

AMI 300

Multifunctional IAQ Analyzer



Connection



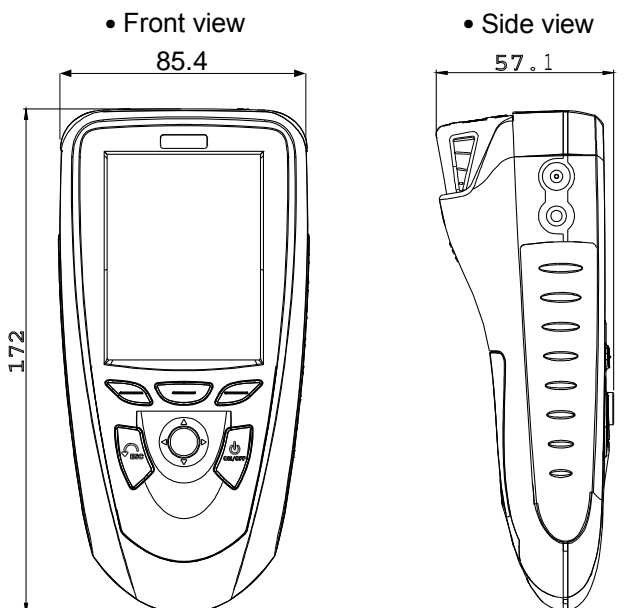
- Interchangeable measurement modules**
 1 instrument = more than 1 range and 1 parameter available.
- Wireless connection**
 Instrument / PC
 Instrument / Probe
- Smart-plus system**
 Probes automatically recognized when connected to the instrument.

The ALL-IN-ONE TOOL.....

AMI 300 - Build Your Own Kit



Dimensions (mm)



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, Hot-Wire 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



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

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 modules Piezoresistive sensor

Overpressure allowed ± 500 Pa : 250 mbar

Overpressure allowed ± 2500 Pa : 500 mbar

Overpressure allowed $\pm 10,000$ Pa : 1,200 mbar

Overpressure allowed ± 500 mbar : 2 bar

Overpressure allowed $\pm 2,000$ 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

CO₂ : 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

Tachometry probe

Optical : optical sensor

Contact : optical probe with ETC adaptor

Instrument connections.....On the top :

2 secured mini-DIN connectors for SMART-Plus probes

Left side :

1 USB port for EIG 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)

Housing

IP54, ABS shock-proof

Keypad.....Metal-coated, 5 keys, 1 joystick

Conformity.....Electromagnetical compatibility

(NF EN 61326-1 norm)

Power supply.....4 alkaline batteries 1.5V LR6 Included

Operating environment.....Neutral gas

Operating temperature.....from 0 to 122°F (0 to 50°C)










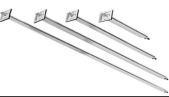



Storage temperature.....from 0 to 176°F (-20 to +80°C)

Auto shut-off.....adjustable from 0 to 120 min

Weight.....13.4 oz. (380g)

