

SevenDirect™ 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™ 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).

METTLER TOLEDO

SevenDirect™ 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™ electrode arm makes sensor handling easy. Dedicated positions for calibration, measurement, cleaning and storage simplify daily operation.

Stirring for Reliable Results



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

Data Management under Control



The EasyDirect™ 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	Ions	Temperature
SD20	•	•			•
SD30			•		•
SD50	•	•		•	•
SD23	•	•	•		•
Range	–2.000...20.000	–2,000.0...2,000.0 mV	Conductivity: 0.000 µS/cm...2,000 mS/cm TDS: 0.00 mg/L...1,000 g/L Salinity: 0.00...80.00 psu Resistivity: 0.00...100.0 MΩ*cm	mmol/L, mol/L, mg/L, ppm: 0...999,999 %: 0...100.000 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, mg/L, ppm: 0.001 mol/L, %: 0.0001 pX: 0.1/0.01	0.1 °C
Accuracy	±0.002	±0.1 (–500.0...500.0 mV) ±0.2 (–2,000.0...2,000.0 mV)	0.5% of measured value	mmol/L, mol/L, mg/L, ppm, %: ±0.5% of measured value, 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 SevenDirect SD20	Basic Instrument	Instrument, power supply, protective cover, Get-Started-Guide, electrode holder EasyPlace™	30671550
	Kit	SD20, plus pH electrode InLab Expert Pro-ISM and 3×3 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 ₂ 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/Ion meter SevenDirect SD50	Basic Instrument	Instrument, power supply, protective cover, Get-Started-Guide, electrode holder EasyPlace™	30671552
	Kit	SD50, plus pH electrode InLab Expert Pro-ISM and 3×3 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 ₂ O Kit	SD50 Kit, with InLab Pure Pro-ISM instead of InLab Expert Pro-ISM	30671548
Cond meter SevenDirect SD30	Basic Instrument	Instrument, power supply, protective cover, Get-Started-Guide, electrode holder EasyPlace™	30671551
	Kit	SD30, plus conductivity sensor InLab 731-ISM and 2×2 conductivity standard sachets (1413 µS/cm and 12.88 mS/cm)	30671562
	Pure H ₂ 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 SevenDirect SD23	Basic Instrument	Instrument, power supply, protective cover, Get-Started-Guide, electrode holder EasyPlace™ with holder for up to three sensors	30671553
	Kit	SD23, plus pH electrode InLab expert Pro-ISM, conductivity sensor InLab 731-ISM, 3×3 pH buffer (pH 4.01, 7.00 and 9.21 or 10.01) sachets and 2×2 conductivity standards (1413 µS/cm and 12.88 mS/cm)	30671567
	Pure H ₂ O Kit	SD23, plus pH electrode InLab Pure Pro-ISM, conductivity sensor InLab 741-ISM, 3×3 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 (included in standard delivery)	30671569
Protective cover (included in standard delivery)	30671529
Power supply 18 W (included in standard delivery)	30671580
Barcode Scanner	30417466
Licence for EasyDirect™ pH software	30323214
USB A-B cable 1.8 m for EasyDirect™	51191926
EasyMix magnetic stirrer	30671570
ISM® cable 1.2 m, BNC/RCA-MultiPin™	30281896

pH Buffers	Order No.
pH 4.01 buffer solution in sachets, 30×20 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	30111140
1413 µS/cm conductivity standard in sachets, 30×20 mL	51302049
12.88 mS/cm conductivity standard in sachets, 30×20 mL	51302050

SevenDirect SD20 pH/mV Meter

Straight to the Point



Traceable Results

Reliable tracking of each stored measurement with the analysis it originates from: SevenDirect™ simplifies data entry and records additional information like date and time, user ID and sensor ID.



Intuitive to Use

Increased productivity and minimized risk of errors: with its on-screen instructions, SevenDirect supports operators in carrying out procedures correctly and with confidence. The automated limit checks enable quick decisions in quality control.



Instrument Kept Safe

Protection from splash water, chemicals and dust to prevent inaccurate results and corroded connectors: the IP54 rating of SevenDirect keeps the interior of the instrument safe, even with sensors attached. The replaceable protective cover provides an extra layer of protection.



Specialized Sensors

Accurate measurements of challenging samples such as organic solvents, solid and semisolid food or highly viscous liquids: benefit from Intelligent Sensor Management (ISM®) to ensure the right sensor is used for each sample.



