



# 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

### AMI 300



### AMI 300 CLA and AMI 300 CRF



### AMI 300 STD and AMI 300 SRF



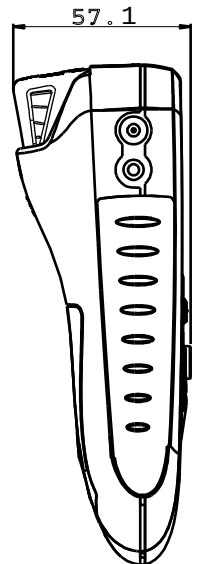
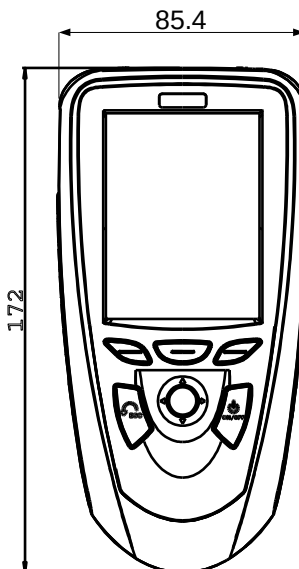
### AMI 300 PRO and AMI 300 PRF



## Dimensions

• Front view

• Side view



## 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



#### 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  $\pm 500$  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

#### 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

- Ch<sub>4</sub>, 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)

