

Transmitter

**INGOLD**

Leading Process Analytics

**High Quality in portable size**

- 1120 (X) pH meter
- 1140 (X) pH meter

**Your Benefits**

- Ergonomic design
- Easy to use
- For process spot checks and lab measurement, ATEX



**Portable pH meters:  
Innovation in compact form!**

**METTLER TOLEDO**

# Innovation in compact form!

The Calimatic® system automatically carries out all necessary unit functions for calibration of the sensor, including single-point or dual-point calibration as selected. The novel Sensoface® feature provides information on the condition of the sensor by displaying appropriate "smilies". Both instruments, 1120 and 1140, are also available as Ex-proof versions.

The innovative design allows optimum use of the meter in a whole variety of applications. The datalogger of the 1140 can store up to 100 measured values covering pH, temperature, date and time. These features make this instrument unique in its class. Despite the extensive range of sophisticated features, operation is extremely simple.



For applications where the object of measurement is particularly hard, firm or tough, such as is the case in a pH spot-check of raw ham, we advise the use of our **rugged puncture knife**. In combination with the puncture electrode and the pH meter 1120 or 1140, you have a sturdy measuring system to hand which is in a class of its own.



The adapters 1 and 2 enable different types of sensors to be stored ready to hand in the leak-proof side-pocket of the pH meters.

Ordering information: pH meter	Order no.
pH meter 1120 (incl. battery and shoulder strap)	52 120 653
pH meter 1120-X, Ex-proof version (incl. battery and shoulder strap)	52 120 654
pH meter 1140 (incl. battery, shoulder strap, transfer software and interface cable)	52 120 657
pH meter 1140-X, Ex-proof version (incl. battery, shoulder strap, transfer software and interface cable)	52 120 658

Ordering information: accessories	Order no.
pH puncture electrode LoT406-M6-DXK-S7/25 *)	10 406 3123
Puncture knife	00 406 3000
Puncture kit (puncture knife and electrode)	00 406 3002
Electrode container (set of 5 pcs.)	52 120 695
Adapter 1 (for all electrodes, except puncture electrodes)	52 000 500
Adapter 2 (for puncture electrodes LoT406-M6-DXK-S7/25 and InLab 427)	52 000 501
Coaxial cable AS9/1 m/-15.50D for DPA electrodes with S8 connector	10 001 0100IG
Coaxial cable AS9/1 m/-15.50D for DPAS electrodes with S8 connector	10 000 0100IG
Coaxial cable VP6-ST/1 m/DIN 3x4 mm for electrodes with VP connector	52 300 186
Temperature sensor Pt 1000/1 m (cable length 1 m)	52 120 350
Temperature sensor Pt 1000/3 m (cable length 3 m)	52 120 874

\*) For additional compatible sensors, please ask for the appropriate ordering information.

Ordering information: pH buffer solutions	Order no.
Buffer pH 2.00 (colorless, 250 ml)	51 340 055
Buffer pH 4.01 (red, 250 ml)	51 340 057
Buffer pH 7.00 (green, 250 ml)	51 340 059
Buffer pH 9.21 (blue, 250 ml)	51 300 193
Buffer pouch pH 4.01 (30 pcs, each piece contains 20 ml)	51 302 069
Buffer pouch pH 7.00 (30 pcs, each piece contains 20 ml)	51 302 047
Buffer pouch pH 9.21 (30 pcs, each piece contains 20 ml)	51 302 070

## Technical specifications pH meter 1120 and 1140

Ranges	pH:	-2.00 ... + 16.00
	mV:	-1300 ... + 1300
	°C:	-20.0 ... + 120.0
Display	LC display 35 × 67 mm character height 15 mm	
Measurement cycle	approx. 1 sec.	
Measurement error (± 1 count)	pH:	< 0.01
	mV:	< 0.1 % of measured value ± 0.3 mV
	temperature:	< 0.3 °C





#### Technical specifications pH meter 1120 and 1140

Input	DIN 19 262
Input resistance	$> 1 \times 10^{12} \Omega$
Input current (20 °C)	$< 1 \times 10^{-12} A$
Electrode standardization	Calimatic® automatic calibration with automatic buffer recognition (German patent 29 37 227) manual electrode standardization
Electrode monitoring	Sensoface®: evaluates the zero point, electrode slope, response time and glass impedance, visual indication: good/average/poor Calibration timer*): monitors the calibration intervals, configurable from 1 to 1.000 hours, can be disabled Unit self test: during power-on
Temperature compensation	Pt 1000/NTC 30 k (automatic recognition during power-on) or manual
Measured value memory*)	100 memory locations: pH/mV, temperature, time, date
Datalogger*)	manual, interval or event-controlled (configurable)
Remote interface*)	serial RS 232 interface, bidirectional, asynchronous, baud rate user-definable, can be used as either printer or computer interface
Data retention	configuration and calibration data > 10 years
Automatic switch-off	after either 1 or 12 hours (configurable)
RFI suppression	to EN 50 081-1 and EN 50 081-2
Immunity to interference	to EN 50 082-1, EN 50 082-2 und NAMUR NE 21
Explosion protection (only 1120-X and 1140-X)	EEX ia IIC T6
Environmental temperature	Operation: $-10 \dots + 55 \text{ °C}$ Transport and storage: $-20 \dots + 70 \text{ °C}$
Power supply	3 alkaline AA cells
Operation time	approx. 2.000 h, clock mode > 2 years
Enclosure	Material: PA, IP 66 protected, with integrated electrode side-pocket
Dimensions	133 × 160 × 30 mm (w × h × d)
Weight	approx. 560 g including batteries

\*)) Only for versions 1140 and 1140-X.