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

Specifications

	Measuring Units	Measuring Range	Accuracy*	Resolutions	
PRESSURE					
	InH ₂ O, Pa, mmH ₂ O, mbar, hPa, mmHg, DaPa	from 0 to ±500 Pa from 0 to ±2500 Pa from 0 to ±10,000 Pa from 0 to ±500 mBar from 0 to ±2000 mBar	± 100 Pa : ±0.2% reading ±0.8Pa, beyond ±0.2% reading ±1.5Pa, ±0.2% of reading ±2Pa ±0.2% of reading ±10Pa ±0.3% of reading ±0,5mBar ±0.3% of reading ±2mBar	0.1 Pa from -100 to +100 Pa, 1 Pa beyond 1Pa 1Pa 0.1mBar 1mBar	
CURRENT/VOLTAGE					
	V, mA	from 0 to 2.5 V from 0 to 10 V from 0 to 4/20 mA	±2mV ±10mV ±0.01mA	0.001 V 0.01 V 0.01 mA	
THERMOCOUPLE					
	°C, °F	K : from -200 to +1,300°C J : from -100 to +750°C T : from -200 to +400°C	±1.1°C or ±0.4% of reading** ±0.8°C or ±0.4% of reading** ±0.5°C or ±0.4% of reading**	0.1 °C 0.1 °C 0.1 °C	
CLIMATIC CONDITIONS					
	Hygro. Temp. Air pressure	%RH °C, °F hPa	from 5 to 95%RH from -20 to +80°C from 800 to 1100 hPa	See datasheet for interchangeable measurement modules	0.1 % RH 0.1 °C 1 hPa
HOTWIRE - Standard and/or Telescopic -					
	Air velocity Temperature Airflow	m/s, fpm, Km/h °C, °F m ³ /h, cfm, l/s, m ³ /s	from 0.15 to 3 m/s from 3 to 30 m/s from -20 to +80°C from 0 to 99,999 m ³ /h	±3% of reading ±0.03 m/s ±3% of reading ±0.1 m/s ±0.3% of reading ±0.25°C ±3% of reading ±0.03*area(cm ²)	0.01 m/s 0.1 m/s 0.1 °C 1 m ³ /h
Ø 100 mm VANE PROBE					
	Air velocity Temperature Airflow	m/s, fpm, Km/h °C, °F m ³ /h, cfm, l/s, m ³ /s	from 0.25 to 3 m/s from 3 to 35 m/s from -20 to +80°C from 0 to 99,999 m ³ /h	±3% of reading ±0,1m/s ±1% of reading ±0,3m/s ±0.4% of reading ±0.3°C ±3% of reading ±0.03*area (cm ²)	0.01 m/s 0.1 m/s 0.1 °C 1 m ³ /h
Ø 70 mm VANE PROBE					
	Air velocity Temperature Airflow	m/s, fpm, Km/h °C, °F m ³ /h, cfm, l/s, m ³ /s	from 0 to 3 m/s from 3 to 35 m/s from -20 to +80°C from 0 to 99,999 m ³ /h	±3% of reading ±0,1m/s ±1% of reading ±0,3m/s ±0.4% of reading ±0.3°C ±3% of reading ±0.03*area (cm ²)	0.1 m/s 0.1 °C 1 m ³ /h
Ø 14 mm VANE PROBE					
	Air velocity Airflow Temperature	m/s, fpm, Km/h m ³ /h, cfm, l/s, m ³ /s °C, °F	from 0.8 to 3 m/s from 3 to 40 m/s from 0 to 99,999 m ³ /h from -20 to +80°C	±3% of reading ±0,1m/s ±1% of reading ±0,3m/s ±3% of reading ±0.03*area (cm ²) ±0.4% of reading ±0.3°C	0.1 m/s 1 m ³ /h 0.1 °C
PITOT TUBE					
	Air velocity Airflow	m/s, fpm, Km/h, mph m ³ /h, cfm, l/s, m ³ /s	from 2 to 5 m/s from 5.1 to 100 m/s from 0 to 99,999m ³ /h	±0.3 m/s ±0.5% of reading ±0.2m/s ±0.2% of reading ±1% PE	0.1 m/s 1 m ³ /h
DEBIMO blades					
	Air velocity Airflow	m/s, fpm, Km/h, mph m ³ /h, cfm, l/s, m ³ /s	from 4 to 20 m/s from 21 to 100 m/s from 0 to 99,999m ³ /h	±0.3 m/s ±1% of reading ±0.1m/s ±0.2% of reading ±1% PE	0.1 m/s 0.1 m/s 1 m ³ /h
Air quality probes : CO / CO₂ / temperature / Hygrometry					
	Temperature CO ₂ CO Relative humidity	°C, °F ppm ppm %RH	from -20 to +80°C from 0 to 5000 ppm from 0 to 1,000 ppm from 5 to 95% RH	See related datasheet "Portable probes"	0.1 °C 1 ppm 1 ppm 0.1 % RH
STANDARD HYGROMETRY probe					
	STD Relative humidity Absolute humidity / enthalpy Dew point Ambient temperature	% RH g/Kg / Kj/Kg °C _{td} , °F _{td} °C, °F	from 3 to 98 %RH According to temperature and hygrometry measuring ranges from -50 to +80°C _{td} from -20 to	See related datasheet "Portable probes"	0.1 % RH 0.1 g/Kg 0.1 °C _{td} 0.1 °C
HIGH TEMPERATURE HYGROMETRY probe					
	H.T Relative humidity Absolute humidity / enthalpy Dew point Ambient temperature	% RH g/Kg / Kj/Kg °C _{td} , °F _{td} °C, °F	from 3 to 98 %RH According to temperature and hygrometry measuring ranges from -50 to +80°C _{td} from -40 to +180°C	See related datasheet "Portable probes"	0.1 %RH 0.1 g/Kg 0.1 °C _{td} 0.1 °C
TACHOMETRY probe (See datasheet "Portable probes")					
MULTIFUNCTION probes (See datasheet "Portable probes")					
Pt100 Smart-Plus probes (See related datasheet)					

