

Experience science

with pH and conductivity bench meters



At a glance

Besides the simultaneous display of measured value and temperature, various helpful icons inform you immediately about the condition of your electrode and whether a measurement is in progress or whether the reading is already stable.



Made easy

"Read" starts a measurement, "Cal" a calibration. Automatic endpoint recognition and calibration with automatic buffer recognition reduces possible user errors to a minimum.



Useful

A low-maintenance plastic electrode and handy electrode arm are included in the kit version. A Quick Guide, laminated for those occasional spills, is included as standard.



Flexible

With the connection of a redox electrode the pH meter can also be used for redox measurements. The separate reference input allows measurements with half cells. Graphical plots of readings can be transmitted to a chart recorder via the analog output.



Education Line

Teaching and learning with METTLER TOLEDO

What is the pH of skin? How does temperature affect conductivity? Many such questions arise in education. With the METTLER TOLEDO Education Line you can find answers and perhaps even develop a passion for science.

The compact instruments have been specifically tailored for training courses in colleges and universities – to make teaching and learning in science simply a pleasure.

Specifications

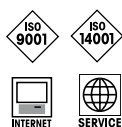
	EL20 pH	EL30 conductivity
Measurement range and limits of error	0.00 ... 14.00 pH \pm 0.01 pH -1999 ... 1999 mV \pm 1 mV 0.0 °C ... 100.0 °C \pm 0.5 °C	0.1 μ S/cm ... 199.9 mS/cm \pm 0.5 % 0.0 °C ... 100.0 °C \pm 0.3 °C
Calibration	Max. 2-point 3 predefined buffer groups	1-point 3 predefined standards
Temperature compensation	ATC & MTC	ATC Linear: 0.00 %/°C ... 10.00 %/°C Reference temperature: 20 & 25 °C
Input	BNC, Cinch/RCA (NTC 30 kOhm)	Mini-DIN
Reference input	2 mm banana socket	–
Analog output	2 mm banana socket	–
Power requirements	100-240 V / 50-60 Hz, 9 V DC	100-240 V / 50-60 Hz, 9 V DC
Size and weight	200 x 175 x 52 mm / 0.6 kg	200 x 175 x 52 mm / 0.6 kg
Materials	Housing: ABS / PC reinforced Window and keypad: Membrane Display: Liquid crystal	Housing: ABS / PC reinforced Window and keypad: Membrane Display: Liquid crystal



Order numbers and standard equipment

Kit	Description	Order No.
EL20-Basic	pH bench meter incl. operating instructions, quick guide, power adapter	51302930
EL20-Kit	As for EL20-Basic, plus LE407 pH electrode, electrode arm, 2 x pH 4.01 and 2 x pH 7.00 buffer sachets	51302931
EL30-Basic	Conductivity bench meter incl. operating instructions, quick guide, power adapter	51302933
EL30-Kit	As for EL30-Basic, plus LE703 conductivity electrode, electrode arm, 2 x 1413 μ S/cm and 2 x 12.88 mS/cm standard sachets	51302934

Electrode	Description	Order No.
LE407	Robust pH electrode with gel electrolyte, applicable for basic applications, uncomplex samples e.g. water; low maintenance	51340330
LE409	pH glass electrode with liquid electrolyte for easy and fast measurements in the laboratory, aqueous samples e.g. acids, bases etc.; electrolyte refillable	51340331
LE420	Glass electrode with movable glass sleeve for more difficult or "dirty" samples such as wastewater, emulsions (e.g. milk), oily samples; electrolyte refillable	51340332
LE438	3-in-1 plastic electrode with integrated temperature sensor for field measurements, samples with fluctuating temperatures; low maintenance	51340242
LE501	Glass redox electrode for the laboratory	51340338
LE510	Robust plastic redox electrode for field measurements	51340339
LE703	Robust conductivity electrode for medium to high conductivities (10 μ S/cm ... 500 mS/cm)	51340335
NTC 30 kOhm	Separate temperature sensor	51300164



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Environment certificate ISO14001
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