SevenDirect Advanced pH Meter Line

The Right Solution For Your Industry

pH or ORP measurements are common procedures in most laboratories and accurate results often critical for safety and product quality. Developed for a wide range of applications, SevenDirect™ SD20 benchtop meters provide reliable measurements of almost any sample. Their ease of use, data handling options and robustness will delight discerning users.

No matter what industry—these features make a difference:

- 7" touchscreen with intuitive user interface
- uFocus mode for most important parameters
- StatusLight allowing for an easy readiness check
- Two level user management to protect instrument settings
- Easy sample ID entry helping to keep track of results
- Optional EasyDirect™ software for simplified data handling
- IP54 protection against dust and spills



General Specifications

Measurement parameters	Range	Resolution	Accuracy	Calibration methods	Calibration points
pH	-2.000... 20.000	0.1/0.01/0.001	±0.002	Linear, Segmented	1 to 5
mV	-2000.0... 2000.0 mV	1/0.1	± 0.1(-500.0...500.0 mV) ± 0.2 (-2000.0...2000.0 mV)	-	-
Temperature	-30.0...130.0	0.1 °C	±0.1 °C	-	-

SevenDirect™ SD20 Kits Overview and General Accessories

Kit	Scope of Delivery	Material No.
Basic Instrument	Instrument, power supply, protective cover, Get-Started-Guide, electrode holder EasyPlace™	30671550
Kit	SD20, plus pH electrode InLab Expert Pro-ISM and 3 x 3 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 ₂ 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

General Accessories	Material no.
EasyPlace Electrode arm (included in standard delivery)	30671569
Protective cover (included in standard delivery)	30671529
Barcode Scanner	30417466
Licence for EasyDirect™ pH PC software	30323214
USB A-B cable 1.8m for EasyDirect™	51191926
EasyMix magnetic stirrer	30671570
Rainbow I pH buffers (3 x 10 sachets of 20 mL, 4.01/7.00/9.21)	51302068
Rainbow II pH buffers (3 x 10 sachets of 20 mL, 4.01/7.00/10.01)	51302080

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www.mt.com/pH

For more information

SevenDirect SD23 pH/Conductivity Meter

Straight to the Point



Two Results in One Go

Quick switch between single and dual mode for maximum flexibility: the common parameters pH and conductivity can be measured separately or simultaneously, e.g. in water analysis.



Intuitive to Use

Increased productivity and minimized risk of errors: with its on-screen instructions, SevenDirect™ supports operators in carrying out procedures correctly and with confidence. The automated limit checks enable quick decisions in quality control.



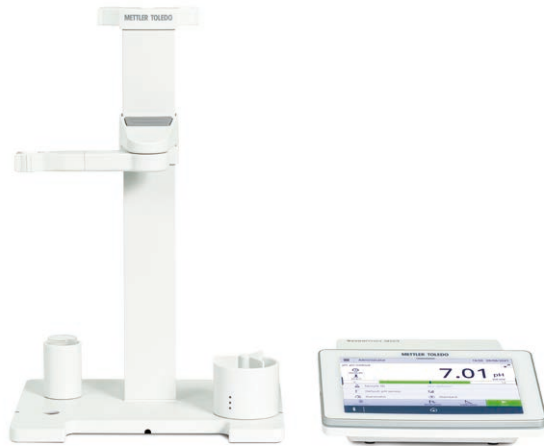
Precise Sensor Position

Simplified handling avoids spilling of sample: the perfectly vertical movement of the EasyPlace™ electrode arm prevents sensor damage and ensures precise positioning, also when using multiple sensors.



Efficient Documentation

Error-free transcriptions in reduced time: the EasyDirect™ pH PC software simplifies data handling by automatically transferring data from instrument to PC, printing or exporting it for further analysis.



SevenDirect Advanced pH/Conductivity Meter Line

The Right Solution for Your Industry

pH and conductivity measurements are common procedures in most laboratories and accurate results are often critical for safety and product quality. Developed for a wide range of applications, SevenDirect™ SD23 benchtop meters provide reliable measurements of almost any sample. Their ease of use, data handling options and robustness will delight discerning users.