#### 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

#### Operating environment.....

- Neutral gas

#### Operating temperature.....

- from 0 to 50°C

#### Storage temperature.....

- from -20 to +80°C

#### Auto shut-off.....

- adjustable from 0 to 120 min










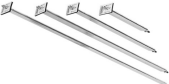



#### Weight.....

- 380g

#### Languages.....

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

# Specifications

	Measuring units	Measuring range	Accuracy*	Resolutions
<b>PRESSURE</b>				
	Pa, mmH <sub>2</sub> O, In WG, mbar, hPa, mmHg, DaPa, kPa	from 0 to ±500 Pa from 0 to ±2500 Pa from 0 to ±10,000 Pa	± 100 Pa : ±0.2% reading ±0.8Pa, beyond ±0.2% reading ±1.5Pa, ±0.2% of reading ±2Pa ±0.2% of reading ±10Pa	0.1 Pa from -100 to +100 Pa, 1 Pa beyond
	mmH <sub>2</sub> O, In WG, mbar, hPa, mmHg, DaPa, kPa, PSI bar, In WG, mbar, hPa, mmHg, kPa, PSI	from 0 to ±500 mBar from 0 to ±2000 mBar	±0.2% of reading ±0.5mBar ±0.2% of reading ±2mBar	0.1mBar 1mBar
<b>CURRENT/VOLTAGE</b>				
	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
<b>THERMOCOUPLE</b>				
	°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
<b>CLIMATIC CONDITIONS</b>				
	Hygro. %RH Temp. °C, °F Air pressure hPa	from 5 to 95%RH from -20 to +80°C from 800 to 1100 hPa	See datasheet interchangeable measurement modules	0.1 %RH 0.1 °C 1 hPa
<b>HOTWIRE - Standard and telescopic -</b>				
	Air velocity	m/s, fpm, Km/h	from 0.15 to 1 m/s from 0.15 to 3 m/s	± 3% of reading ± 0.03 m/s*** ±3% of reading ±0.03 m/s
	Temperature	°C, °F	from 3.1 to 30 m/s	±3% of reading ±0.1 m/s
	Airflow	m <sup>3</sup> /h, cfm, l/s, m <sup>3</sup> /s	from -20 to +80°C from 0 to 99,999 m <sup>3</sup> /h	±0.3% of reading ±0.25°C ±3% of reading ±0.03*area(cm <sup>2</sup> )
<b>Ø 100 mm VANE PROBE</b>				
	Air velocity	m/s, fpm, Km/h	From 0.3 to 3 m/s From 3.1 to 35 m/s	±3% of reading ±0.1m/s ±1% of reading ±0.3m/s
	Temperature	°C, °F	from -20 to +80°C	±0.4% of reading ±0.3°C
	Airflow	m <sup>3</sup> /h, cfm, l/s, m <sup>3</sup> /s	from 0 to 99,999 m <sup>3</sup> /h	±3% of reading ±0.03*area (cm <sup>2</sup> )
<b>Ø 70 mm VANE PROBE</b>				
	Air velocity	m/s, fpm, Km/h	From 0.3 to 3 m/s From 3.1 to 35 m/s	±3% of reading ±0.1m/s ±1% of reading ±0.3m/s
	Temperature	°C, °F	from -20 to +80°C	±0.4% of reading ±0.3°C
	Airflow	m <sup>3</sup> /h, cfm, l/s, m <sup>3</sup> /s	from 0 to 99,999 m <sup>3</sup> /h	±3% of reading ±0.03*area (cm <sup>2</sup> )
<b>Ø 14 mm VANE PROBE</b>				
	Air velocity	m/s, fpm, Km/h	From 0.8 to 3 m/s From 3.1 to 25 m/s	±3% of reading ±0.1m/s ±1% of reading ±0.3m/s
	Airflow	m <sup>3</sup> /h, cfm, l/s, m <sup>3</sup> /s	from 0 to 99,999 m <sup>3</sup> /h	±3% of reading ±0.03*area (cm <sup>2</sup> )
	Temperature	°C, °F	from -20 to +80°C	±0.4% of reading ±0.3°C
<b>PITOT TUBE</b>				
	Air velocity	m/s, fpm, Km/h, mph	from 2 to 5 m/s from 5.1 to 100 m/s	±0.3 m/s ±0.5% of reading ±0.2m/s
	Airflow	m <sup>3</sup> /h, cfm, l/s, m <sup>3</sup> /s	from 0 to 99,999m <sup>3</sup> /h	±0.2% of reading ±1% PE
<b>DEBIMO blades</b>				
	Air velocity	m/s, fpm, Km/h, mph	from 4 to 20 m/s from 21 to 100 m/s	±0.3 m/s ±1% of reading ±0.1m/s
	Airflow	m <sup>3</sup> /h, cfm, l/s, m <sup>3</sup> /s	from 0 to 99,999m <sup>3</sup> /h	±0.2% of reading ±1% PE
<b>Air quality probes : CO / CO<sub>2</sub> / temperature / Hygrometry</b>				
	Temperature	°C, °F	from -20 to +80°C	See related datasheet
	CO <sub>2</sub>	ppm	from 0 to 5000 ppm	"Portable probes"
	CO	ppm	from 0 to 500 ppm	
	Relative humidity	%RH	from 5 to 95%RH	
<b>STANDARD HYGROMETRY probe</b>				
	Relative humidity	%RH	from 3 to 98 %RH	See related datasheet
	Absolute humidity / enthalpy	g/Kg / Kj/Kg	According to temperature and hygrometry measuring ranges	"Portable probes"
	Dew point	°C <sub>td</sub> , °F <sub>td</sub>	from -50 to +80°C <sub>td</sub>	±0.6% of reading ±0.5°C <sub>td</sub>
	Ambient temperature	°C, °F	from -20 to	±0.3% of reading ±0.25°C
<b>HIGH TEMPERATURE HYGROMETRY probe</b>				
	Relative humidity	%RH	from 3 to 98 %RH	See related datasheet
	Absolute humidity / enthalpy	g/Kg / Kj/Kg	According to temperature and hygrometry measuring ranges	"Portable probes"
	Dew point	°C <sub>td</sub> , °F <sub>td</sub>	from -50 to +80°C <sub>td</sub>	±0.6% of reading ±0.5°C <sub>td</sub>
	Ambient temperature	°C, °F	from -40 to +180°C	±0.3% of reading ±0.25°C
<b>TACHOMETRY probe (See datasheet "Portable probes")</b>		<b>OMNIDIRECTIONAL PROBE See datasheet "Portable probes"</b>		
<b>MULTIFUNCTION probes (See datasheet "Portable probes")</b>		<b>GAS LEAK DETECTION PROBE See datasheet "Portable probes"</b>		
<b>Pt100 Smart-Plus probes (See related datasheet)</b>				

\*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

## Supplied with ...

● Supplied with ○ Option

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	○	○	○	●	○	○	●
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	●	●	●	●	●	●	●
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	○	○	○	○	○	○	○
Hot wire with specific adjustment and calibration	○	○	○	○	○	○	○
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	○	○	○	○	○	○	○
Gas leak detection probe	○	○	○	○	○	○	○
Omnidirectional probe (air velocity/temperature/hyrometry)	○	○	○	○	○	○	○
Air velocity/ Temperature / Hygrometry probe	○	○	○	○	○	○	○
8 rechargeable batteries with charger	●	●	●	●	●	●	●
Calibration certificate	●	●	●	●	●	●	●
Transport case	●	●	●	●	●	●	●

## 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 - 85 - 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 230 Vac	<b>See related datasheet</b> Silicone tube and 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 After-Sales Service required for appraisal).

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