



The most precise and flexible all-rounder instrument for professional applications-easy to handle and robust for measurement of Temperature/Humidity, flow, co2 and air pressure

Parameters measured

Integrated sensor for air pressure, exchangable sensors for highly precise measurements of temperature, relative humidity and air flow

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

5900.00

"All-rounder" in the handheld measurement technology segment. A universal measuring device for professionals with the inclusion of exchangeable SDI Sensors. Highly precise measurements of temperature and relative humidity. Integrated air pressure sensor, online/offline data recording. Equipped with test certificate, can be calibrated.

IMPORTANT: XA1000 Handheld Device is discontinued















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

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

Operating conditions	
Operating rel. humidity	< 90 % r.h. (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

Display	
Definition of measured values	2 decimal places
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	
Measurement 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
Compatibility	Sensor/probe: all SDI/digital sensors (temperature, humidity, SDI
	airflow, air pressure integrated)

Others















Calculated measurement	Mathematical: MIN/MAX/AVG/HOLD
categories for external	Temperature (°C/°F)
temperature/humidity sensors	Rel. humidity (% RH)
	Rel. humidity of ice (% RH)
	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
	Speci c Enthalpy (mass of air) kJ/kg
	Saturation vapour pressure above ice/water (hPa)
	Vapour particle pressure (hPa)
	Air density kg/m 3
Calculated measurement	Operating air ow volume - various units: (m 3 /s) (m 3 /h) (l/min);
categories for external airflow	Standard air ow volume: DIN 1343 (°C, 1013.25hPa), ISO 2533
sensors	(15°C,
	1013.25hPa), DIN 1945 (20°C, 1013.25hPa);
	Various units: (m 3 /s), (m 3 /min), (m 3 /h), (l/min)











