



# Sensors Transmitters

Pressure / Temperature / Humidity / Air velocity / Airflow / Air quality / Solar / Light



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



# Sensors Transmitters

Pressure / Temperature / Humidity / Air velocity  
Airflow / Air quality / Solar / Light

Designed and manufactured in France, KIMO range of transmitters is perfectly suitable for any industry, process, building services, indoor climate, OEM...

KIMO offers many models: from the simplest to the most complete, suitable for any application, with easy configuration and calculation functions. Innovating range: the interchangeable measuring elements enable easy maintenance and on-site calibration.



**All our datasheets**  
available on [www.kimo.fr/sensors](http://www.kimo.fr/sensors)

# New products

Monostats / Class 110 / Class 210 / Class 310



## Simplified calibration

Monostats/Class 110

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.



## Front PC connection

Monostats/Class 110

This new range has a front side input to allow you to configure the sensor via a PC equipped with the LCC-S software.



## Keypad configuration

Class 210

The new class 210 has a keyboard on the front side which allows configuration without modifying the sensor installation.



Perforated housing for **ambient sensors**



Automatic **autozero**



Power supply **LED**



**CO/CO<sub>2</sub>** sensors



**LUX W/m<sup>2</sup>** Light/solar transmitters



**Atmospheric pressure**

## Software

### LCC-S

LCC-S software allows the configuration of new sensors monostats, class 110, class 210 and class 310.

You can select your units, ranges, relays, alarms, time-delays, outputs, channels, setpoints...



## Summary

New products

**Monostats**  
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New products

**Class 110**  
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New products

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# Monostats

Applications: **Refrigeration - Air conditioning**

*Quick installation and easy to set up, monostats enable to trigger a relay when you reach the predefined treshold and to send this information via the relay on the regulation system or an automaton for example.*



**RCR**  
Relay



**IP65**  
Waterproof  
ABS housing



**Power supply**  
24 Vdc/Vac



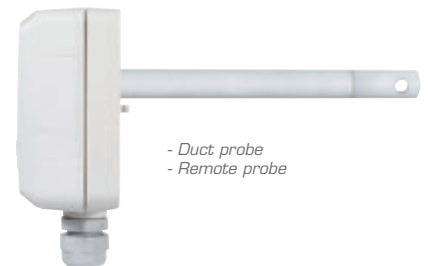
**Alarm**  
visual and sound



## Thermostats TST

TEMPERATURE

**Measuring range**  
From -100 to +400°C



- Duct probe  
- Remote probe

## Hygrostats HST

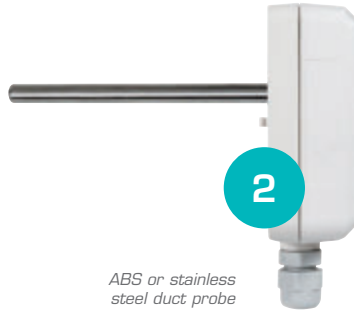
HUMIDITY

**Measuring range**  
From 5 to 95 %RH  
From -20 to +80°C



1

Sensor with remote probe



2

ABS or stainless steel duct probe



3

Perforated housing for integrated ambient probe IP20



## Manostats PST

PRESSURE

**Measuring range**  
From  $\pm 100$  Pa to  $\pm 2000$  mbar



## COstats COST

CO RATE

**Measuring range**  
From 0 to 500 ppm



## CO<sub>2</sub>stats CO2ST

AIR QUALITY

**Measuring range**  
From 0 to 5000 ppm

## New products

# Class 110

Applications: **Refrigeration - Air conditioning - Industries - OEM**

*Covering the whole measuring parameters, this communicating range releases a current or voltage signal. To meet the needs of any type of application, sensitive elements are available as ambient, remote or duct. Analogue outputs are automatically adapted to the configured measuring scale via dip switches on the devices or via LCC-S software.*