No matter what industry—these features make a difference:

- 7" touchscreen with intuitive user interface
- uFocus mode for most important parameters
- StatusLight allowing for an easy readiness check
- Two-level user management to protect instrument settings
- Easy sample ID entry helps to keep track of results
- Optional EasyDirect™ PC software simplifies data handling
- IP54 protection against dust and spills

METTLER TOLEDO



General Specifications

Measurement parameters	Range	Resolution	Accuracy	Calibration methods	Calibration points
pH	−2.000...20.000	0.1/0.01/0.001	±0.002	Linear, Segmented	1 to 5
mV	−2,000.0...2,000.0 mV	1/0.1	±0.1 (−500.0...500.0 mV) ±0.2 (−2,000.0...2,000.0 mV)	—	—
Conductivity	Conductivity: 0.000 µS/cm...2,000 mS/cm TDS: 0.00 mg/L...1,000 g/L Salinity: 0.00...80.00 psu Resistivity: 0.00...100.0 MΩ*cm	Auto-range, max. 0.001	0.5% of measured value	Linear, Manual cell constant	1 or 2
Temperature	−30.0...130.0	0.1 °C	±0.1 °C	—	—

SevenDirect SD23 Kits Overview and General Accessories

Kit	Scope of Delivery	Material No.
Basic Instrument	Instrument, power supply, protective cover, Get-Started-Guide, electrode holder EasyPlace™ with holder for up to three sensors	30671553
Kit	SD23, plus pH electrode InLab expert Pro-ISM, conductivity sensor InLab 731-ISM, 3×3 pH buffer sachets (pH 4.01, 7.00 and 9.21 or 10.01) and 2×2 conductivity standard sachets (1413 µS/cm and 12.88 mS/cm)	30671567
Pure H ₂ O Kit	SD23, plus pH electrode InLab Pure Pro-ISM, conductivity sensor InLab 741-ISM, 3×3 pH buffer sachets (pH 4.01, 7.00 and 9.21 or 10.01) and 2 conductivity standards sachets (84 µS/cm)	30671568

General Accessories	Material No.
EasyPlace: Electrode arm (included in standard delivery)	30671569
Protective cover (included in standard delivery)	30671529
Barcode Scanner	30417466
Licence for EasyDirect™ pH software	30323214
USB A-B cable 1.8 m for EasyDirect™	51191926
EasyMix magnetic stirrer	30671570
Rainbow I pH buffers (3×10 sachets of 20 mL, 4.01/7.00/9.21)	51302068
Rainbow II pH buffers (3×10 sachets of 20 mL, 4.01/7.00/10.01)	51302080
1413 µS/cm conductivity standard in sachets, 30×20 mL	51302049
12.88 mS/cm conductivity standard in sachets, 30×20 mL	51302050

SevenDirect SD30 Conductivity Meter

Straight to the Point



Traceable Results

Reliable tracking of each stored measurement with the analysis it originates from: SevenDirect™ simplifies data entry and records additional information like date and time, user ID and sensor ID.



Verification of Accuracy

Automated verification for precise results: for regular verification when measuring low conductivity samples, SevenDirect™ provides a preset procedure with on-screen instruction and clear pass/fail indications.



Temperature Factored In

Compensating temperature warrants comparable results: SevenDirect™ offers different temperature correction options depending on the sample—and using methods, it is quick and easy to pick the right setting for each measurement.



Stirring for Reliable Results

Homogenized samples for more accurate results: program the EasyMix™ magnetic stirrer for the desired behaviour as part of the measurement method, including stirring and waiting periods.



SevenDirect Advanced Conductivity Meter Line

The Right Solution for Your Industry

Conductivity measurements are common procedures in many laboratories and accurate results are often critical for safety and product quality. Developed for a wide range of applications, SevenDirect™ SD30 benchtop meters provide reliable readings of almost any sample. Their ease of use, data handling options and robustness will delight discerning users.

No matter what industry—these features make a difference:

- 7" touchscreen with intuitive user interface
- uFocus mode for most important parameters
- StatusLight allowing for an easy readiness check
- Two-level user management to protect instrument settings
- Easy sample ID entry helps to keep track of results
- Optional EasyDirect™ software simplifies data handling
- IP54 protection against dust and spills

METTLER TOLEDO



General Specifications

Measurement parameters	Range	Resolution	Accuracy	Calibration methods	Calibration points
Conductivity	Conductivity: 0.000 $\mu\text{S}/\text{cm}$...2,000 mS/cm TDS: 0.00 mg/L ...1,000 g/L Salinity: 0.00...80.00 psu Resistivity: 0.00...100.0 $\text{M}\Omega\cdot\text{cm}$	Auto-range, max. 0.001	0.5% of measured value	Linear, Manual cell constant	1 or 2
Temperature	-30.0...130.0	0.1 $^{\circ}\text{C}$	± 0.1 $^{\circ}\text{C}$	–	–

