

Technical Data Sheet

Pressure • Temperature • Humidity • Air Velocity • Airflow • Sound level



AMI 300 Multifunction







Connection





Interchangeable measurement modules

1 instrument = more than 1 range and 1 parameter available.



Wireless connection

Instrument / PC Instrument / Probe



Smart-plus system

Probes automatically recognized when connected to the instrument.

The multifunctions





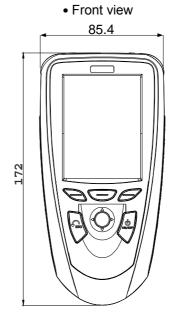


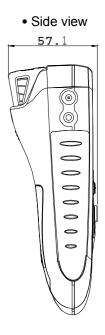






Dimensions

















Functions



Manometer

- **PRESSURE**
- · Automatic or manual self-calibration
- Selection of units
- Pressure integration (0 to 9)
- Point/point, automatic point/point, automatic average
- Minimum / maximum values, hold, standard deviation
- Storage



AIR VELOCITY AND AIRFLOW



- · Selection of Pitot tube, Debimo blades, hotwire or factor for other sensing elements
- Selection of duct type
- · Selection of units
- Point/point, automatic point/point, automatic average
- Manual or automatic temperature balancing
- · Manual air pressure balancing
- K2 factor
- Minimum / maximum values, hold, standard deviation
- Storage

Thermo-hygrometer



HYGROMETER

- Selection of units
- Minimum / maximum values and hold function
- Storage

PSYCHROMETER

- Dew point, wet temperature, enthalpy, absolute temperature
- Minimum / maximum values and hold function
- Storage

WBGT index

For hygrometry probe with black ball.

- · Calculation of comfort index inside / outside
- Storage



Air Quality

CLIMATIC CONDITIONS MODULE

- Selection of units
- Minimum / maximum values and hold function
- Storage



AIR QUALITY PROBES

- Audible Alarm (2 setpoints)
- CO maximum
- Selection of units
- Minimum / maximum values and hold function
- Storage

OMNIDIRECTIONAL PROBE

- Air velocity
- Temperature
- Hygrometry

Current / voltage module

- Adjustable ranges
- Minimum / maximum values and hold function
- Storage



Thermometer

Thermocouple module, Pt100 and thermocouple temperature probes

- Dynamic delta T
- · Selection of units
- Minimum / maximum values and hold function
- Alarme (upper and lower setpoints)
- Storage
- Calculation of U-value

Datalogger-10

- Multi-parameters recording
- · Manual and automatic storage
- Memory: up to 12,000 measurement points or 50 datasets
- User-friendly with printing of customized report
- Management of instruments pool, follow-up of calibration periods
- Intervention planning
- Wired or wireless interface

Technical features

Sensing elements

Pressure module Piezoresistive sensor

Overpressure allowed ±500 Pa: 250 mbar Overpressure allowed ±2500 Pa: 500 mbar Overpressure allowed ±10,000 Pa : 1,200 mbar Overpressure allowed ±500 mbar : 2 bar Overpressure allowed ±2,000 mbar: 6 bar

Hotwire: Thermistance with a negative temperature coefficient.

Ambient temperature: Pt100 1/3 Din.

Ø 70 and 100 mm vane probes: Hall effect sensor

Ambient temperature: Pt100 class A. Ø 14 mm vane probe : Proximity sensor Ambient temperature: Pt100 class A.

Hygrometry/Temp. Probe: capacitive sensor, Pt100 1/3 DIN

Thermocouple probes: type K, J and T class 1 Pt100 probes Smart-plus: Pt100 class 1/3 Din

Climatic conditions module

Hygrometry: capacitive sensor Temperature: semiconductor sensor Air pressure : piezoresistive sensor

Air quality probes

CO,: NDIR sensor CO: electrochemical sensor Temperature: Pt100 class A Hygrometry: capacitive sensor

Climatic conditions module

Hygrometry: capacitive sensor Temperature: semiconductive sensor Air pressure: piezoresistive sensor

Multifunction probe

Air velocity: Thermistance with a negative temperature coefficient.

