



X-pert range for humidity and temperature measurements in climate and environmental technology.

- **Parameters measured**
Air pressure, temperature and humidity
- **Measurement technology**
Various - thus exchangeable sensors
- **Product highlights**
Precise and flexible all-rounder handheld instrument, easy to handle and robust, sensor connection with automatic recognition, saves measuring campaigns, allows all climate data to be calculated and archived, evaluation software SmartGraph3 included
- **Interfaces**
USB (Cable and SmartGraph3 software included)
- **Article number**
5820.00

Hand held device with integrated air pressure sensor is compatible with various intelligent external temperature and humidity probes.

IMPORTANT: Hand-held measuring device XP200 is discontinued

Please check the alternative: [All-in-One Handheld Device XA1000](#)

Technical Data

Hand-held measuring device XP200 - discontinued



General

| | |
|------------|------------------|
| Dimensions | 170 x 62 x 34 mm |
| Weight | Approx. 205 g |

Storage conditions

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

Operating conditions

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|---|--|
| Operating rel. humidity | <90 % RH (20 g/m ³) non - condensing |
| Admissible height above absolute altitude | 4000 m |

Power supply

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|--------------------------|----------------------------------|
| 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 |
| Sensor power supply | 5.5 V ± 10 % DC, max. 200 mA |

Data storage

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|-------------------------|--|
| Integrated data storage | Up to 200 gauges taking approx. 1 mill. values |
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Interface

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|-----|---|
| USB | Cable and SmartGraph3 software included in delivery |
|-----|---|

Display

| | |
|-------------------------------|------------------|
| Definition of measured values | 2 decimal places |
|-------------------------------|------------------|

Display

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|--------------------------|--|
| 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 |

Integrated air pressure sensor

| | |
|-------------------------------|------------------|
| Measuring range | 800...1100 mbar |
| Accuracy at 25°C, 1013.25mbar | 0.5 mbar |
| Long-term stability | typ. 1 mbar/year |
| Measurement resolution | 0.024 mbar |
| Measuring principle | Piezoresistive |

| | |
|---|--|
| Calculated measurement categories for external temperature/humidity sensors | Mathematical: MIN/MAX/AVG/HOLD |
| | Temperature °C/°F |
| | Rel. humidity %r.h |
| | Rel. humidity of ice %r.h |
| | Water vapour density (absolute humidity) g/m ³ |
| | Dew point temperature °C/°F |
| | Frost point temperature °C/°F |
| | Mixing ratio at saturation (100%) g/kg |
| | Volume fraction of water vapour /mass fraction of water vapour % |
| | Wet-bulb temperature °C/°F |
| | Ice-bulb temperature °C/°F |
| | Specific Enthalpy (mass of air) kJ/kg |
| | Saturation vapour pressure above ice/water hPa |
| | Vapour particle pressure hPa |
| Air density kg/m ³ | |