



# HVAC Measuring Instruments

Export general catalogue 2016



Pressure / Temperature / Humidity / Air velocity / Airflow / Air quality / Gas analysis / Sound level



European Manufacturer  
[www.kimo.fr](http://www.kimo.fr)

# Combustion

## Gas Analyser



### SOLUTION

FOR ANY TYPE OF BOILER UP TO 400 KW

We have developed a new range of combustion gas analysers, which fulfills all the needs of heating professionals.

Our analysers are scalable and offer many solutions for any type of boiler up to 400 kW, to improve efficiency and to control pollutant emissions.

### NEW APP

### KIGAZ mobile

Mobile application compatible with all KIGAZ range (except KIGAZ 50).



## Operating software

### LIGAZ-2

*FREE Software*

**Record your customers, boilers and measurements.**

Download your datasets and the programme will automatically fill in the measurement report.  
Synchronisation of PC/instrument database.

### LOGAZ-2

*Optional software*

Easy reading of measurement reports. Customize, print and export your files. Organize your timetable, maintenance contracts, customers follow-up. Display and recording of measurements in real-time.  
Synchronisation of PC/instrument database.

# Class 310 & 210

3

Up to **4**  
**interchangeable**  
**sensors**

## KIGAZ 310



**O<sub>2</sub>LV / CO-H<sub>2</sub> / NO  
NO<sub>2</sub> / SO<sub>2</sub> / CH<sub>4</sub>**  
sensors in standard or option



**Built-in**  
water trap

Any type  
of boiler



Max level  
alarm

Autozero  
in the flue



CO  
dilution

*Customized procedures*  
*CO dilution*  
*Simplified water discharge*  
*Optional: probe up to 1000°C*

O<sub>2</sub>, CO (H<sub>2</sub> compensation), Losses, Excess air, Efficiency (condensation), Flue gas temperature, Ambient temperature, Dew point temperature, Draft, Differential pressure, Flue gas velocity, Dilution, CH<sub>4</sub>

## KIGAZ 210

Up to **3**  
**interchangeable**  
**sensors**

Interchangeable sensors  
**O<sub>2</sub>LV / CO-H<sub>2</sub> / NO / CH<sub>4</sub>**



Autozero  
in the flue

Built-in  
printer



Reports  
printing

*Interchangeable probe*  
*Customized procedure*  
*Up to 10 measurements displayed simultaneously*

O<sub>2</sub> & CO (H<sub>2</sub> compensation)  
Losses, Excess air, Efficiency (condensation)  
Flue gas temperature & velocity  
Ambient temperature  
Differential pressure





## KIGAZ 110

**2**  
interchangeable  
sensors

O<sub>2</sub>LV/ CO-H<sub>2</sub>  
sensors



Protection of sensors by  
pump stopping

Built-in  
printer



Protective cover  
with magnet

*Step by step procedure*  
*Self-test menu*

O<sub>2</sub> flue gas, CO flue gas, CO<sub>2</sub> flue gas, ambient CO max  
Flue gas temperature  
Ambient temperature  
Differential pressure & Pressure draft  
Losses & Excess air  
Efficiency up to 120%

## KIGAZ 80

**2**  
interchangeable  
sensors

O<sub>2</sub> / CO-H<sub>2</sub>  
sensors



Protection of sensors by pump  
stopping with treshold

External  
printer (option)



Protective cover  
with magnet

*Step by step procedure*  
*Self-test menu*

O<sub>2</sub> flue gas, CO flue gas, CO<sub>2</sub> flue gas, ambient CO max  
Flue gas temperature  
Ambient temperature  
Differential pressure & Pressure draft  
Losses & Excess air / Efficiency up to 120%



*External printer*  
*(option for KIGAZ 50 and 80)*



*Protective cover with magnet*  
*(supplied with KIGAZ 80,*  
*option for KIGAZ 50)*

## KIGAZ 50

**2 sensors**

O<sub>2</sub> flue gas, CO flue gas,  
CO<sub>2</sub> flue gas, ambient CO max  
Flue gas temperature  
Ambient temperature  
Differential pressure  
Pressure draft  
Losses & Excess air