Hygrometry/Temp.: capacitive sensor, Pt100 1/3 DIN

Omnidirectional probe

Air velocity: Thermistance with a negative temperature coefficient Hygrometry/Temps.: capacitive sensor, Pt100 1/3 DIN

Tachometry probe

Optical: optical sensor

Contact: optical probe with ETC adaptor

Gas leak detection probe

Ch4, hydrocarbon and LPG: electrochemical sensor

Instrument connections.....On the top:

2 secured mini-DIN connectors for SMART-Plus probes

Left side :

1 USB port for KIMO cable only

1 power supply plug

Module connections..... .Thermocouple

4 inputs for compensated miniature plug of thermocouple type K, J or T Class 1 (as per IEC 584-3norm)

Pressure

2 pressure connectors Ø 6,2 mm made of nickelled brass. 2 threaded pressure connectors Ø 4,6 mm made of

nickelled brass

+ 1 thermocouple temperature input for miniature connectors

Current / voltage module 2 stereo jacks

Display.....Graphic display 320x240 pixels

Dim. 70 x 52 mm, color display

Display of 6 measurements (including 4 simultaneously)

IP54, ABS shock-proof Housing Keypad...Metal-coated, 5 keys, 1 joystick Conformity.....Electromagnetical compatibility (NF EN 61326-1 norm)

Operating temperature......from 0 to 50°C Storage temperature......from -20 to +80°C Auto shut-off......adjustable from 0 to 120 min Weight.....380g

Languages......French, English, Dutch, German, Italian, Spanish, Portuguese, Swedish, Norwegian,