**1 or 2 analogue outputs**



**Waterproof ABS housing**



**Power supply 24 Vdc/Vac**



**Configurable outputs**



**AUTOZERO**

**Differential pressure transmitters**



**Atmospheric pressure  
CP116**

## Pressure

CP110

111

112

113

114

115



TH 110

TEMPERATURE  
HUMIDITY

**Measuring range**

From 5 to 95 %RH  
From -20 to +80°C



HM 110

HUMIDITY

**Measuring range**

From 5 to 95 %RH



CTV 110

AIR VELOCITY

**Measuring range**

From 0 to 30 m/s  
From 0 to +50°C



CP 110

PRESSURE

**Measuring range**

From ±100 Pa to ±2000 mbar



CP 116

ATMOSPHERIC  
PRESSURE

**Measuring range**

From 800 to 1100 hPa



TM 50

TEMPERATURE

Measuring range  
From -100 to +400°C



TM 110

TEMPERATURE

Measuring range  
From -100 to +400°C



CO 110/CO 112

AIR QUALITY

Measuring range  
CO: From 0 to 500 ppm  
CO<sub>2</sub>: From 0 to 5000 ppm



Perforated housing for  
ambient sensors



Duct  
probe



Remote  
probe



Large choice of temperature  
probes

Ambient, penetration, bent,  
contact, ...





✓  
ARTIFICIAL  
ENVIRONMENT



## LR 110

LIGHT

Lighting and electrical products manufacturers

Architecture (office, administration, shop...)

Control, maintenance and visual confort

Food industry and sylviculture

### Measuring range

From 0 to 10 000 lux

## Photovoltaic and thermal installations control

CR 110



**Waterproof**  
ABS housing

✓  
NATURAL  
ENVIRONMENT

## CR 110

SOLAR

### Measuring range

From 0 to 1500 W/m<sup>2</sup>

CR 110 allows to:

- Proceed to sunshine surveys
- Determine the correct power supply which must be used (photovoltaic or thermal)
- Check the installation conformity
- Estimate the energetic power produced

**New products**

# Class 210

Applications: **Industries - Laboratories**

*Equipped with airtight and strong ABS housing, these sensors have a large 2-line backlit LCD display, and a keyboard on front face for configuration.*

*Multi-parameter and provided with advanced calculation functions, this range offers a global reading and delivers accurate information on the conditions of your air / thermal process.*



**2 analogue outputs**



**Waterproof ABS housing**



**Power supply**  
24 Vdc/Vac - 115/230 Vac



**Control and measurement of air quality**

*Minimal global airflow of fresh air*

*Respects of the limits*

*Atmosphere monitoring*

*Ventilation and cleaning up control*

...