**O<sub>2</sub> / CO**  
Sensors



External  
**printer** (option)



**Autozero**  
30 seconds



## Additional measurements



### Gas detection

*FG 110*

Gas leak detector  
Detection of gas such as methane (CH<sub>4</sub>), LPG (isopropanol and isobutane) and other combustible gases (hydrocarbons)



### Gas network

*MP 130*

Gas tightness special manometer  
for gas network  
±500 mbar



### Refrigerant gases

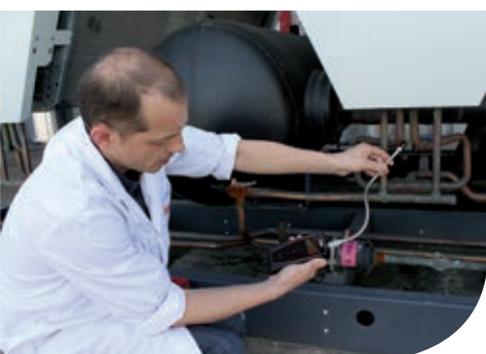
*DF 110*

Detector of refrigerant gases and hydrogen (HFC, HCFC, Nidron 5...) Visual and audible alarm Manual and automatic self-calibration

### Ambient CO

*CO 50/110*

CO and CO max measurement  
From 0 to 500 ppm  
From -20 to +80°C



NEW RANGE

# HVAC

## Portable instruments

### New features

- Designed for the field
- Ease of use
- Nonstop measurements
- Scalable instruments
- Interchangeable probes



*Class 310*  
multifunction

**IP54** ABS housing  
Integrated protection

*Class 210*  
multi-probes



*Class 50 & 110*  
monofunction

## The of class 210 & 310



### Designed for the field

An overmoulding made of elastomere protects the instrument, guarantees shockproofing



### Nonstop measurements

This new generation of instruments has an interchangeable and rechargeable Li-ion battery.



### Expandable memory (AMI 310)

Internal memory of 1,000 datasets of 20,000 measuring points. Built-in location for a micro-SD memory card



### Interchangeable probes

The new probes utilise a mini-Din connecting cable which is compatible with all probes



### Modules

- |                              |                  |
|------------------------------|------------------|
| 1. Climatic conditions       | 3. Pressure      |
| 2. Thermocouple (4 channels) | 4. U Coefficient |



## Air Quality

CO 50/110 - AQ 110 - HQ 210

CO : 0 to 500 ppm  
 CO<sub>2</sub> : 0 to 5,000 ppm  
 -200 to +600°C  
 3 to 98 %RH  
 0 to 5 m/s



## Manometers

MP 50/51/55/110/111  
 112/115/120/130/210

Differential pressure  
 From ±500 Pa to ±2,000 mbar  
 Air velocity with Pitot tube  
 From 2 to 100 m/s  
 Atmospheric pressure  
 From 800 to 1,100 hPa



## Anemometers

LV 50/110/111/117/130  
 VT 50/110/115/210

Hotwire and telescopic hotwire  
 0.15 to 30 m/s  
 Vane probes : Ø14, 70, 100 mm  
 0.3 to 35 m/s  
 Airflow: 0 to 99,999 m<sup>3</sup>/h



## Hygrometers

HD 50/110 - HQ 210

3 to 98 %RH  
-200 to +600°C  
-50 to +80°C<sub>w</sub>



## Tachometers

CT 50/110

Optical : 60 to 60,000 rpm  
Contact : 30 to 20,000 rpm



## Accessories



1. Software
2. Protective housing
3. ABS transport case
4. Saturated salt solutions
5. Measuring cones
6. Debimo blades
7. Gas network pack
8. Pitot tubes



# AMI

## Multifunction

AMI 310 is a multi-probe instrument which can measure up to 6 parameters simultaneously.