SevenDirect SD30 Kits Overview and General Accessories

Kit	Scope of Delivery	Material No.
Basic Instrument	Instrument, power supply, protective cover, Get-Started-Guide, electrode holder EasyPlace™	30671551
Kit	SD30, plus conductivity sensor InLab 731-ISM and 2 x 2 conductivity standard sachets (1413 $\mu\text{S}/\text{cm}$ and 12.88 mS/cm)	30671562
Pure H ₂ O Kit	SD30 kit, with InLab 741-ISM instead of InLab 731-ISM and 2 conductivity standard sachets (84 $\mu\text{S}/\text{cm}$)	30671563

General Accessories	Material No.
EasyPlace: Electrode arm (included in standard delivery)	30671569
Protective cover (included in standard delivery)	30671529
Barcode Scanner	30417466
Licence for EasyDirect™ pH software	30323214
USB A-B cable 1.8 m for EasyDirect™	51191926
EasyMix magnetic stirrer	30671570
84 $\mu\text{S}/\text{cm}$ conductivity standard in sachets, 10 x 20 mL	30111140
1413 $\mu\text{S}/\text{cm}$ conductivity standard in sachets, 30 x 20 mL	51302049
12.88 mS/cm conductivity standard in sachets, 30 x 20 mL	51302050

SevenDirect SD50 pH/Ion Meter

Straight to the Point



Diverse Applications

Measuring the concentration of ions beyond H^+ : unlock the full potential of the SD50 meter across various applications, from fluoride determination in dental products to calcium in ketchup. Easily switch back and forth with SevenDirect™ methods.



Verification for Accuracy

Confirm the accuracy of your calibration: automated verification is a simple procedure to check the performance of your measurement system with a known standard and works for both, pH and ISE measurement.



Precise Sensor Position

Simplified handling avoids spilling of sample: the perfectly vertical movement of the EasyPlace™ electrode arm prevents sensor damage and ensures precise positioning, also when using multiple sensors.



Stirring for Reliable Results

Homogenized samples for more accurate results: program the EasyMix™ magnetic stirrer for the desired behaviour as part of the measurement method, including stirring and waiting periods.



SevenDirect Advanced pH/Ion Meter Line

The Right Solution for Your Industry

pH, ORP and ion concentration measurements are common procedures in most laboratories and accurate results are often critical for safety and product quality. Developed for a wide range of applications, SevenDirect™ SD50 benchtop meters provide reliable measurements of almost any sample. Their ease of use, data handling options and robustness will delight discerning users.

No matter what industry—these features make a difference:

- 7" touchscreen with intuitive user interface
- uFocus mode for most important parameters
- StatusLight allowing for an easy readiness check
- Two-level user management to protect instrument settings
- Easy sample ID entry helps to keep track of results
- Optional EasyDirect™ software simplifies data handling
- IP54 protection against dust and spills



General Specifications

Measurement parameters	Range	Resolution	Accuracy	Calibration methods	Calibration points
pH	-2.000...20.000	0.1/0.01/0.001	±0.002	Linear, Segmented	1 to 5
mV	-2,000.0...2,000.0 mV	1/0.1	±0.1 (-500.0...500.0 mV) ±0.2 (-2,000.0...2,000.0 mV)	—	—
Ions	mmol/L, mol/L, mg/L, ppm: 0...999,999 %: 0...100.000 pX: -2.000...20.000	mmol/L, mg/L, ppm: 0.001 mol/L, %: 0.0001 pX: 0.1/0.01	mmol/L, mol/L, mg/L, ppm, %: ±0.5% of measured value, pX: ±0.002	Linear, Segmented	1 to 5
Temperature	-30.0...130.0	0.1 °C	±0.1 °C	—	—

SevenDirect SD50 Kits Overview and General Accessories

Kit	Scope of Delivery	Material No.
Basic Instrument Kit	Instrument, power supply, protective cover, Get-Started-Guide, electrode holder EasyPlace™	30671552
	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 ₂ 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

General Accessories	Material No.
EasyPlace: Electrode arm (included in standard delivery)	30671569
Protective cover (included in standard delivery)	30671529
Barcode Scanner	30417466
Licence for EasyDirect™ pH software	30323214
USB A-B cable 1.8 m for EasyDirect™	51191926
EasyMix magnetic stirrer	30671570
Rainbow I pH buffers (3 × 10 sachets of 20 mL, 4.01/7.00/9.21)	51302068
Rainbow II pH buffers (3 × 10 sachets of 20 mL, 4.01/7.00/10.01)	51302080
Fluoride solution kit (TISAB III, Ion Electrolyte A, Fluoride ISE standard solution 1,000 mg/L)	30718583