## COT 210/212

**CO/CO<sub>2</sub> TEMPERATURE**

**Measuring range**

CO: From 0 to 500 ppm  
CO<sub>2</sub>: From 0 to 5000 ppm  
From -20 to +80°C



## CP 210

**PRESSURE TEMPERATURE AIR VELOCITY & AIRFLOW**

**Measuring range**

From ±100 Pa to ±2000 mbar  
From -100 to +400°C  
From 0 to 100 m/s





**Configurable**  
outputs



**Calculation**  
functions

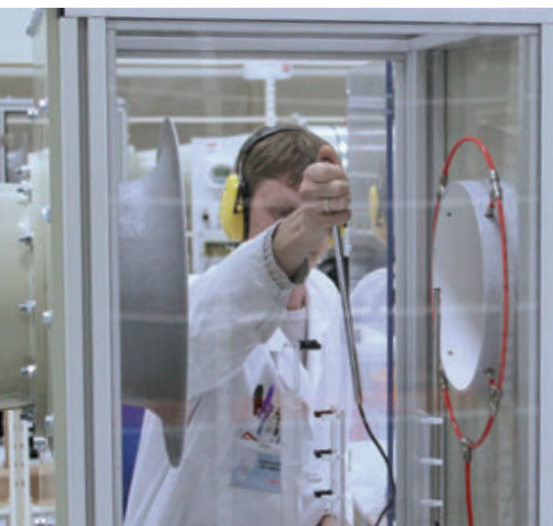


**Password**  
locking



Ambient probe

Remote probes



Enthalpy  
Temperature humidity  
Absolute humidity  
Dew point



**HVAC**



CTV 210

**AIR VELOCITY & AIRFLOW**

**Measuring range**  
From 0 to 30 m/s  
From 0 to +50°C



TH 210

**HUMIDITY TEMPERATURE**

**Measuring range**  
From 5 to 95 %RH  
From -40 to +180°C



TM 210

**TEMPERATURE**

**Measuring range**  
From -100 to +400°C

NEW GENERATION

# Class 310 Multifunction

Pressure/Humidity/Temperature/Air velocity/Airflow/Air quality

4 visual and audible alarms

Graphic display

Software or keypad configuration

With or without display

Easy and quick installation



**Waterproof**  
ABS housing



**2 Analogue**  
Outputs



**4 RCR relays**  
card (option)



**Ethernet**  
Communication



**MODBUS**  
RS 485

**ADJUSTMENT**  
certificate



**2 INPUTS**  
for probes

Measure up to  
**4 parameters**

Interchangeable  
Probes



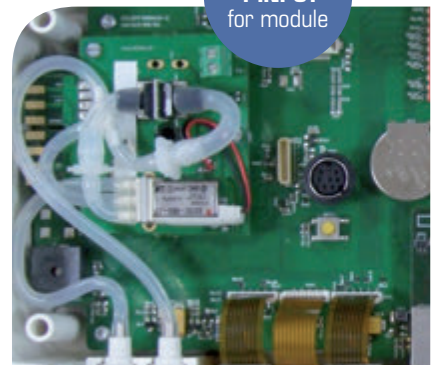
C 310

## MULTIFUNCTION

Interchangeable pressure  
modules SPI-2

- SPI2-100 : ±100 Pa
- SPI2-500 : ±500 Pa
- SPI2-1000 : ±1,000 Pa
- SPI2-10000 : ±10,000 Pa
- SPI-ATMO : 800 to 1,100 hPa

**1 INPUT**  
for module





## C310 Graphic Display



HISTORICAL graphics display



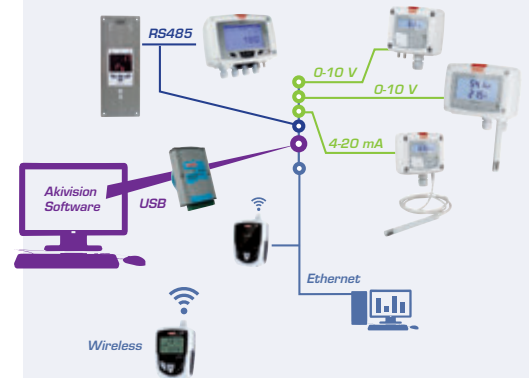
TREND MARKUP



UP TO 4 PARAMETERS simultaneously



Our range of transmitters can be managed within a Modbus network (RS 485 system). You can also integrate our transmitters to your existing network.



- MODBUS Network (option)**
- Ethernet Communication (option)**
- Configurable analogue outputs**



Learn More  
See page 16.



## Interchangeable Probes

C 310 / CPE 310-S / CA 310

Easy Clip



### Unclip - Clip - Measure !

Easy and quick change of measurement element.  
Automatic recognition.

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
	0 to 20.000 on demand
CO <sub>2</sub> .....	0 to 5,000 ppm
Current/Voltage.....	4-20 mA / 0-10 V



