20$ mL  | 51302069  |
| pH 7.00 buffer solution in sachets, 30×20 mL           | 51302047  |
| pH 9.21 buffer solution in sachets, 30×20 mL           | 51302070  |
| pH 10.01 buffer solution in sachets, 30×20mL           | 51302079  |
| Rainbow I (3 × 10 sachets of 20 mL, 4.01/7.00/9.21)    | 51302068  |
| Rainbow II (3 × 10 sachets of 20 mL, 4.01/7.00/10.01)  | 51302080  |
| Fluoride solution kit                                  | 30718583  |
| 84 μS/cm conductivity standard in sachets, 10×20 mL    | 51350004  |
| 1413 µS/cm conductivity standard in sachets, 30×20 mL  | 51350006  |
| 12.88 mS/cm conductivity standard in sachets, 30×20 mL | 51350008  |

#### METTLER TOLEDO Group

Laboratory Local contact: www.mt.com/contacts

#### www.mt.com/pH \_

For more information

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