*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.

Supplied with ...

● Supplied with ○ Option

DESCRIPTION	AMI 300
Pressure module from 0 to ±500 Pa	○
Pressure module from 0 to ±2500 Pa	○
Pressure module from 0 to ±10000 Pa	○
Pressure module from 0 to ±500 mBar	●
Pressure module from 0 to ±2000 mBar	○
Current / voltage module w/ Cables	●
Thermocouple module	○
Climatic conditions module	○
2x1 m silicone tube Ø 4 x 7 mm *	●
Stainless steel tips Ø 6 x 100 mm *	●
Pitot tube Ø 6mm, lg. 300 mm	○
Pitot tube Ø 6mm, lg. 300 mm T	○
Pitot tube Ø 6mm, lg. 300 mm S	○
Optical tachometry probe	○
ETC adaptor	○
Reflective tape	○
Standard hotwire	○
Straight extension for hotwire	○
Telescopic gooseneck-shaped hotwire	○
SMART-Plus Ø 14 mm vane probe	○
Telescopic SMART-Plus Ø 14 mm vane probe	○
SMART-Plus Ø 70 mm vane probe	○
Wireless Ø 70 mm vane probe	○
SMART-Plus Ø 100 mm vane probe	○
Wireless Ø 100 mm vane probe	○
SMART-Plus standard hygrometry probe	○
Wireless standard hygrometry probe	○
SMART-Plus high temperature hygrometry probe	○
Wireless high temperature hygrometry probe	○
SMART-Plus Pt100 temperature probe	○
Wireless Pt100 temperature probe	○
Thermocouple K, J and T probe	○
CO ₂ / temperature probe	○
CO / temperature probe	○
CO ₂ / temperature / Hygrometry probe	○
Air velocity/ Temperature / Hygrometry probe	○
PC Software, USB Cable & Memory	●
Calibration Certificate	●
Transport case	●

*Supplied w/ ANY choice of Pressure Modules



Accessories (See related datasheet)

Datalogger-10 Datalogger-10 PC software for data recording and processing. Wired (LPCF) or wireless (LPCR) interface.	KPIJ 20 - 50 - 100 - 200 - 600 Ammeter clamp with PVC cable lg. 2m and jack connector.	RTS Telescopic extension, length 1 m, bent at 90° for measuring probe.	BNF Hotwire cleaning spray	K 25 - 35 - 75 - 120 - 150 Airflow cones (See related datasheet)
CE 300 Hands-free protective cover	GST Silicone heat conductive grease for temperature probes	ADS Adaptor for power supply 120 Vac	See related datasheet Silicone tube & crystal flexible tube	See related datasheet Debimo airflow blades of different sizes
BN Black ball Ø 150mm with junction for temperature probe Ø 4.5mm. Further dimensions available.	RD 300 Straight extension for hotwire Ø 10 mm. lg. 300 mm	JAC Set of 4 LR6 batteries	CHA 4 batteries charger	

Warranty period

Instruments have 1-year guarantee for any manufacturing defect (return to our Service Department).



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