

**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!**

# 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.

| 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 0100 IG |
| Coaxial cable AS9/1 m/-15.50D for DPAS electrodes with S8 connector   | 10 000 0100 IG |
| Coaxial cable VP6-ST/1 m/DIN 3×4 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<br>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                           |
|                                                 |                                                 |                                    |



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.





#### 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<br>Calibration timer*): monitors the calibration intervals, configurable from 1 to 1.000 hours, can be disabled<br>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<br>> 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: $-10 \dots + 55 \text{ °C}$<br>Transport and storage: $-20 \dots + 70 \text{ °C}$                                                                                                                                                                                      |
| Power supply                                  | 3 alkaline AA cells                                                                                                                                                                                                                                                               |
| Operation time                                | approx. 2.000 h, clock mode<br>> 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, $\varnothing 4 \text{ mm}$ |
| 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** (Hazardous Analysis and Critical Control Points).



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.



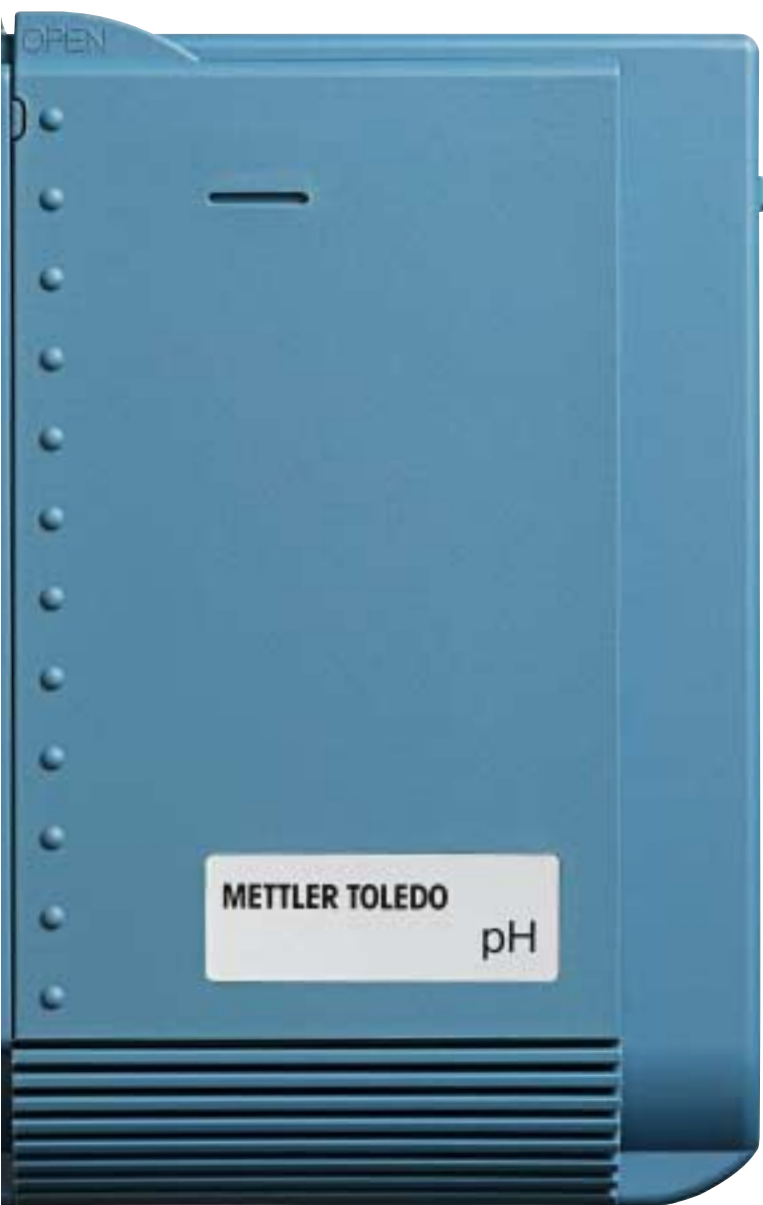
The convenient and, above all, ergonomic design of the meters makes them particularly suitable for **field application purposes**.

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:**