Technical Data Sheet

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

New

Supplied with **Calibration** certificate

MP 200
Thermo-Anemo-Manometer

CE

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

Connection

Interchangeable measurement modules
1 instrument = more than 1 range and 1 parameter available.

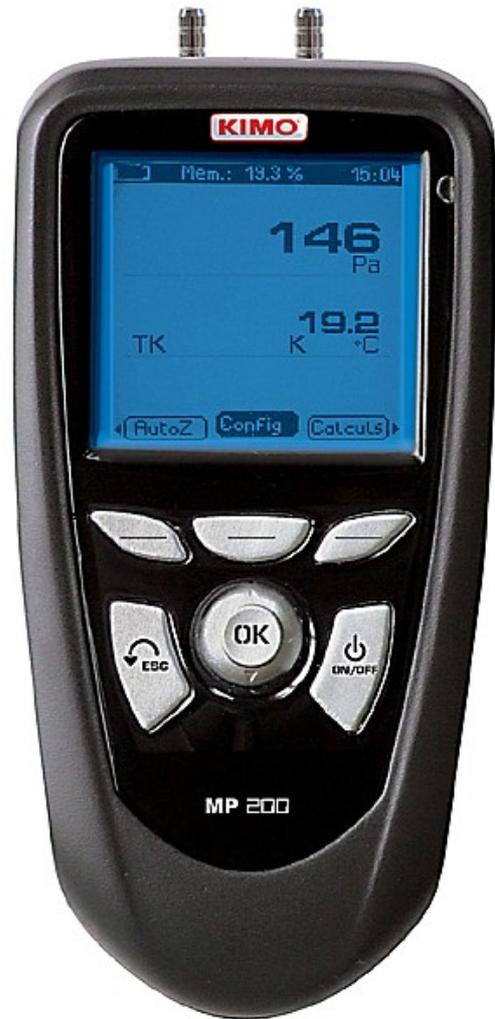**Wireless connection**
Instrument / PC

Smart-plus system
Probes automatically recognized when connected to the instrument.

The thermo-anemo-manometers

MP 200 P – *± 500 Pa*
MP 200 M – *± 2500 Pa*
MP 200 G – *± 10,000 Pa*

MP 200 H – *± 500 mBar*
MP 200 HG – *± 2000 mBar*

Thermocouple temperature module – *4 channels*

Current / voltage module

Option

Pitot tubes – **Large choice**

Option SMART+

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Thermocouple temperature probes - **Large choice**

Option SMART+

CO / Temperature probe

Option SMART+

[Kimo MP 200 P Thermo Anemometer Manometer](#)
[Kimo MP 200 M Thermo Anemometer Manometer](#)
[Kimo MP 200 G Thermo Anemometer Manometer](#)
[Kimo MP 200 H Thermo Anemometer Manometer](#)
[Kimo MP 200 HG Thermo Anemometer Manometer](#)

■ *Functions*

Manometer

PRESSURE
- Automatic self-calibration with solenoid valve (MP200 P)
- Manual self-calibration (MP200 M, MP200 G)
- Selection of units
- Pressure integration (0 to 9)
- Point/point average
- Automatic point/point average
- Automatic average
- Minimum / maximum values, hold, standard deviation
- Storage

AIR VELOCITY AND AIRFLOW
- Large choice of Pitot tube or Debimo blades or factor for other sensing elements
- Selection of duct type
- Selection of units
- Point/point average
- Automatic point/point average
- Automatic average
- Manual or automatic temperature balancing.
- Manual air pressure balancing.
- K2 Factor
- Minimum / maximum values, hold, standard deviation
- Storage

Thermometer

PRESSURE MODULE
- See pressure function above
- Storage of 1 thermocouple K, J or T channel

THERMOCOUPLE MODULE
- Selection of units
- Audible alarm (2 setpoints)
- Large choice of thermocouple type
- Dynamic delta T, minimum / maximum values and hold function
- Storage of 4 thermocouple K, J or T channels

Current / voltage module
- Adjustable ranges
- Minimum / maximum values and hold function
- Storage

CO / temperature probe
- Audible alarm (2 setpoints)
- CO maximum
- 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

Pressure module :

