

## AMI 300

### Multifunctional IAQ Analyzer



#### Connection



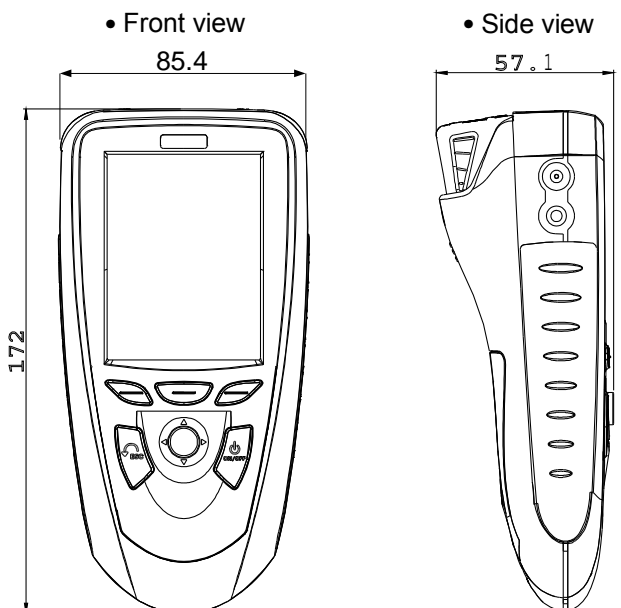
- Interchangeable measurement modules**  
 1 instrument = more than 1 range and 1 parameter available.
- Wireless connection**  
 Instrument / PC  
 Instrument / Probe
- Smart-plus system**  
 Probes automatically recognized when connected to the instrument.

#### 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  $\pm 500$  Pa : 250 mbar
- Overpressure allowed  $\pm 2500$  Pa : 500 mbar
- Overpressure allowed  $\pm 10,000$  Pa : 1,200 mbar
- Overpressure allowed  $\pm 500$  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

**CO<sub>2</sub>** : 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










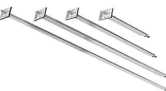



# Specifications

## Measuring Units

## Measuring Range

## Accuracy\*

## Resolutions

PRESSURE					
		InH <sub>2</sub> O, Pa, mmH <sub>2</sub> 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 <sup>3</sup> /h, cfm, l/s, m <sup>3</sup> /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 <sup>3</sup> /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 <sup>2</sup> )	0.01 m/s 0.1 m/s 0.1 °C 1 m <sup>3</sup> /h
Ø 100 mm VANE PROBE					
	Air velocity Temperature Airflow	m/s, fpm, Km/h °C, °F m <sup>3</sup> /h, cfm, l/s, m <sup>3</sup> /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 <sup>3</sup> /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 <sup>2</sup> )	0.01 m/s 0.1 m/s 0.1 °C 1 m <sup>3</sup> /h
Ø 70 mm VANE PROBE					
	Air velocity Temperature Airflow	m/s, fpm, Km/h °C, °F m <sup>3</sup> /h, cfm, l/s, m <sup>3</sup> /s	from 0 to 3 m/s from 3 to 35 m/s from -20 to +80°C from 0 to 99,999 m <sup>3</sup> /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 <sup>2</sup> )	0.1 m/s 0.1 °C 1 m <sup>3</sup> /h
Ø 14 mm VANE PROBE					
	Air velocity Airflow Temperature	m/s, fpm, Km/h m <sup>3</sup> /h, cfm, l/s, m <sup>3</sup> /s °C, °F	from 0.8 to 3 m/s from 3 to 40 m/s from 0 to 99,999 m <sup>3</sup> /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 <sup>2</sup> ) ±0.4% of reading ±0.3°C	0.1 m/s 1 m <sup>3</sup> /h 0.1 °C
PITOT TUBE					
	Air velocity Airflow	m/s, fpm, Km/h, mph m <sup>3</sup> /h, cfm, l/s, m <sup>3</sup> /s	from 2 to 5 m/s from 5.1 to 100 m/s from 0 to 99,999m <sup>3</sup> /h	±0.3 m/s ±0.5% of reading ±0.2m/s ±0.2% of reading ±1% PE	0.1 m/s 1 m <sup>3</sup> /h
DEBIMO blades					
	Air velocity Airflow	m/s, fpm, Km/h, mph m <sup>3</sup> /h, cfm, l/s, m <sup>3</sup> /s	from 4 to 20 m/s from 21 to 100 m/s from 0 to 99,999m <sup>3</sup> /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 <sup>3</sup> /h
Air quality probes : CO / CO <sub>2</sub> / temperature / Hygrometry					
	Temperature CO <sub>2</sub> 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 <sub>td</sub> , °F <sub>td</sub> °C, °F	from 3 to 98 %RH According to temperature and hygrometry measuring ranges from -50 to +80°C <sub>td</sub> from -20 to	See related datasheet "Portable probes" ±0.6% of reading ±0.5°C <sub>td</sub> ±0.3% of reading ±0.25°C	0.1 % RH 0.1 g/Kg 0.1 °C <sub>td</sub> 0.1 °C
HIGH TEMPERATURE HYGROMETRY probe					
	H.T Relative humidity Absolute humidity / enthalpy Dew point Ambient temperature	% RH g/Kg / Kj/Kg °C <sub>td</sub> , °F <sub>td</sub> °C, °F	from 3 to 98 %RH According to temperature and hygrometry measuring ranges from -50 to +80°C <sub>td</sub> from -40 to +180°C	See related datasheet "Portable probes" ±0.6% of reading ±0.5°C <sub>td</sub> ±0.3% of reading ±0.25°C	0.1 %RH 0.1 g/Kg 0.1 °C <sub>td</sub> 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 <sub>2</sub> / temperature probe	○
CO / temperature probe	○
CO <sub>2</sub> / 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)

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

## Warranty period

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



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