

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

Connection



• Up to 8,000 measurement points

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

Interchangeables measurement modules 1 instrument = more than 1 range

Wireless connection Instrument / PC Instrument / probe

and 1 parameter available.

Smart-plus system

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

The instrument

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



Thermocouple temperature module - 4 channels





Climatic conditions module – Hygro/Temp./Air pressure







N^{ew} CE

CO / temperature probe from 0 to 1,000 ppm / from -20°C to +80°C

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



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

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

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 A 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

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____

Dim. 50 Blue ba	c display 128x128 pixels 0 x 54 mm acklight v of 6 measurements (including 4 simultaneously)
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ABS shock-proof IP54

Keypad

Metal-coated, 5 keys 1 joystick

Conformity____

Electromagnetical compatibility (NF EN 61326-1 norm)

Power supply_

4 alcaline 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

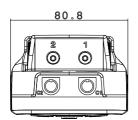
340g

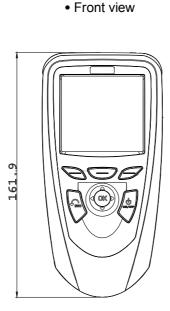
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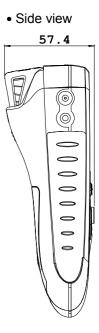
Languages_

Dimensions

Top view







Specifications

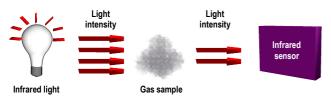
	Measuring units	Measuring range	Accuracy*	Resolution		
CURRENT / VOLTAGE						
	V, mA	from 0 to 2,5 V from 0 to 10 V from 0 to 4/20 mA	±1mV ±10mV ±0.01mA	0.001 V 0.01 V 0.01 mA		
THERMOCOUPLE (See related datasheet)						
+	°C, °F	K : from -200 to 1300°C J : from -100 to 750°C T : from -200 to 400°C	±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%RH	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 1,100 hPa	±3 hPa	1 hPa		
CO / temperature						
Temp.	°C, °F ppm	from -20 to +80°C from 0 to 100 ppm from 101 to 1,000 ppm	±0.4% of reading ±0.3°C ±5ppm ±3% of reading ±5ppm	0.1 °C 1 ppm		
CO ₂ / temperature						
Temp.	°C, °F ppm	from -20 to +80°C from 0 to 5,000 ppm	$\pm 0.4\%$ of reading ± 0.3 °C $\pm 3\%$ of reading ± 50 ppm	0.1 °C 1 ppm		
CO ₂ / temperature / Hygrometry						
Temp. CO ₂ Hygro.	°C, °F ppm %RH	from -20 to +80°C from 0 to 5,000 ppm from 5 to 95%RH	±0.4% of reading ±0.3°C ±3% of reading ±50ppm See Climatic conditions module	0.1 °C 1 ppm 0.1 %RH		
Pt100 Smart-plus or wireless probes (See related datasheet)						
	°C, °F	from -50 to 250°C (Accoding to model)	$\pm 0.3\%$ of reading ± 0.25 °C (Accoding 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

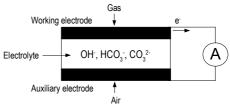
NDIR - Non dispersive infrared absorbance

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 CO_2 concentration.



Electrochemical sensor

Electrochemical cell consists of a container, 2 electrodes, connexion wires and an electrolyte. Carbon monoxide is oxidised at one electrode to CO_2 whilst oxygen is consumed at the other electrode. The current produced is proportional to CO concentration.



Supplied with ...

• Supplied with O Option

DESCRIPTION	AQ 200	AQ 200P
Current / voltage	•	•
Thermocouple temperature module	0	0
Climatic condition module	0	0
CO ₂ / temperature probe	•	0
CO / temperature probe	0	0
CO ₂ / temperature / Hygrometry probe	0	•
Thermocouple K, J and T probe	0	0
SMART-Plus Pt100 probe	0	0
Wireless Pt100 probe	0	0
8 rechargeable batteries with charger	0	0
Current / voltage cable	•	•
Calibration certificate	•	•
Transport case	•	•

Large choice of temperature probes (See related datasheet) :



- contact
- penetration
- Food industry penetration
- General use



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
CTC-P		
Input current or voltage input PVC cable Ig 2 m		

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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