

OMNIPOINT 20

Multifunctional Handheld Instrument

To measure various climate and processes values with a handheld, user-friendly instrument requires extraordinary measurement technology. The handheld meter of the Series OMNIPOINT 20 meets these multiple demands.

The selection of the appropriate sensing probe and accordingly the configuration of the handheld meter allow for displaying the following values with the highest accuracy:

- relative humidity (RH),
- temperature (T),
- dew point temperature (Td),
- absolute humidity (dv),
- mixing ratio (r),
- air velocity (v),
- water activity (aw)
- water content in oil (x)



The robust housing of the OMNIPOINT 20 allows usage in harsh industrial environments. The readability of the large illuminated display is excellent. The easy to understand menu and the practical thumbwheel navigation offer outstanding comfort.

An optional carrying case can accommodate the display unit, up to 5 sensing probes as well as accessories such as cables and calibration kits.

Typical Applications

HVAC control
industry and process control
clean room control
water activity and moisture content in oil
humidity measurement in walls and floors

Features

measurands: RH, T, Td, dv, r, v, aw, x
large, illuminated display
HOLD / MIN / MAX / AVG readout
real time clock
SI/US units selectable
recalibration by user

Technical Data

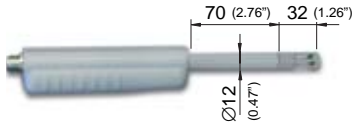
General

Supply voltage	4x 1.5V AA alkali-manganese battery		
Battery lifetime	with PT100 probe:	300h	
	with RH/T or aw/x probe:	200h	
	with v probe:	40h	
Working temperature range	0...50°C (32...122°F)		
CE compatibility according	EN50081-2	EN50082-2	EN55011
	EN61000-4-2	EN61000-4-3	
Housing / protection class	ABS / IP40		
Dimensions (HxWxD)	145 x 85 x 37 mm (5.7 x 3.3 x 1.5")		
Weight	ca. 400g (1lbs)		
Display	LC display, 90 x 50 mm (3.5 x 2"), illuminated		



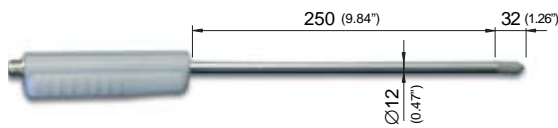
Humidity-/Temperature Probes:

RH/T HVAC probe



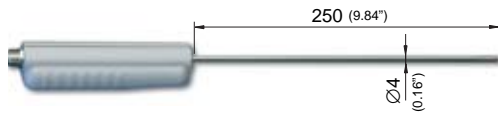
Application: humidity and temperature measurement in HVAC applications
 Working range: 0...100% RH / -20...70°C (-4...158°F)
 Accuracy: ±2% RH (0...90% RH), ±3% RH (90...100% RH)
 ±0.2°C / ±0.36°F (20°C / 68°F),
 ±0.5°C / ±0.9°F (-20 resp. 70°C / -4 resp. 158°F)
 Response time τ_{90} : ≤ 7 sec.
 Measurand: channel 1: T [°C/°F]
 channel 2: RH [%], dv [g/m³], Td [°C/°F], r [g/kg, gr/lb]
 Order code: **HA040201**

RH/T high temperature probe



Application: humidity and temperature measurement in industrial process applications
 Working range: 0...100% RH / -40...180°C (-40...356°F)
 Accuracy: ±2% RH (0...90% RH), ±3% RH (90...100% RH)
 ±0.2°C / ±0.36°F (20°C / 68°F),
 ±0.5°C / ±0.9°F (-40°C / -40°F), ±0.6°C / ±1.1°F (180°C / 356°F)
 Response time τ_{90} : ≤ 30 sec.
 Measurand: channel 1: T [°C/°F]
 channel 2: rF [%], dv [g/m³], Td [°C/°F], r [g/kg, gr/lb]
 Order code: **HA040202**

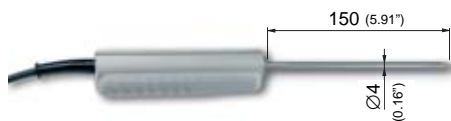
RH/T miniature probe



Application: humidity and temperature measurement in small places, humidity measurement in boreholes
 Working range: 0...100% RH / -40...100°C (-40...212°F)
 Accuracy: ±2% RH (0...90% RH), ±3% RH (90...100% RH)
 ±0.2°C / ±0.36°F (20°C / 68°F),
 ±0.7°C / ±1.26°F (-40 resp. 100°C / -40 resp. 212°F)
 Response time τ_{90} : ≤ 15 sec.
 Measurand: channel 1: T [°C/°F]
 channel 2: RH [%], dv [g/m³], Td [°C/°F], r [g/kg, gr/lb]
 Order code: **HA040203**

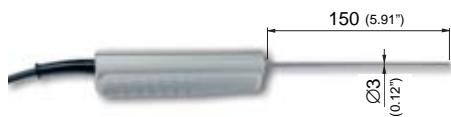
Temperature probes:

PT100 cut-in probe



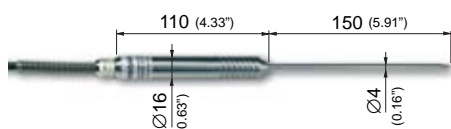
Application: temperature measurement in solid, liquid and powdery media
 Working range: -40...400°C (-40...752°F)
 Accuracy: PT100 class B, basic device: ±0.5°C (±0.9°F)
 Response time τ_{90} : 10 sec.
 Cable length: 1m (3.28ft)
 Order code: **HA040101**