**Wireless**  
Probes



Data processing  
**Software**



**Interchangeable**  
Probes & Modules



**Micro-SD**  
Card



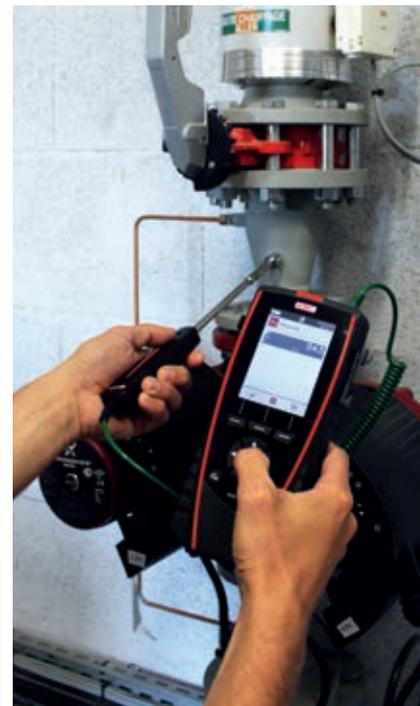
**Graphical**  
Display



**Colour**  
Wide screen

### Measuring ranges

- $\pm 500$  Pa /  $\pm 2,500$  Pa /  $\pm 10,000$  Pa
- $\pm 500$  mbar /  $\pm 2,000$  mbar
- Thermocouple:  $-200$  to  $+1760^\circ\text{C}$
- Pt 100:  $-200$  to  $+600^\circ\text{C}$
- Humidity: 3 to 98 %RH
- CO: 0 to 500 ppm
- CO<sub>2</sub>: 0 to 5,000 ppm
- Air velocity:  $-5$  to  $35$  m/s
- Airflow: 0 to 99,999 m<sup>3</sup>/h
- Gas leak detection: 0 to 10,000 ppm
- Tachometry: 30 to 60,000 rpm



NEW

# Portable Thermometers



## Class 210 - TM 210

- -200 to +1,760°C
- 2 Pt 100 channels
- 4 thermocouple inputs
- 1000 datasets



Thermocouple module  
4 channels



## Class 50

TK 50/52 - TR 50/52

1 or 2 channels  
for Pt 100 probes,  
Thermocouple K, J, T, S  
-200 to +1,760°C



## Class 100

TK 110/112 - TR 110/112

**Configurable alarms**  
**Hold/Min/Max functions**

1 or 2 channels for Pt 100 probes,  
Thermocouple K, J, T, S  
-200 to +1,760°C



INFRARED

## Thermometers

KIRAY 100/200/300

Diagnose, inspect and check any  
temperature, with the advantage  
of using "no-contact" technology.  
-50 to +1,850°C



# DBM 610

## Airflow / Air velocity



**Interchangeable  
Hoods**



**Pa Micromanometer  
Function**



### A solution for airflow commissioning and balancing

DBM 610 can be used on any supply or exhaust, air distributors: rectilinear, helical and toric.

- Quick and simple hood changes
- Measuring range from 40 to 3,500 m<sup>3</sup>/h or 24 to 2060 cfm
- Simultaneous display of airflow and temperature
- Automatic airflow direction (extraction or air blast)
- Supplied with 610x610 mm hood
- 4 others hoods are available as options

720 x 720 mm  
720 x 1,320 mm  
420 x 1,520 mm  
1,020 x 1,020 mm



### Micromanometer function with Pitot tube



## Remote velocity grid

**NEW**

Designed for air velocity measurements on any type of large ceiling vent or diffuser.

The grid is similar to the DBM610 grid. It calculates the average air velocity from 24 points to guarantee a reliable measurement. The grid is attached to a telescopic (maximum length is 2.05 m) and articulated pole (0 to 90°). Struts of 3 different lengths allow for correct positioning of the grid on the ceiling surface.

A backpack allows easy carriage of the grid and its accessories (telescopic pole, articulation, 2 x 2.5m of silicone tube, positioning strut and electronic housing).



# Sound Level Meters



*DB 100/200/300*

**Class 1 and 2 sound level meters as per international standards**

20 to 137 dB

Frequency weighting A, C, Z\*

Real time analyser by octave bands: 31.5 Hz to 8 kHz (class 2),  
16 Hz to 16 kHz (class 1, DB 300 only)



#### Data processing software

In option for DB 200 and 300, LDB 300 software is specific for industry and work environment.

