

AQ 200

Air quality






Advantages

- Interchangeable measurement modules
- User-friendly (Joystick navigation)
- Large graphic display
- Blue backlight
- Up to 8,000 measurement points
- Up to 6 measurements simultaneously
- Instrument/PC wireless communication
- Wireless probes

Connection



- 
Interchangeables measurement modules
 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.

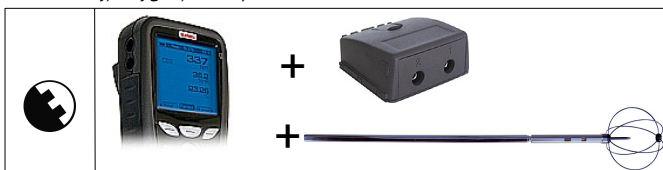
The instrument

AQ 200 – Current voltage module – CO₂/Temp. probez

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



AQ 200 O – Current voltage module – Omnidirectional probe
 Air velocity/Hygro/Temp



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



CO / temperature probe
 from 0 to 500 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



Functions

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

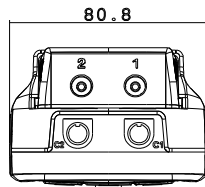
340 g

Languages

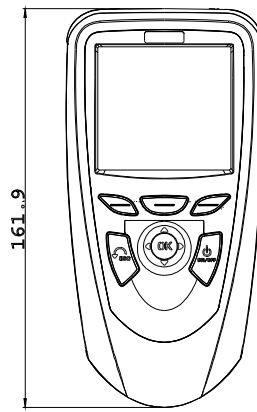
French, English, Dutch, German, Italian, Spanish, Portuguese, Swedish, Norwegian, Finn, Danish

Dimensions

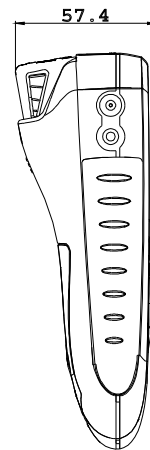
• Top view



• Front view



• Side view



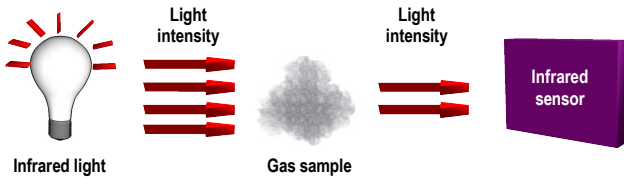
Specifications

	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					
	Temp. CO	°C, °F ppm	From -20 to +80°C From 0 to 100 ppm From 100 to 500 ppm	±0.3% of reading ±0.25°C ±3 ppm ±3% of reading	0,1 °C 0,1 ppm
CO₂ / Temperature					
	Temp. CO ₂	°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
CO₂ / Temperature / Hygrometry					
	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
Omnidirectional probe (Air velocity / Temperature / Hygrometry)					
	Air velocity Temp. Hygro.	m/s °C, °F %RH	From 0.15 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
Pt100 Smart-plus or wireless probes (See related datasheet)					
		°C, °F	From -50 to 250°C (According to model)	±0,3% of reading ±0.25°C (According to model)	0,01 °C

Working principle

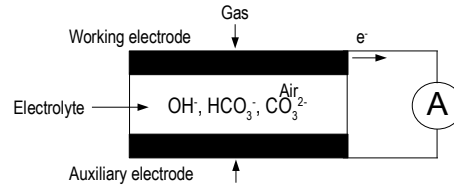
NDIR - Non dispersive infrared absorbance

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 ○ Option

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

Large choice of temperature probes
(See related datasheet) :

- ambient
- 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 lg. 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	CHA	CTC-P
Set of 4 LR6 batteries	4 batteries charger	Input current or voltage input PVC cable lg 2 m and jack connector