Piezo-resistive sensor
Overpressure allowed ±500 Pa : 250 mBar
Overpressure allowed ±2500 Pa : 500 mBar
Overpressure allowed ±10,000 Pa : 1200 mBar
Overpressure allowed ±500 mBar : 2 Bar
Overpressure allowed ±2,000 mBar : 6 Bar

Connection
2 pressure connectors Ø 6,2 mm made of nickelled brass
2 pressure threaded connectors Ø 4,6 mm of nickelled brass
+ 1 thermocouple temperature input for miniature connectors

Thermocouple module :

Connection : 4 thermocouple temperature inputs for thermocouple miniature connectors Type K, J or T Class 1 (IEC 584-3 norm)

Current / voltage module :

Connection : 2 stereo jacks

MP200 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

Display

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

Housing

Shock-proof made of ABS
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

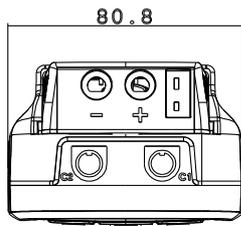adjustable from 0 to 120 min

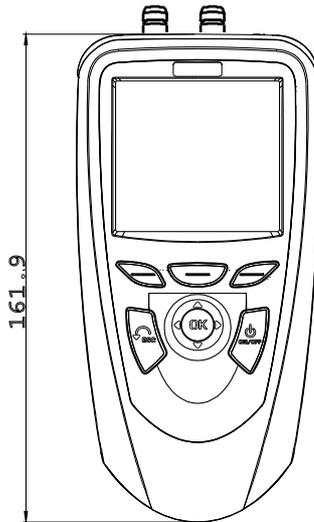**Weight**

340 g

Languages

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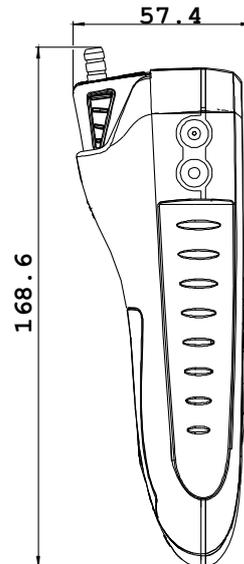Spanish, Portuguese, Swedish, Norwegian, Finn, Danish
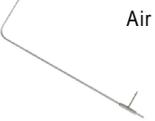
■ *Dimensions*

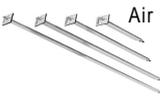| • On the top	• Front view	• Side view
80.8	161.9	57.4 / 168.6

■ *Specifications*

	Measuring units	Measuring range	Accuracy*	Resolutions
PRESSURE				
	Pa, mmH$_2$O, In WG, mbar, hPa, mmHg, DaPa, kPa	from 0 to ±500 Pa	± 100 Pa : ±0.2% of reading ±0.8Pa, beyond ±0.2% of reading ±1,5Pa	0,1 Pa from -100 to +100 Pa, 1 Pa beyond
		from 0 to ±2500 Pa	±0.2% of reading ±2Pa	1Pa
		from 0 to ±10,000 Pa	±0.2% of reading ±10Pa	1Pa
	mmH$_2$O, In WG, mbar, hPa, mmHg, DaPa, kPa, PSI	from 0 to ±500 mBar	±0.2% of reading ±0,5mBar	0,1mBar
	Bar, In WG, mbar, hPa, mmHg, kPa, PSI	from 0 to ±2,000 mBar	±0.2% of reading ±2mBar	1mBar
PITOT TUBE				
Air velocity	m/s, fpm, Km/h, mph	from 2 to 5 m/s	±0.3 m/s	0.1 m/s
		from 5.1 to 100 m/s	±0.5% of reading ±0.2m/s	0.1 m/s
Airflow	m^3/h, cfm, l/s, m^3/s	from 0 to 99,999m^3/h	±0.2% of reading ±1% PE	1 m^3/h
DEBIMO BLADE				
Air velocity	m/s, fpm, Km/h, mph	from 4 to 20 m/s	±0.3 m/s	0.1 m/s
		from 21 to 100 m/s	±1% of reading ±0.1m/s	0.1 m/s
Airflow	m^3/h, cfm, l/s, m^3/s	from 0 to 99,999m^3/h	±0.2% of reading ±1% PE	1 m^3/h
CURRENT / VOLTAGE				
	V, mA	from 0 to 2.5 V	±2mV	0.001 V
		from 0 to 10 V	±10mV	0.01 V
		from 0 to 4/20 mA	±0.01mA	0.01 mA
THERMOCOUPLE (See related datasheet)				
	°C, °F	K :from -200 to 1300°C	±1.1°C or ±0.4% of reading**	0.1 °C
		J :from -100 to 750°C	±0.8°C or ±0.4% of reading**	0.1 °C
		T :from -200 to 400°C	±0.5°C or ±0.4% of reading**	0.1 °C
CO / Temperature				
Temp.	°C, °F	from -20 to +80°C	±0.3% of reading ±0.25°C	0.1 °C
CO	ppm	from 0 to 200 ppm	±3 ppm	0.1 ppm
		from 200 to 500 ppm	±1.5% of reading	
Gas leak				
	ppm	From 0 to 10 000 ppm (GPL : 0-1800)	±20% of full scale at 20 °C at 65 %HR ± 5 %HR	1 ppm
	%LEL	From 0 to 20%LEL		0,01 %LEL
	%VOL	From 0 to 1%VOL		0,001 %VOL