It allows for elaborated data processing and reports printing as per NF S31-010 standard.

# Environmental Diagnosis

B

## Solarimeters

CR 110 - SL 100/200

Portable or fixed installation  
To control photovoltaic  
and thermal installations  
1 to 1,500 W/m<sup>2</sup>



## Noise dosimeters

DS 200/300

For the measurement of noise exposure  
at workstation

Detection and peak counting:  
135 dB - 137 dB - 140 dB  
Daily sound exposure level: Lex,d  
Data processing software



Applicative standard  
ISO 9612 : 2009



2003/10/CE  
Directive



## Luxmeters

LX 50/100/200

Light measurement

0.1 to 200,000 lux  
0.01 to 18,585 fc  
Data processing software



## Pin moisture meter

HM 50

Compatible with 4 types of materials:  
wood, plaster, brick and concrete

Supplied with 2 extra pin sets and a  
protective cap



As per following standards  
EN 12464-1 / EN 12464-2  
EN 12193

# Sensors

## Transmitters



**Configurable**  
outputs



**RCR**  
relay



**IP65**  
Waterproof  
ABS housing



**1 or 2 analogue**  
outputs

### Industry, service, food industry

- For air processing
- Dip switch, keypad and software configuration
- Power supply: 24 V / 115 V / 230 V
- Outputs: 4-20 mA/0-20 mA or 0-10 V/0-5 V



Class 210



Class 110



### INNOVATION

#### Simplified calibration

*Electronic board and measuring element connected to the front side of the sensor, which allows to configure and calibrate your device without causing any damage.*

## Monostats

PST/HST/TST/COST/CO2ST

### 1 RCR relay

From  $\pm 100$  Pa to  $\pm 2,000$  mbar  
 From 5 to 95 %RH  
 From  $-100$  to  $+400^\circ\text{C}$   
 CO: 0 to 500 ppm  
 CO<sub>2</sub>: 0 to 5,000 ppm



## Class 110 - Monofunction

CP / HM / TH / TM / CTV / CR / LR / CO

### 1 or 2 analogue outputs

From  $\pm 100$  Pa to  $\pm 2,000$  mbar  
 Atmospheric pressure: 800 to 1,100 hPa  
 From 5 to 95 %RH  
 From  $-100$  to  $+400^\circ\text{C}$

From 0 to 30 m/s  
 From 0 to 1,500 W/m<sup>2</sup>  
 From 0 to 10,000 lux  
 CO: 0 to 500 ppm  
 CO<sub>2</sub>: 0 to 5,000 ppm



**NEW**

### CO/CO<sub>2</sub> sensors

*KIMO designed CO/CO<sub>2</sub> transmitters in order to meet with requirements of new norms and decrees on air quality.*



## Multifunction

### Class 210

CP / TH / TM / CTV / COT

#### 2 analogue outputs Calculation functions Automatic autozero

From  $\pm 100$  Pa to  $\pm 2,000$  mbar  
 From 5 to 95 %RH  
 From  $-100$  to  $+400^\circ\text{C}$   
 From 0 to 30 m/s  
 CO: 0 to 500 ppm  
 CO<sub>2</sub>: 0 to 5,000 ppm



#### SQR/3 option

Connected to DEBIMO measuring blades, CP 210 can calculate air velocity and airflow in a duct, from differential pressure.

# Class 310 Multifunction

Pressure / Humidity / Temperature / Air Velocity / Airflow / CO / CO<sub>2</sub>  
**NEW GENERATION**

## Multifunction sensor

*C 310*

- Display and measure 4 parameters simultaneously
- 3 Inputs for interchangeable probes
- RS485 Modbus
- 4 RCR relays
- Up to 4 analogue outputs
- 4 visual and audible alarms



Ethernet  
Communication



## Multifunction sensor

*CA 310*

- Large display
- 2 Inputs for interchangeable probes
- RS485 Modbus
- 3 RCR relays and 3 analogue outputs



