

Technical Data Sheet

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



AQ 200 Air quality



Advantages

- Interchangeable measurement modules
- User-friendly (Joystick navigation)
- Large graphic display
- Blue backlight





The instrument

AQ 200 - Current voltage module - CO₂/Temp. probez AQ 200P - Current voltage module - CO₂/Temp./Hygrometry probe



AQ 200 0 - Current voltage module - Omnidirectionnal probe Air velocity/Hygro/Temp



Thermocouple temperature Climatic conditions module module - 4 channels Hygro/Temp./Air pressure





- Up to 6 measurements simultaneously
- Instrument/PC wireless communication
- · Wireless probes

Interchangeables

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

Wireless connection Instrument / PC Instrument / probe

Smart-plus system

Wireless or wired probes automatically recognized when connected to the instrument.



CO₂ / temperature probe from 0 to 5,000 ppm / from -20°C to +80°C

CO₂ / temperature / Hygrometry probe

from 0 to 5,000 ppm / from -20°C to +80°C / from 5 to 95%RH



Wired or wireless temperature probe





N^{ew} CE



Air quality

CLIMATIC CONDITIONS MODULE

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

AIR QUALITY PROBES :

CO / temperature

CO₂ / temperature

CO₂ / temperature / Hygrometry

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

OMNIDIRECTIONAL PROBE

- Air velocity
- Temperature
- Hygrometry

Thermometer

THERMOCOUPLE MODULE

- Dynamic delta T
- Audible Alarm (lower and upper setpoints)
- Selection of units
- Minimum / maximum values and hold function
- 4-channel storage of thermocouple K, J and T
- Calculation of U-value

TEMPERATURE PROBES

- Dynamic delta T
- Audible Alarm (lower and upper setpoints)
- · Selection of units
- Minimum / maximum values and hold function
- Storage

Current / voltage module

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

Datalogger-10

- Multi-parameters recording
- Manual and automatic storage
- Memory : up to 8,000 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_

Air quality probe

CO₂: NDIR infrared sensor (Non dispersive- infrared) **CO**: Electrochemical sensor **Temperature**: Pt100 class 1/3 Din **Hygrometry**: capacitive hygrometry sensor

Climatic conditions module Hygrometry : capacitive hygrometry sensor Temperature : semiconductor temperature sensor Air pressure : capacitive sensor

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

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

AQ200 connection_

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

Interchangeable measurement modules____

Thermocouple module :

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

Current / voltage module :

Connection : 2 stereo jacks

Display__

Graphic display 128x128 pixels Dim. 50 x 54 mm Blue backlight Display of 6 measurements (including 4 simultaneously)

Housing

ABS shock-proof IP54

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___

340 g

Languages

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

Dimensions

Top view







Specifications

	Measuring units	Measuring range	Accuracy*	Resolutions					
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 (See related datasheet)									
+	°C, °F	K : From -200 to 1300°C J : From -100 to 750°C T : From -200 to 400°C	±1,1°C or ±0,4% reading*** ±0,8°C or ±0,4% reading*** ±0,5°C or ±0,4% reading***	0,1 °C 0,1 °C 0,1 °C					
Climatic conditions									
Hygro.	%RH	From 5 to 95%HR	Accuracy** (Repeatability, linearity, hysteresis) : ±1,8%RH (from 15°C to 25°C) Factory calibration uncertainty: ±0,88 %RH Temperature dependence : ±0.04 x (T-20) %RH (if T<15°C or T>25°C)	0,1 %RH					
Temp.	°C, °F	From -20 to +80°C	±0.4% of reading ±0.3°C	0,1 °C					
Air pressure	hPa	From 800 to 1100 hPa	±3 hPa	1 hPa					
CO / Temperature									
CO	°C, °F ppm	From -20 to +80°C From 0 to 200 ppm From 200 to 500 ppm	±0.3% of reading ±0.25°C ±3 ppm ±1.5% of reading	0,1 °C 0,1 ppm					
CO ₂ / Temperature									
Temp.	°C, °F ppm	From -20 to +80°C From 0 to 5000 ppm	±0.3% of reading ±0.25°C ±3% of reading or ±50ppm	0,1 °C 1 ppm					
CO ₂ / Temperature / Hy	/grometry								
Temp. CO ₂ Hygro.	°C, °F ppm %RH	From -20 to +80°C From 0 to 5000 ppm From 5 to 95%HR	±0.3% of reading ±0.25°C ±3% of reading or ±50ppm See Climatic conditions module	0,1 °C 1 ppm 0,1 %RH					
	be (Air velocity / Temperature	e / Hygrometry)	1						
Air velocity Temp. Hygro.	"/s ° C, ° F %RH ireless probes (See related o	From 0 to 5 m/s From -20 to +80°C From 5 to 95%HR	±3% of reading ±0.05 m/s ±0.3% of reading ±0.25°C See Climatic conditions module	0,01 m/s 0,1 °C 0,1 %RH					
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	°C, °F	From -50 to 250°C (According to model)	±0,3% of reading ±0.25°C (According to model)	0,01 °C					

*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. ** As per NFX 15-113 and the Charter 2000/2001 HYGROMETERS, GAL (Guaranteed Accuracy Limit) which has been calculated with a coverage factor value of 2 is ±2.88%RH between 18 and 28°C on the measuring range from 5 to 95%RH. Sensor drift is less than 1%RH/year. **The accuracy is expressed either by a deviation in *C, or by a percentage of the value concerned. Only the bigger value is considered.

Working principle

NDIR - Non dispersive infrared absorbance

A gas absorbs light at a specific wavelength, some of the intensity emitted by the infrared source is absorbed by the gas sample. The amount of light read by the IR sensor is inversely proportional to CO₂ concentration.



Electrochemical sensor

Electrochemical cell consists of a container, 2 electrodes, connexion wires and an electrolyte. Carbon monoxide is oxidised at one electrode to CO₂ whilst oxygen is consumed at the other electrode. The current produced is proportional to CO concentration.



Supplied with ...

 Supplied with Ο Option

DESCRIPTION	AQ 200	AQ 200 P	AQ 200 S	AQ 200 O
Current / voltage	•	•	•	●
Thermocouple temperature module	0	0	0	0
Climatic condition module	0	0	0	0
CO ₂ / temperature probe	•	0	0	0
CO / temperature probe	0	0	0	0
CO ₂ / temperature / Hygrometry probe	0	•	0	0
Thermocouple K, J and T probe	0	0	0	0
SMART-Plus Pt100 probe	0	0	0	0
Vireless Pt100 probe	0	0	0	0
Omnidirectional probe (Air velocity/temperature/hygrometry)	0	0	0	•
3 rechargeable batteries with charger	0	0	0	0
Current / voltage cable	•	•	•	•
Calibration certificate	•	•	0	•
Transport case	•	•	0	•

Accessories (See related datasheet)

Datalogger-10	KPIJ 20 – 50 – 100 – 200 - 600	RTS		
Datalogger-10 PC software for data recording and processing Wired (LPCF) or wireless (LPCR) interface.	Ammeter clamp with PVC cable Ig. 2m and jack connector.	Telescopic extension, length 1 m, bent at 90° for measuring probe.		
CE 200	GST	ADS		
Hands-free protective cover	Silicone heat conductive grease for temperature probes	Adaptor for power supply 230 Vac		
JAC	СНА	CTC-P		
Set of 4 LR6 batteries	4 batteries charger	Input current or voltage input PVC cable lg 2 m and jack connector		

Warranty period

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

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