

Omniport 30

Multifunctional Hand-Held

The robust multifunctional hand-held meets the highest requirements and comes with a wide range of accurate probes that fit various applications. Use touch-screen navigation to show up to three measurement values simultaneously on the capacitive TFT display.

A total of 23 measurands (vary according to probe) is available, including:

- Relative humidity RH
- Temperature T
- Dew point temperature Td
- Absolute humidity dv
- Mixing ratio r
- Air velocity v
- Volumetric flow \dot{v}
- Air pressure p
- CO₂ ppm



Store measurement values in the internal memory of the device and use the free SmartGraph3 software to manage data on your PC. The optional carrying case accommodates the hand-held and probes, as well as accessories.

Data-Logging & Data-Management

The Omniport 30 offers both continuous and single-point data-logging. The measurement values of up to three channels are stored simultaneously, together with a time and date stamp, in the internal memory of the device.

Stored measurement data, as well as the minimum, maximum, average and standard deviation values can be shown directly on the display. Scroll through a recorded measurement and switch between graphs by using the control cross.



Data management is easy and intuitive by using the free SmartGraph3 software to create graphs that contain measurement channels of interest for better data analysis. Data can be exported in .csv format and then imported into EXCEL for further processing.


Features

- Data logging**
- Internal memory for 2 million measured values**
- 23 physical quantities**
- Capacitive TFT touch screen**
- Displays measurands simultaneously**

- Real-time HOLD / MIN / MAX / AVG readout**
- Integrated air pressure sensor**
- User friendly operation**
- Free data management software**

Technical Data

General

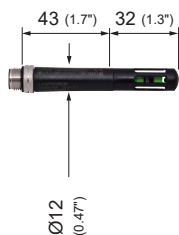
Power supply	4 x Alkaline LR6 AA batteries, 1.5 V (not in the scope of supply)		
Optional power supply	5 V DC via USB (cable included)		
Temperature range	Operating: hand-held and handle of sensing probe: 0...50 °C (32...122 °F) Storage: -20...60 °C (-4...140 °F)		
Internal memory	For approx. 2 million measured values		
Automatic measurement	Recording duration: 5 min, 10 min, 30 min, 1 h, 3 h		
Housing / protection rating	ABS / IP40		
Dimensions (HxWxD)	170 x 62 x 34 mm (6.69 x 2.44 x 1.34")		
Weight	Approx. 205 g (0.45 lbs)		
Display	TFT display, 54 x 41 mm (2.13 x 1.61"), illuminated		
CE compatibility	Hand-held: EN 61000-6-2:2005	EN 61000-6-3:2007	
	Logprobe: EN 61326-1:2013	EN 61326-2-3:2013	

Integrated air pressure sensor

Measuring range	800 to 1 100 mbar (complete accuracy)
Accuracy	Max. ± 0.5 mbar (at 25 °C, 1 013.25 mbar)
Long term stability, typ.	-1 mbar/year

HUMIDITY / TEMPERATURE PROBES

Logprobe 20 - compact, pluggable HVAC probe



Working range: 0...100 %RH / -40...80 °C (-40...176 °F)
 Accuracy: ± 2 % RH (0...90 % RH), ± 3 % RH (90...100 % RH) @20 °C / 68 °F
 ± 0.2 °C / ± 0.36 °F @20 °C / 68 °F
 max. ± 0.6 °C / ± 1.08 °F (-40...80 °C / -40...176 °F)

Order code: **LOGPROBE20-HTPC**

Response time τ_{90} : ≤ 30 s

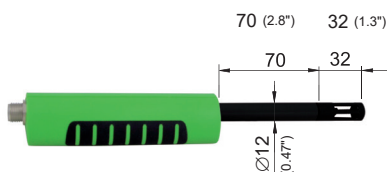
Filter: Membrane

Order code: **LOGPROBE20-HTPA**

Response time τ_{90} : ≤ 10 s

Filter: Plastic grid

Logprobe 16 - HVAC probe

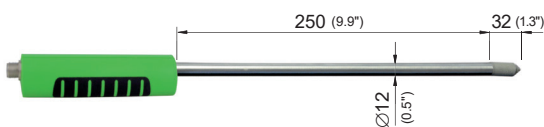


Working range: 0...100 % RH / -20...70 °C (-4...158 °F)
 Accuracy: ± 2 % RH (0...90 % RH), ± 3 % RH (90...100% RH) @20 °C / 68 °F
 ± 0.2 °C / ± 0.36 °F @20 °C / 68 °F
 max. ± 0.5 °C / ± 0.9 °F (-20...70 °C / -4...158 °F)

