



High-precision reference measurement standard for industrial temperature calibrations

- **Parameters measured**
Temperature
- **Measurement technology**
PT100 - 4 wire sensing / temperature
- **Product highlights**
0.005°C accuracy, high quality wooden case, PT100 ceramic sensor, 2m cable, batteries and DAkks calibration certificate are included in delivery
- **Interfaces**
USB (Cable and SmartGraph3 software included)
- **Article number**
5810.10

The highly precise temperature probe of the hand held device XP101 is an ideal reference standard e.g. in calibration laboratories. It's Mini USB interface uncludes software and online data collection. Excellent stability through multiple annealing cycles. Sensor characteristic curve is determined individually and is saved in the device. Integrated root 2 function for determination of the sensor self-heating, plus automatic elimination of parasitic thermovoltage. For traceability to national standards a DAkks calibration certificate is attached.

IMPORTANT: XP101 Handheld Device is discontinued

Technical Data

Handheld Measuring Device XP101 for reference temperature - discontinued



General	
Dimensions	170 x 62 x 34 mm
Weight	Approx. 205 g
Measuring current in normal operation	1 mA DC with duty cycle of 50 % = 0.50 mA, 1.85 measurements/sec. Automatic elimination of thermo voltage
Measuring current $\sqrt{2}$ " function	1 mA DC with duty cycle of 33 % = 0.33 mA, 1.25 measurements/sec.
Integrated sensor characteristic curves	DIN EN IEC 60751 / IST - 90 or XP101 - mode

Storage conditions	
Permissible ambient temperature	-20...60 °C
Operating rel. humidity	<90 % RH non - condensing

Operating conditions	
Operating rel. humidity	<90 % RH non - condensing
Admissible height above absolute altitude	4000 m

Power supply	
Power supply	4 Alkaline LR6 AA 1.5 V/USB 5 V
Active power consumption	Approx. 400 mW
Battery life passive	Approx. 1 year
Battery life active	Min. 24 hours

Data storage	
Integrated data storage	Up to 200 gauges taking approx. 1 mill. values

Interface	
USB	Cable and SmartGraph3 software included in delivery

Display	
Definition of measured values	3 decimal places
Display	
Control	Touch screen, capacitive
Technology	TFT, resolution 240 x 320, 65 k colours, very good contrast due to Piezoresistive technology
Surface, toughened glass	Degree of hardness: 7, scratch - resistant

Temperature	
Principle	4 wire sensing
Measuring range	-150°C ... +400°C (-238°F ... +752°F)
Unit	°C or °F
Accuracy	0.005 °C at 0 °C otherwise -40...+200 °C 0.02 °C
Response time	10 s