*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.

■ *Working principle*

Piezoresistif sensor

Piezoresistif sensor is a diaphragm formed on a silicone substrate, which bends with applied pressure and generates millivoltage or millicurrent proportional to the pressure applied.
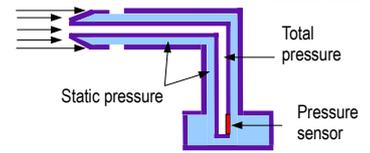
Voltage

Pressure

Vacuum

Silicone layer
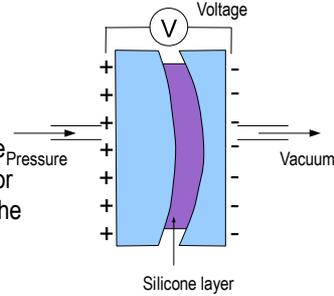
Pitot tube

Dynamic pressure is measured by Pitot tube :
Pd = Total pressure – Static pressure

Velocity is calculated according to Bernoulli simplified formula.

Formula with temperature correction :

$$V_{m/s} = K \times \sqrt{\frac{}{P_0}} \times \sqrt{\Delta P_{en\ Pa}}$$

Total pressure

Static pressure

Pressure sensor

Po = Barometric pressure in Pa
θ = Temperature in °C
K = Pitot tube coefficient

■ *Supplied with...*

● Supplied with   ○ Option

DESCRIPTION	MP 200 P	MP 200 M	MP 200 G	MP 200 H	MP 200 HP
Pressure module from 0 to ±500 Pa	●				
Pressure module from 0 to ±2,500 Pa		●			
Pressure module from 0 to ±10,000 Pa			●		
Pressure module from 0 to ±500 mBar				●	
Pressure module from 0 to ±2000 mBar					●
Thermocouple temperature module	○	○	○	○	○
Current / Voltage module	○	○	○	○	○
SMART-Plus CO / Temperature probe	○	○	○	○	○
Pitot tube Ø 6mm, lg. 300 mm	○	○	○	○	○
Pitot tube Ø 6mm, lg. 300 mm T	○	○	○	○	○
Pitot tube Ø 6mm, lg. 300 mm S	○	○	○	○	○
Thermocouple K, T and J probe	○	○	○	○	○
Gas leak detection probe	○	○	○	○	○
8 rechargeable batteries with charger	○	○	○	○	○
2x1 m silicone tube Ø 4 x 7 mm	●	●	●	●	●
Stainless steel tip Ø 6 x 100 mm	●	●	●	●	●
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**	**KCTJ10 - KCTJ02**
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.	Input cable current (KCTJ02) or voltage (KCTJ10) with PVC cable lg 2 m and jack connector
CE 200	**GST**	**ADS**	**See related datasheet**
Hands-free protective cover	Silicone heat conductive grease for temperature probes	Adaptor for power supply 230 Vac	Debimo airflow blades of different sizes
See related datasheet	**JAC**	**CHA**	
Pitot tube available in many lengths Ø 3 – 6 or 8 mm, with or without temperature compensation	Set of 4 LR6 batteries	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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