Finn, Danish

Specifications	s	Measuring units	Measuring range	Accuracy*	Resolutions
PRESSURE		0.1.140	from 0 to ±500 Pa	± 100 Pa : ±0.2% reading ±0.8Pa,	0.1 Pa from -100 to +100
	4	O, In WG, mbar,	from 0 to ±2500 Pa	beyond ±0.2% reading ±1,5Pa, ±0.2% of reading ±2Pa	1 Pa beyond 1Pa
200	•	ıHg, DaPa, kPa	from 0 to ±10,000 Pa	±0.2% of reading ±10Pa	1Pa
mmH	O, In WG, mb	ar, hPa, mmHg, DaPa, kF	a, PSI from 0 to ±500 mBar	±0.2% of reading ±0,5mBar	0,1mBar
CURRENT/VOLTAGE	bar, In WG,	mbar, hPa, mmHg, kPa, P	SI from 0 to ±2000 mBar	±0.2% of reading ±2mBar	1mBar
- CONTRACTOR OF THE PROPERTY O		V, mA	from 0 to 2,5 V	±2mV	0.001 V
50			from 0 to 10 V	±10mV	0.01 V
THERMOCOUPLE			from 0 to 4/20 mA	±0.01mA	0.01 mA
THERMOODULEE	D	00 0F	V. f 200 t1 200°C	. 1 1°C or . 0 10/ of roading**	0.4.90
+		°C, °F	K: from -200 to +1,300°C J: from -100 to +750°C	±1.1°C or ±0.4% of reading** ±0.8°C or ±0.4% of reading**	0.1 °C 0.1 °C
			T: from -200 to +400°C	±0.5°C or ±0.4% of reading**	0.1 °C
CLIMATIC CONDITIONS					
	Hygro.	%RH	from 5 to 95%RH	See datasheet	0.1 %RH
	Temp.	°C, °F	from -20 to +80°C	interchangeable	0.1 °C
	Air pressure	hPa	from 800 to 1100 hPa	measurement modules	1 hPa
HOTWIRE - Standard and	telescopic -		from 0.15 to 1 m/s	± 3% of reading ± 0.03 m/s***	0.01 m/s
5	Air velocity	m/s, fpm, Km/h	from 0.15 to 3 m/s	±3% of reading ±0.03 m/s	0.01 m/s
O ESSE	Temperature	°C, °F	from 3.1 to 30 m/s	±3% of reading ±0.1 m/s	0.1 m/s
			from -20 to +80°C	±0.3% of reading ±0.25°C	0.1 °C
Ø 100 mm VANE PROB	Airflow	m³/h, cfm, l/s, m³/s	from 0 to 99,999 m ³ /h	±3% of reading ±0.03*area(cm²)	1 m³/h
		m/s, fpm, Km/h	from 0,25 to 3 m/s	+20/ of roading +0.4/-	0.01 m/s
	Air velocity	111/0, 1pi11, KIII/II	from 3,1 to 35 m/s	±3% of reading ±0,1m/s ±1% of reading ±0,3m/s	0.01 m/s
	Temperature	°C, °F	from -20 to +80°C	±0.4% of reading ±0.3°C	0.1 °C
	Airflow	m ³ /h, cfm, l/s, m ³ /s	from 0 to 99,999 m³/h	±3% of reading ±0.03*area (cm ²)	
Ø 70 mm VANE PROBE	7	,,,	110111 0 10 00,000 111 711		
	Air velocity	m/s, fpm, Km/h	from 0,to à 3 m/s	±3% of reading ±0,1m/s	0.1 m/s
	Temperature	°C, °F	from 3,1 to 35 m/s	±1% of reading ±0,3m/s ±0.4% of reading ±0.3°C	0.1 °C
	Airflow	m³/h, cfm, l/s, m³/s	from -20 to +80°C from 0 to 99,999 m³/h	$\pm 3\%$ of reading ± 0.03 *area (cm ²)	
Ø 14 mm VANE PROBE	All llow	III /II, CIIII, I/3, III /3	110111 0 10 00,000 111 /11	15% of reading 10.05 area (cit)	1 111 /11
<u> </u>	Air velocity	m/s, fpm, Km/h	from 0,8 to 3 m/s	±3% of reading ±0,1m/s	0.1 m/s
	Airflow	m³/h, cfm, l/s, m³/s	from 3,1 to 25 m/s from 0 to 99,999 m³/h	±1% of reading ±0,3m/s ±3% of reading ±0.03*area (cm ²	
	Temperature	°C. °F	from -20 to +80°C	±0.4% of reading ±0.3°C	0.1 °C
PITOT TUBE	Tomporaturo	<u> </u>	110111 -20 10 100 0		0.1 0
	Air velocity	m/s, fpm, Km/h, mph	from 2 to 5 m/s	±0.3 m/s	0.1 m/s
1			from 5.1 to 100 m/s	±0.5% of reading ±0.2m/s	4 2"
DEDIMO blades	Airflow	m³/h, cfm, l/s, m³/s	from 0 to 99,999m³/h	±0.2% of reading ±1% PE	1 m³/h
DEBIMO blades	Air velocity	m/s, fpm, Km/h, mph	from 4 to 20 m/s	±0.3 m/s	0.1 m/s
	All velocity	111/3, 1p111, K111/11, 111p11	from 21 to 100 m/s	±1% of reading ±0.1m/s	0.1 m/s
	Airflow	m³/h, cfm, l/s, m³/s	from 0 to 99,999m3/h	±0.2% of reading ±1% PE	1 m³/h
Air quality probes : CO /	CO, / tempera	ture / Hygrometry			
	Temperature	°C, °F	from -20 to +80°C	See related datasheet	0.1 °C
	° CO,	ppm	from 0 to 5000 ppm	"Portable probes"	1 ppm
_	CÕ	ppm	from 0 to 500 ppm		0,1 ppm
Relat STANDARD HYGROMETI	ive humidity	%RH	from 5 to 95%RH		0.1 %RH
	•	0/ D.U.	from 0 to 00 0/ DU	Con related detections	0.1 %RH
STD Absolute humi	lative humidity dity / enthalpy	%RH g/Kg / Kj/Kg	from 3 to 98 %RH According to temperature and	See related datasheet "Portable probes"	0.1 %KH 0.1 g/Kg
, assolute numi	Dew point	°C _{td} , °F _{td}	hygrometry measuring ranges from -50 to +80°C _{td}	±0.6% of reading ±0.5°C _{td}	0.1 °C _{trl}
 Ambien	t temperature	°C, °F	from -20 to	±0.3% of reading ±0.25°C	0.1 °C
HIGH TEMPERATURE HY	<u> </u>	· · · · · · · · · · · · · · · · · · ·	20 10		
Do	lative humidity	%RH	from 3 to 98 %RH	See related datasheet	0.1 %RH
H.T Absolute humi	•	g/Kg / Kj/Kg	According to temperature and	"Portable probes"	0.1 g/Kg
7 to Solute Hulli	Dew point		hygrometry measuring ranges from -50 to +80°C _{td}	±0.6% of reading ±0.5°C _{td}	0.1 °C _{td}
Ambio	nt temperature	°C _{td} , °F _{td} °C, °F	from -40 to +180°C	±0.3% of reading ±0.25°C	0.1 °C
AIIDIEI	it tomperature	<u> </u>			
	a datachoot "	Portable probee"\	OMNIDIDECTIONAL DOG	DE Con detechant IID antalia	\alpha''
TACHOMETRY probe (Se				BE See datasheet "Portable probe PROBE See datasheet "Portable p	

^{*}All accuracies indicated in this document were stated in laboratory conditions and can be guaranteed for measurements carried out in the same conditions, or carried out with required compensation.

**The accuracy is expressed either by a deviation in °C, or by a percentage of the value concerned. Only the bigger value is considered.