Ethernet  
Communication



## Interchangeable Probes

*C 310 / CPE 310-S / CA 310*

- Pressure..... From 0-10 Pa to 10,000 Pa
- Humidity..... 0 to 100 %RH
- Temperature ..... -50 to +180°C
- Air Velocity..... 0 to 35 m/s
- Airflow..... 0 to 99,999 m<sup>3</sup>/h
- CO ..... 0 to 500 ppm
- CO<sub>2</sub> ..... 0 to 5,000 ppm
- Current/Voltage..... 4-20 mA / 0-10 V

### Easy Clip



## SPECIAL FOR CLEAN ROOM

### Flush-mount

#### Multifunction pressure sensor

CPE 310-S

- 1 Input for interchangeable probes
- Front calibration
- 3 analogue outputs
- RS485 Modbus
- Range :  $\pm 100$  Pa
- 3 visual and audible alarms



Precise Resolution



1 INPUT for probe



Front connection for configuration and calibration



alternative display

### Multi-channel Display

Flush-mount ATE 300

Display 3 parameters alternatively.  
RS485 Modbus

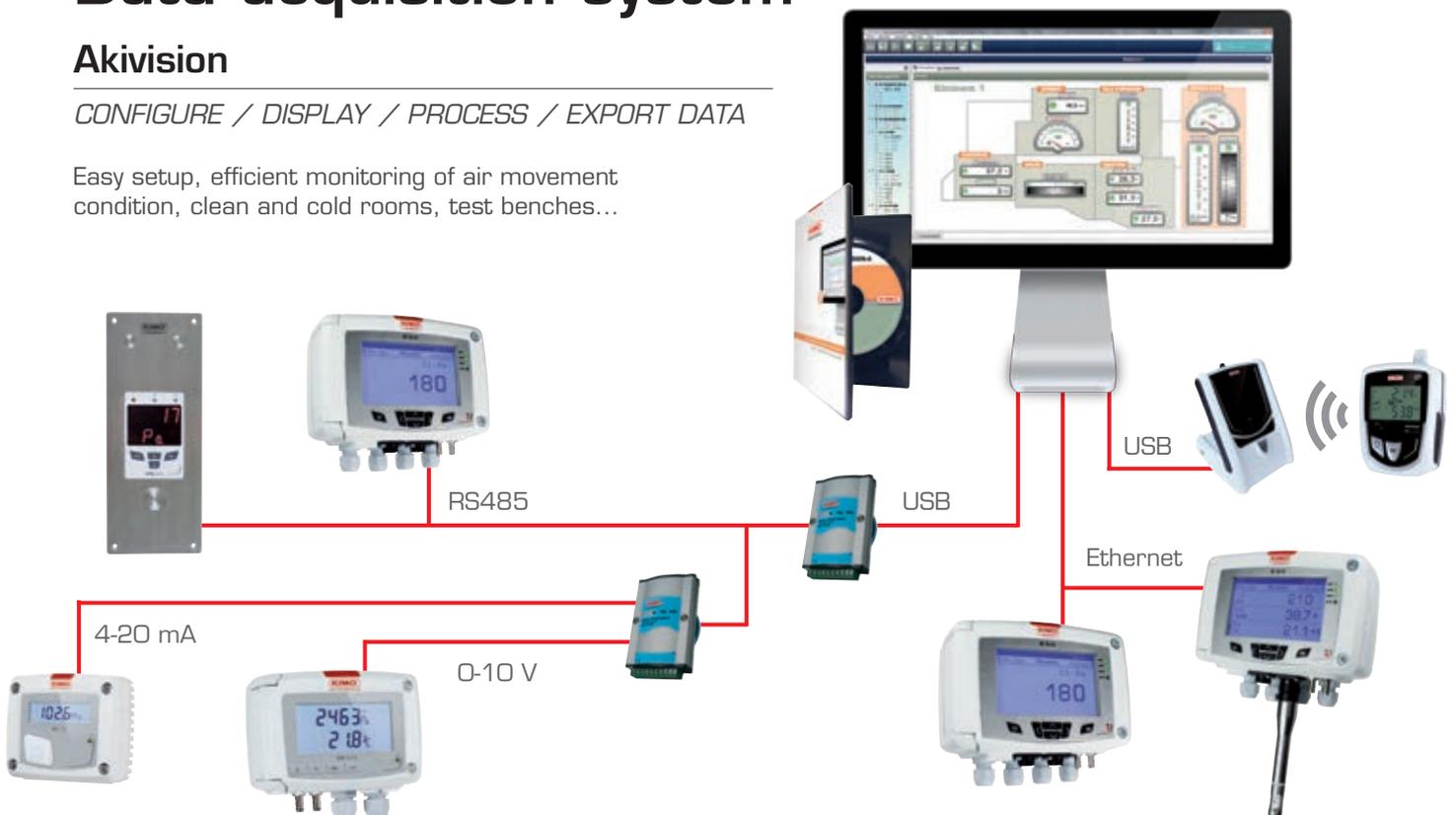


## Data acquisition system

### Akivision

CONFIGURE / DISPLAY / PROCESS / EXPORT DATA

Easy setup, efficient monitoring of air movement condition, clean and cold rooms, test benches...



# Temperature Probes

## Standard or custom-made probes

- Thermocouple, NTC, Pt 100, Pt 1000
- Probes with connection head
- Probes with cable
- Probes with ABS head



## Wire probes

### PVC/Silicone/Teflon®/ Glass silk cable

Stainless steel hose  
Wire mounting : 2, 3, 4 wires  
(single pair or multipair)



## Connection head

### Alu/Noryl/Stainless steel head

Stainless steel, heat resisting steel  
or mineral insulated sheath, Alard  
coating...  
Single pair or multipair

## Duct mount, remote or ambient probe

Pt 100, 0-10 V, 4-20 mA



## + Accessories

- Converters/transmitters
- Thermowell
- Thermocouple connectors
- Brackets and support wall fixing

- Adjustable ring
- PVC, silicone, Teflon® cable
- Stainless steel hose  
(with or without shielding)



# Calibration Benches

NEW

## Pressure generator

*GP 500*

