



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

Parameters measured

Air pressure, temperature and humidity

Measurement technology

Various - thus exchangable sensors

Product highlights

Precice and flexible all-rounder handheld instrument, easy to handle and robust, sensor connection with automatic recognition, saves measuring campaignes, allows all climate data to be calculated and archieved, 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





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

Storage conditions	
Permissible ambient temperature	-2060 °C
Operating rel. humidity	<90 % RH non - condensing

Operating conditions	
Operating rel. humidity	<90 % RH (20 g/m3) non - condensing
Admissible height above	4000 m
absolute altitude	

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

Interface	
USB	Cable and SmartGraph3 software included in delivery

Display	
Definition of measured values	2 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

Integrated air pressure sensor	
Measuring range	8001100 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













Technical Data

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Mathematical: MIN/MAX/AVG/HOLD **Calculated measurement**

Temperature °C/°F categories for external temperature/humidity sensors Rel. humidity %r.h

Rel. humidity of ice %r.h

Water vapour density (absolute humidity) g/m3

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/m3













