

Robust technology
in a sophisticated
design.

*Precision and reliability
in one – made by
professionals for
professionals*

Measuring on the Go



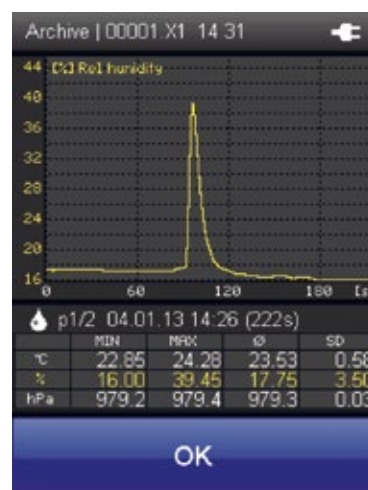
- TFT colour display, legible in sunlight
- Capacitive touch operation
- Sampling rate 1s
- Data recording of up to 3 channels in parallel
- Graphical analysis with standard deviation resolution
- Integrated Flash memory for 200 recording blocks with maximum length of 3 hours
- USB port for data transfer to SmartGraph3 (included in delivery)
- Various languages selectable
- Measuring temperature, humidity, airflow via external digital sensors
- Integrated air pressure measurement
- Numerous calculated measurements
- Online firmware update

Premium Segment XA1000



The most precise and flexible all-rounder instrument for professional applications—easy to handle and robust. Allows various intelligent sensors to be connected with automatic recognition, saves measuring campaigns, allows all climate data to be calculated and archived on a computer for further evaluation by SmartGraph3 software.

Hand-held Measuring Device XA1000 "All-in-ONE"		Order No.
<i>"All-rounder" in the 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. Equipment test certificate, can be calibrated.</i>		5900.00
Technical data	Dimensions	170x62x34mm
	Weight	ca. 205g
Storage conditions	Permitted ambient temperature	-20...60°C
	Permitted rel. humidity	<90% RH non-condensing
Operating conditions	Permitted rel. humidity	<90% RH (20g/m³) non-condensing
	Permitted altitude above sea level	4000m
Power supply	Power supply	4 Alkaline LR6 AA 1.5V / USB 5V
	Active power consumption	Approx. 400mW
	Battery life passive	Approx. 1 year
	Battery life active	Min. 24 hours
	Sensor power supply	5.5V ± 10% DC, max. 200mA
Data storage	Integrated data storage	Up to 200 gauges taking approx. 1 mill. values
Interface	USB	Cable and SmartGraph3 software included
Resolution	Definition of measured values	2 decimal places
Display	Control	Touch screen, capacitive
	Technology	TFT, resolution 240x320, 65k colours, very good contrast due to Piezoresistive technology
Integrated air pressure sensor	Surface, toughened glass	Degree of hardness: 7, scratch-resistant
	Measuring range (full accuracy)	800...1,100mbar
	Accuracy at 25°C, 1013.25mbar	0.5mbar
	Long-term stability	typ. - 1mbar/year
	Measurement resolution	0.024mbar
	Measuring principle	Piezoresistive
Calculated measurement categories for external temperature/humidity sensors	Mathematical:	MIN/MAX/AVG/HOLD
	Temperature	(°C/°F)
	Rel. humidity	(% RH)
	Rel. humidity of ice	(% RH)
	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
Calculated measurement categories for external airflow sensors	Operating airflow volume - various units:	(m³/s) (m³/h) (l/min)
	Standard airflow volume:	DIN 1343 (°C, 1013.25hPa), ISO 2533 (15°C, 1013.25hPa), DIN 1945 (20°C, 1013.25hPa)
	Various units:	(m³/s), (m³/min), (m³/h), (l/min)
Compatibility	Sensor/probe: all SDI/digital sensors (temperature, humidity, SDI airflow, air pressure integrated)	
Accessories	Extension and/or connecting cable for digital sensor, 2m	8120.KAB2
	Extension and/or connecting cable for digital sensor, 10m	8120.KAB10



Compatible sensors for XA1000		Page
Temperature/humidity	Digital TFF20	24
	Allround SDI	24
	5 mm diameter SDI	25
	High temperature SDI	25
	High-precision Temperature/Humidity Sensor	26
Airflow/temperature	SDI (0...2m/s)	27
	SDI (0...20m/s)	27
CO₂	CO ₂ Sensor	26