The pressure generator allows to adjust and calibrate measurement instruments in laboratory or on-site.

-2,500 to +2,500 Pa  
-10,000 to +10,000 Pa

- 20 programs with adjustable generations
- Solid transport case
- Aluminium housing with adjustable carrying handle



NEW

## Humidity generator

*GH 500*

Calibration of several instruments simultaneously  
Multi-probe ventilated measuring chamber  
Interchangeable regulating probe

From 10 to 85%RH



**NEW**

# Dataloggers



**Anti-theft system**



**Multi application**



## KISTOCK

- Measuring, recording and data processing
- Measurement of 1 to 5 parameters simultaneously
- Storage of up to 2,000,000 measurement points
- User-friendly configuration with KILOG software and Kistock Mobile



*HVAC*



*Food Industry*



*Clean Room*

## KISTOCK mobile

Configuration, data visualisation and download (only available for class 320)



## Class 50

*KH 50 / KT 50*

**Temperature - Humidity**  
 -40 to +70°C  
 5 to 95 %RH



## Class 120

*KH 120 / KT 120*

**Temperature - Humidity**  
 -40 to +70°C  
 5 to 95 %RH  
 PDF Reports



**Embedded software**



## Class 220

*KH 220 - KT 220 - KTT 220*

Up to 2 inputs for external probes  
NTC or K, J, T, N, S thermocouple  
Humidity

Water pressure

-200 to +1,760°C

5 to 95 %RH

0 to 10,000 lux

0 to 10 bar

0 to 20 mA / 0 to 600 A

0 to 10 V



Interchangeable probes



With or without display



## Class 320

*KT 320 - KTT 320 - KP 320  
KPA 320 - KCC 320*

Up to 4 inputs for external probes  
Pt 100 or K, J, T, N, S thermocouple,  
CO<sub>2</sub>, differential pressure, humidity,  
current

-200 to +1,760°C

5 to 95 %RH

0 to 5000 ppm

800 to 1100 hPa

±10,000 Pa

0 to 20 mA

0 to 600 A

0 to 10 V



Mobile application



Bluetooth communication

## Accessories



Large choice of temperature and hygrometry probes



Data collector for mobile data transfer (20,000,000 pts)