PT100 immersion probe



Application: temperature measurement in gaseous, liquid and powdery media
 Working range: -40...400°C (-40...752°F)
 Accuracy: PT100 class A, basic device: ±0.5°C (±0.9°F)
 Response time τ_{90} : 10 sec.
 Cable length: 1m (3.28ft)
 Order code: **HA040102**

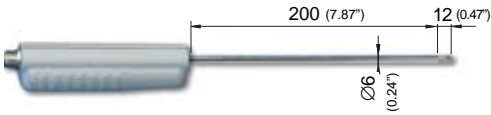
PT100 cut-in food probe



Application: temperature measurement in solid, liquid and powdery food
 Working range: -40...400°C (-40...752°F)
 Accuracy: PT100 class A, basic device: ±0.5°C (±0.9°F)
 Response time τ_{90} : 10 sec.
 Cable length: 1m (3.28ft)
 Order code: **HA040104**

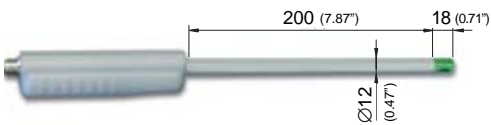
Air Velocity Probes:

Air velocity probe Ø6mm (0.24")



Application:	air velocity measurement in small places and for high accuracy requirements	
Working range:	0...2m/s (0...400ft/min) -20...70°C (-4...158°F)	0...20m/s (0...4000ft/min) -20...70°C (-4...158°F)
Accuracy:	± (0.04m/s / 8ft/min + 1% of m. v.) ± 0.7°C (±1.26°F)	± (0.2m/s / 39ft/min + 2% of m. v.) ± 0.7°C (±1.26°F)
Response time τ_{90} :	≤ 1.5 sec.	
Measurand:	channel 1: v [m/s, ft/min] channel 2: T [°C/°F]	channel 1: v [m/s, ft/min] channel 2: T [°C/°F]
Order code:	HA040401	HA040402

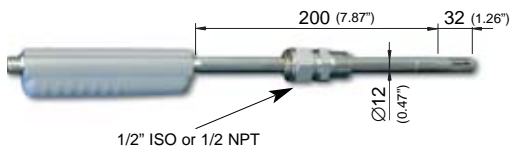
Air velocity probe Ø12mm (0.47")



Application:	air velocity measurement in HVAC applications	
Working range:	0...20m/s (0...4000ft/min) / 0...50°C (32...122°F)	
Accuracy:	± (0.2m/s / 39ft/min + 3% of m. v.) / ± 1°C (±1.8°F)	
Response time τ_{90} :	≤ 1.5 sec.	
Measurand:	channel 1: v [m/s, ft/min] channel 2: T [°C/°F]	
Order code:	HA040403	

Oil Probe:

Oil probe Ø12mm (0.47")



Application:	measurement of moisture in mineral und synthetic oil	
Working range:	0...1 a _w / 0...20000ppm / -40...120°C (-40...248°F)	
Accuracy:	±0.02a _w (0...0.9a _w), ± 0.03a _w (0.9...1a _w) ±0.2°C / ±0.36°F (20°C / 68°F), ±0.5°C / ±0.9°F (-40 resp. 120°C / -40 resp. 248°F)	
Response time τ_{90} :	≤ 10 min (in still oil)	
Pressure range:	0.01...10bar (0.15...145psi)	
Measurand:	channel 1: T [°C/°F] channel 2: aw [] oder x [ppm] oil specific parameters are adjustable at the basic device	
Order code:	1/2 ISO: HA040204	1/2 NPT: HA040206

Ordering Guide

MODEL	PROBES	ACCESSORIES
basic device (OMNIPOINT 20)	RH/T HVAC probe (HA040201)	stainless steel sintered filter (for Ø12mm RH/T probe) (HA010103)
	RH/T high temperature probe (HA040202)	PTFE - filter (for Ø12mm RH/T probe) (HA010105)
	RH/T miniature probe (HA040203)	metal grid filter (for Ø12mm RH/T probe) (HA010106)
	PT100 cut-in probe (HA040101)	carrying case (for basic device + 5 probes + accessories) (HA040902)
	PT100 immersion probe (HA040102)	ball valve set for oil probe (HA050101)
	PT100 cut-in food probe (HA040104)	humidity standards:
	air velocity probe Ø6mm (0.24") - 0...2m/s (0...400ft/min) (HA040401)	5 ampoules 5% RH, 5 textile discs (HA010405)
	air velocity probe Ø6mm (0.47") - 0...20m/s (0...4000ft/min) (HA040402)	5 ampoules 10% RH, 5 textile discs (HA010410)
	air velocity probe Ø12mm (0.47") (HA040403)	5 ampoules 35% RH, 5 textile discs (HA010435)
	oil probe - 1/2 ISO (HA040204)	5 ampoules 50% RH, 5 textile discs (HA010450)
	oil probe - 1/2 NPT (HA040206)	5 ampoules 80% RH, 5 textile discs (HA010480)
		5 ampoules 95% RH, 5 textile discs (HA010495)
		calibration device for sensor probes 12mm (0.47") - horizontal mounting (HA010401)
		ISO standard calibration package (refer to data sheet "OEKD Calibration Laboratory")

Order Example

OMNIPOINT 20, HA040201, HA040202, HA040401, HA010401, HA040902

model: basic device OMNIPOINT 20

probes: RH/T HVAC probe, RH/T high temperature probe, air velocity probe Ø6mm (0.24") - 0...2m/s (0...400ft/min)

accessories: calibration device for sensor probes 12mm (0.47") - horizontal mounting, carrying case

Contact

E+E ELEKTRONIK
Langwiesen 7
A-4209 Engerwitzdorf
Austria

Tel: +43 7235 605 0
Fax: +43 7235 605 8
info@epluse.at
www.epluse.com