

AMI 300

Multifunctional IAQ Analyzer



Connection



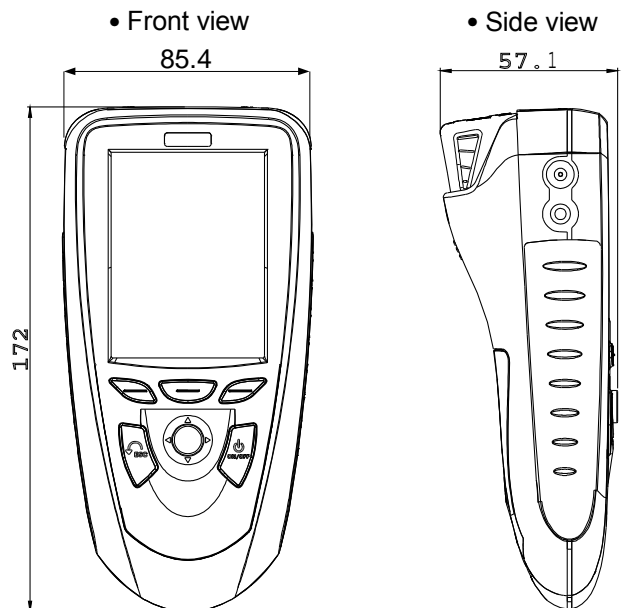
- Interchangeable measurement modules**
1 instrument = more than 1 range and 1 parameter available.
- Wireless connection**
Instrument / PC
Instrument / Probe
- Smart-plus system**
Probes automatically recognized when connected to the instrument.

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)










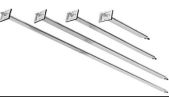



Storage temperature.....from 0 to 176°F (-20 to +80°C)

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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