



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.

General	
Dimensions	170 x 62 x 34 mm
Weight	Approx. 205 g

Technical Data

Hand-held measuring device XP200



Storage conditions

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

Operating conditions

Operating rel. humidity	<90 % RH (20 g/m ³) 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
Sensor power supply	5.5 V ± 10 % DC, max. 200 mA

Data storage

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

USB	Cable and SmartGraph3 software included in delivery
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Display

Definition of measured values	2 decimal places
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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

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	