Anti-theft System (class 220 and 320)



Kilog software (option) and Kilog lite software (free)

# Wireless Datalogger

## KISTOCK RF

- Measuring, recording and data processing
- Remote configuration
- Storage of up to 20,000 measurement points
- Up to 100 dataloggers in network



Communication base



Alarm box



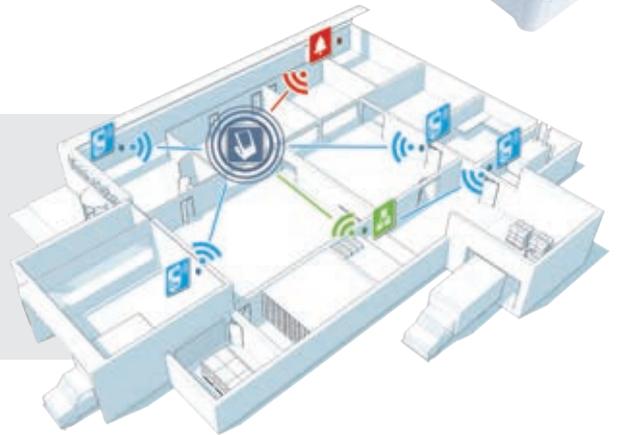
Wireless datalogger



Network extender

### KIMO exclusivity

**Pressure datalogger**  
 KP 110-RF / KP 111-RF  
 -1,000 to +1,000 Pa  
 -10,000 to +10,000 Pa



### Class 100

KT 110-RF / KT 150-RF / KP 110-RF

Up to 1 input for external probe  
 -40 to +70°C  
 0 to 20 mA / 0 to 10 V  
 -1,000 Pa to +1,000 Pa  
 -10,000 Pa to +10,000 Pa



### Class 200

KH 210-RF / KTU 210-RF

Up to 2 inputs for external probes  
 Standard or remote probe  
 -40 to +180°C / 0 to 100 %RH  
 0 to 20 mA / 0 to 10 V  
 0 to 20 A / 0 to 600 A



### Class 300

KTR 310-RF / KTT 310-RF

Up to 2 inputs for external probes  
 Pt 100 remote probe or  
 Thermocouple K, J, T, S  
 -200 to +1,760°C  
 0 to 20 mA / 0 to 10 V

# Liquid column Manometers

## Liquid column manometers

- Inclined or vertical
- Measure slight variations in differential pressure of air or neutral gases
- Air treatment industry, clean rooms...



## Vertical

0-100 mmH<sub>2</sub>O to 0-2.6 bar  
Units : mbar, Pa, DaPa...

## Inclined

0-5 to 0-80 mmH<sub>2</sub>O  
Units : Pa, DaPa...



## ECM

0-10 to 300 mmH<sub>2</sub>O  
Manual adjustable setpoints

## + Accessories

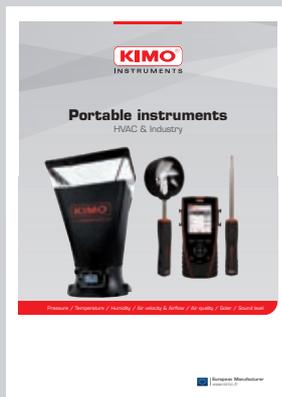
To fit any installation with proper connections :

- Liquid for manometer
- Tubes, junctions
- Pressure connections, wall-crossing connection...



## DISCOVER ALL OUR PRODUCT RANGES

on [www.kimo.fr](http://www.kimo.fr)



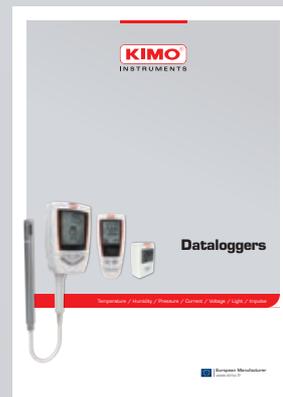
Portables instruments



Sensors transmitters



Flue gas analysers



Dataloggers

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