***Optional specific adjustment and calibration

DESCRIPTION	AMI 300	AMI 300 CLA	AMI 300 STD	AMI 300 PRO	AMI 300 CRF	AMI 300 SRF	AMI 300 PRF
Pressure module from 0 to ±500 Pa	0	0	0	•	0	0	•
Pressure module from 0 to ±2500 Pa	0	0	0	0	0	0	0
Pressure module from 0 to ±10000 Pa	0	0	•	0	0	•	0
Pressure module from 0 to ±500 mBar	0	0	0	0	0	0	0
Pressure module from 0 to ±2000 mBar	0	0	0	0	0	0	0
Current / voltage module	•	•	•	•	•	•	•
Thermocouple module	0	0	0	0	0	0	0
Climatic conditions module	0	0	0	0	0	0	0
2x1 m silicone tube Ø 4 x 7 mm	0	0	•	•	0	•	•
Stainless steel tips Ø 6 x 100 mm	0	0	•	•	0	•	•
Pitot tube Ø 6mm, lg. 300 mm	0	0	•	0	0	•	0
Pitot tube Ø 6mm, lg. 300 mm T	0	0	0	•	0	0	•
Pitot tube Ø 6mm, lg. 300 mm S	0	0	0	0	0	0	0
Optical tachometry probe	0	0	0	0	0	0	0
ETC adaptor	0	0	0	0	0	0	0
Reflective tape	0	0	0	0	0	0	0
Hot wire with specific adjustment and calibration	0	0	0	0	0	0	0
Standard hotwire	0	•	•	0	•	•	0
Straight extension for hotwire	0	•	•	0	•	•	0
Telescopic gooseneck-shaped hotwire	0	0	0	•	0	0	•
SMART-Plus Ø 14 mm vane probe	0	0	0	0	0	0	0
Telescopic SMART-Plus Ø 14 mm vane probe	0	0	0	0	0	0	0
SMART-Plus Ø 70 mm vane probe	0	•	0	0	0	0	0
Wireless Ø 70 mm vane probe	0	0	0	0	•	0	0
SMART-Plus Ø 100 mm vane probe	0	0	•	•	0	0	0
Wireless Ø 100 mm vane probe	0	0	Q	O	O	•	•
SMART-Plus standard hygrometry probe	0	•	•	0	0	0	0
Wireless standard hygrometry probe	0	0	0	0	•	•	0
SMART-Plus high temperature hygrometry probe	0	0	0	•	0	0	0
Wireless high temperature hygrometry probe	0	0	0	0	0	0	•
SMART-Plus Pt100 temperature probe	0	0	0	0	0	0	0
Wirelesss Pt100 temperature probe	0		0	0	0	0	0
Thermocouple K, J and T probe		0	0		0	0	0
CO ₂ / temperature probe	0			I .		1	
CO / temperature probe	0	0	0	0	0	0	0
CO ₂ / temperature / Hygrometry probe	0	0	0	0	0	0	0
Gas leak detection probe	0	0	0	0	0	0	0
Omnidirectional probe (air velocity/temperature/hyrometry)	0	0	0	0	0	0	0
Air velocity/ Temperature / Hygrometry probe	0	0	0	0	0	0	0
8 rechargeable batteries with charger	•	•	•	•	•	•	•
Calibration certificate	•	•	•	•	•	•	•
Transport case	•	•	•	•	•	•	•

Accessories (See related datasheet)

Datalogger-10	KPIJ 20 – 50 – 100 – 200 - 600	RTS	BNF	K 25 - 35 – 75 - 85 - 120 - 150
Datalogger-10 PC software for data recording and processing. Wired (LPCF) wireless (LPCR) interface.	Ammeter clamp with PVC cable lg. 2m and jack connector.	Telescopic extension, length 1 m, bent at 90° for measuring probe.	Hotwire cleaning spray	Airflow cones (See related datasheet)
CE 300	GST	ADS	See related datasheet	See related datasheet
Hands-free protective cover	Silicone heat conductive grease for temperature probes	Adaptor for power supply 230 Vac	Silicone tube and crystal flexible tube	Debimo airflow blades of different sizes
BN	RD 300	JAC	CHA	
Black ball Ø 150mm with junction for temperature probe Ø 4,5mm. Further dimensions available.	Straight extension for hotwire Ø 10 mm. lg. 300 mm	Set of 4 LR6 batteries	4 batteries charger	

Warranty period

Instruments have 1-year guarantee for any manufacturing defect (return to our After-Sales Service required for appraisal).



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