Response time τ_{90} : ≤ 7 s

Order code: **LOGPROBE16**

Logprobe 31 - high temperature probe



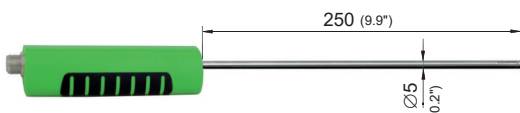
Working range: 0...100 % RH / -40...180 °C (-40...356 °F)
 (grip of sensing probe up to 50 °C/122 °F)
 Accuracy: ± 2 % RH (0...90 % RH), ± 3 % RH (90...100 % RH) @20 °C / 68 °F
 ± 0.2 °C / ± 0.36 °F @20 °C / 68 °F
 max. ± 0.6 °C / ± 1.08 °F (-40...180 °C / -40...356 °F)

Response time τ_{90} : ≤ 30 s

Temperature dependency: RH: ± 0.03 % RH/°C (% RH/1.8 °F)

Order code: **LOGPROBE31**

Logprobe 30 - confined space probe



Working range: 0...100 % RH / -40...100 °C (-40...212 °F)
 Accuracy: ± 2 % RH (0...90 % RH), ± 3 % RH (90...100 % RH) @20 °C / 68 °F
 ± 0.2 °C / ± 0.36 °F @20 °C / 68 °F
 max. ± 0.6 °C / ± 1.08 °F (-40...100 °C / -40...212 °F)

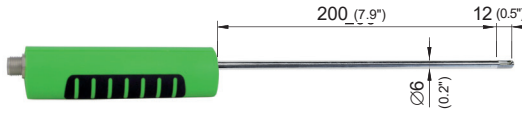
Response time τ_{90} : ≤ 15 s

Temperature dependency: RH: ± 0.03 % RH/°C (% RH/1.8 °F)

Order code: **LOGPROBE30**

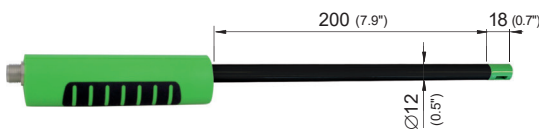
AIR VELOCITY PROBES

Logprobe 60/61 - stainless steel probe



Working range: 0.4...20 m/s (80...4000 ft/min) 0.12...2 m/s (24...400 ft/min)
 Accuracy at 20 °C (68 °F) / 45 %RH / 1013 mbar (14.69 psi):
 $\pm (0.2 \text{ m/s} / 40 \text{ ft/min} + 2 \% \text{ of m. v.}) \pm (0.04 \text{ m/s} / 8 \text{ ft/min} + 1 \% \text{ of m. v.})$
 Response time τ_{90} : $\leq 1.5 \text{ s}$ $\leq 1.5 \text{ s}$
 T working range: -20...70 °C (-4...158 °F)
 T accuracy: $\pm 0.7 \text{ °C} / \pm 1.26 \text{ °F}$ ($v > 0.5 \text{ m/s} / 0...50 \text{ °C} / 32...122 \text{ °F}$)
 $\pm 1.2 \text{ °C} / \pm 2.16 \text{ °F}$ ($v = 0.2...0.5 \text{ m/s} / 0...50 \text{ °C} / 32...122 \text{ °F}$)
 Order code: **LOGPROBE60** **LOGPROBE61**

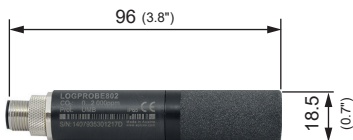
Logprobe 65 - polycarbonate probe



Working range: 0.4...20 m/s (80...4000 ft/min) / 0...50 °C (32...122 °F)
 Accuracy: $\pm (0.2 \text{ m/s} / 39 \text{ ft/min} + 3 \% \text{ of m.v.})$
 $\pm 1 \text{ °C} / \pm 1.8 \text{ °F}$ ($0...50 \text{ °C} / 32...122 \text{ °F}$)
 Response time τ_{90} : $\leq 1.5 \text{ s}$
 Order code: **LOGPROBE65**