#### Technical specifications temperature sensors

Type	Pt 1000
Connection	2-pin plug, $\varnothing$ 4 mm
Temperature range	$-10 \dots + 100 \text{ °C}$

#### Guarantee

Defective instruments, returned to us carriage paid within 1 year from original date of delivery, will be repaired free of charge in our works.





During the **ripening of cheese**, the pH value acts as an important control parameter. With the pH meter 1120, constant quality checks can be performed with the greatest of ease. The replaceable, transparent, built-in side-pocket provides excellent protection for stored electrodes.



pH value plays a decisive role in determining the quality of meat. The pH meters 1120 and 1140 are particularly suitable for the tough conditions experienced in slaughterhouses.

Due to the datalogger, the 1140 instrument provides ideal support for **HACCP** (**H**azardous **A**nalysis and **C**ritical **C**ontrol **P**oints).



The versions 1120-X and 1140-X have been specially designed for use **in potentially explosive areas**.

On the enhanced LC display, pH/mV and temperature can be shown simultaneously. The non-reflecting and scratch-proof glass display panel is fully resistant to chemicals, as is the complete unit itself.



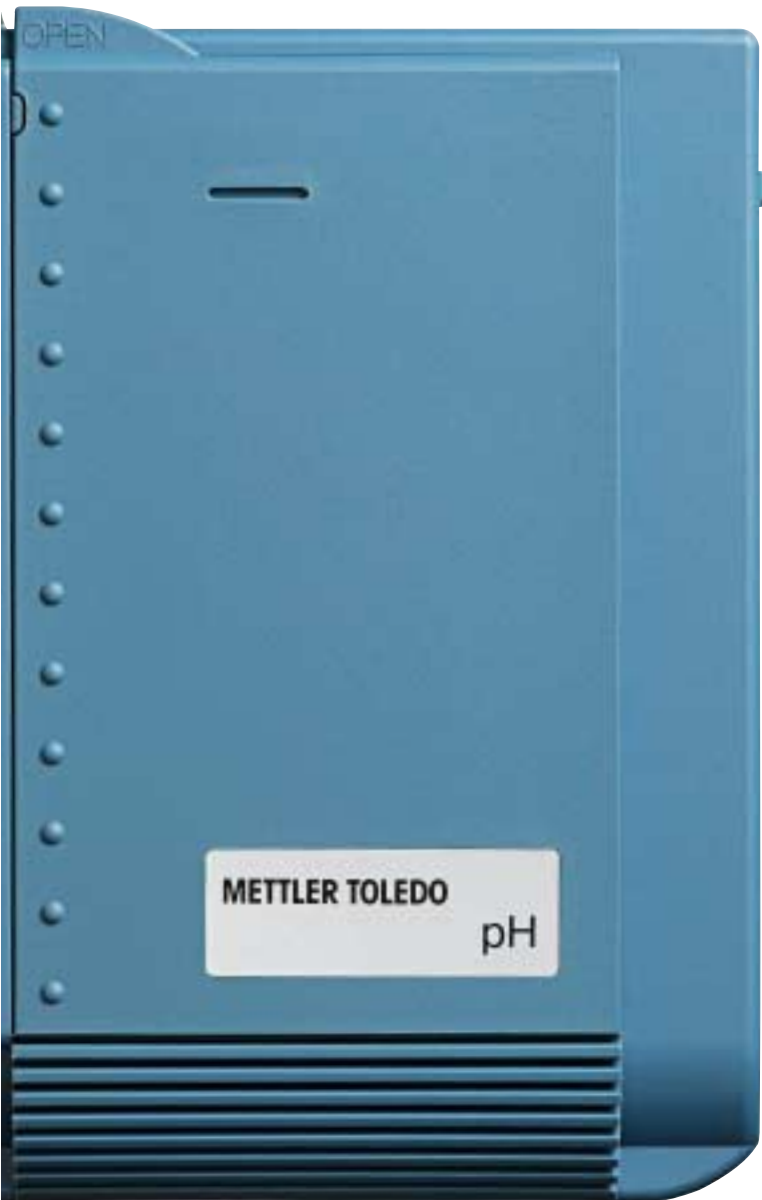
The convenient and, above all, ergonomic design of the meters makes them particularly suitable for **field application purposes**.

The integrated real time clock with date ensures that the measured values stored in the pH meter 1140 are correctly assigned and sequenced.



The 1140 unit offers those features expected from a **professional laboratory pH meter** – and even more!

The transfer software included in the supply provides a comfortable means for establishing documentation and for further processing of the data on a PC. QM documentation according to **ISO 9000** and **GLP** is guaranteed at all times.



# Innovation in compact form!

The superlative in slim-line meters!



Whether on or off the hook ...



... always in form!



Management System  
certified according to  
ISO 9001 / ISO 14001

**Sales and service:**