CO₂ PROBE

Logprobe 802/805/810 - CO₂ probe



Working range: 0...2000 / 5000 / 10000 ppm
 Technology: dual wavelength NDIR with auto-calibration
 Accuracy at 25 °C (77 °F and 14.69 psi) and 1013 mbar:
 0...2000 ppm: $< \pm (50 \text{ ppm} + 2 \% \text{ of measured value})$
 0...5000 ppm: $< \pm (50 \text{ ppm} + 3 \% \text{ of measured value})$
 0...10000 ppm: $< \pm (100 \text{ ppm} + 5 \% \text{ of measured value})$
 Warm-up time: 3 min.
 Temperature dependency: typ. 1 ppm CO₂/°C (-20...45 °C) (-4...113 °F)
 Order code: 0...2000 ppm **LOGPROBE802**
 0...5000 ppm **LOGPROBE805**
 0...10000 ppm **LOGPROBE810**

Carrying Case

The optional carrying case protects the hand-held, probes and accessories during transport and storage. It helps to avoid mechanical damage, as well as the contamination of the sensors, which is essential for the optimal long term performance of the instrument.



Protective Cover

The optional cover protects the hand-held device during usage in dirty or oily environments. The integrated magnetic plate allows an easy temporary fixing of the hand-held onto a metallic surface on site, while the hang-on straps helps keep your hands free while taking measurements.



Ordering Guide

		Pluggable Probes ¹⁾	Remote Probes ²⁾
POSITION 1	BASIC DEVICE	OMNIPOINT30-	OMNIPOINT30-
	Type Hand-held	T30	T30
POSITION 2	CABLE		HA010813
	2 m (6.6 ft)		HA010814
	5 m (16.4 ft)		HA010815
	10 m (32.8 ft)		
POSITION 3	PROBES		
	Humidity / Temperature	LOGPROBE20-HTPC	
	Logprobe 20 - Response time ≤ 30 s	LOGPROBE20-HTPA	LOGPROBE16
	Logprobe 20 - Response time ≤ 10 s		LOGPROBE31
	Logprobe 16 - HVAC probe		LOGPROBE30
	Logprobe 31 - high temperature probe		
	Logprobe 30 - confined space probe		
	Air Velocity		LOGPROBE60
	Logprobe 60 - stainless steel probe / 0.4...20 m/s (80...4000 ft/min)		LOGPROBE61
	Logprobe 61 - stainless steel probe / 0.12...2 m/s (24...400 ft/min)		LOGPROBE65
	Logprobe 65 - polycarbonate probe / 0.4...20 m/s (80...4000 ft/min)		
	CO₂	LOGPROBE802	
	Logprobe 802 - 0...2000 ppm	LOGPROBE805	
	Logprobe 805 - 0...5000 ppm	LOGPROBE810	
	Logprobe 810 - 0...10000 ppm		
POSITION 4	CARRYING CASE For basic device and up to 4 probes	HA040906	HA040906

1) Directly connected to device, cable is optional

2) Cable is necessary

Order Example

Pluggable Probes:

Position 1 - Basic Device **OMNIPOINT30-T30**
 Position 2 - Probe **LOGPROBE805**
 Position 3 - Carrying Case **HA040906**

Remote Probes:

Position 1 - Basic Device **OMNIPOINT30-T30**
 Position 2 - Cable **HA010813**
 Position 3 - Probes **LOGPROBE16**
LOGPROBE61
 Position 4 - Carrying Case **HA040906**

Accessories

Carrying case for basic device,
 2 pluggable and 2 remote probes **HA040906**

Protective cover **HA040907**

Membrane filter PC (for Ø 12 mm RH/T probes) **HA010118**
 Metal grid filter PC (for Ø 12 mm RH/T probes) **HA010119**
 Stainless steel sintered filter (for Ø 12 mm RH/T probe) **HA010103**

Plastic grid filter PC (for Logprobe 20-HTPA) **HA010121**

Cable for remote probes 2 m (6.6 ft) **HA010813**
 5 m (16.4 ft) **HA010814**
 10 m (32.8 ft) **HA010815**

Humidity standards / Calibration device **Refer to data sheet Humidity Calibration Kit**

SmartGraph3 - data management software **Free download at www.epluse.com/smartgraph3**