# Flush-mount

## Multifunction pressure sensor



**MODBUS**  
RS 485



**3 audible/visual**  
alarms



**Output**  
Diagnostic



**Tenth**  
Resolution



**3 Analogue**  
Outputs

**ADJUSTMENT**  
certificate



**1 INPUT**  
for probe



*Interface for configuration software and front calibration*

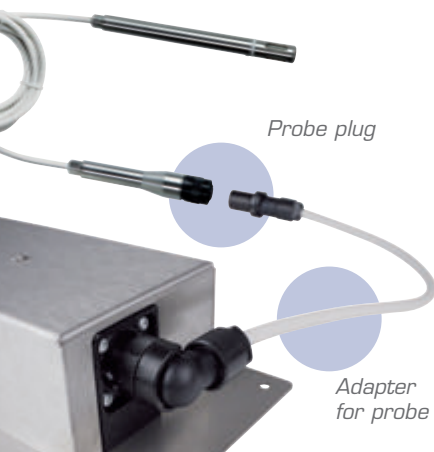
### CPE 310 S

#### MULTIFUNCTION

**Multifunction flush mount transmitter**

**Measuring range**  
-100 to +100 Pa

1 Input for interchangeable probes (see probes page 13)



*Probe plug*

*Adapter for probe*



*alternative display*



**LCC-S**  
*Configuration software (option)*

LCC-S software allows the configuration of new class 310 sensors. You can select your units, ranges, relays, alarms, time-delays, outputs, channels, set points...

# Multifunction sensor

Large display transmitter



1 INPUT  
for module

1 INPUT  
for probe

CA 310

## MULTIFUNCTION

**Tenth Resolution**

**Ethernet Communication**

**MODBUS RS 485**

- 1 slot for SPI-2 or MVA card
- 3 RCR relays
- 3 analogue outputs :  
0-5/10 V ou 0/4-20 mA
- 3 visual and audible alarms

1 Input for interchangeable probes  
(see probes page 13)



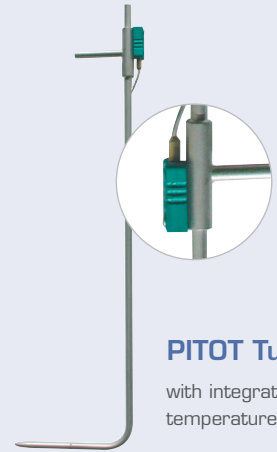
ATE 300

## MULTI-CHANNEL DISPLAY

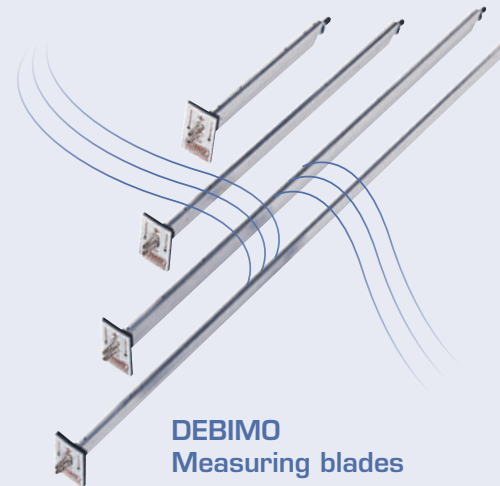
Flush-mount  
Display 3 parameters alternatively.  
RS485 Modbus



## Airflow accessories



**PITOT Tube**  
with integrated  
temperature probe



**DEBIMO**  
Measuring blades



## SQR3 function

Calculation of air velocity and airflow from  
the differential pressure.

# Data acquisition System

Applications: **Refrigeration - Air conditioning - Industries - Offices**

*New AKIVISION data acquisition system comes to complete current KIMO range of transmitters and was specially developed to monitor air movement conditions in many applications such as service sector, cleanrooms... It is perfectly suitable for process monitoring and control of air.*

## NEW SOFTWARE



**INTUITIVE  
Synoptic  
DISPLAY**

*New synoptic view for a comprehensive real-time of your installation*

*Graphic display from the datasets*



Up to **255 devices** over network



**Real-time Alarm**



**Ethernet Communication**



**Wireless datalogger**  
Kistock RF compliant



**MODBUS**  
RS 485

## AKIVISION SOFTWARE

### CONFIGURATION & ACQUISITION

**Configure all transmitters and modules of your installation, record and display measurements in real time.**

Configuration of instruments and modules

User access management

Configuration and display of acquisition



### VISUALIZATION & OPERATION

**Process, consult, analyze and print all measured data.**

Data processing and exportation

Alarms log

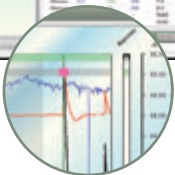
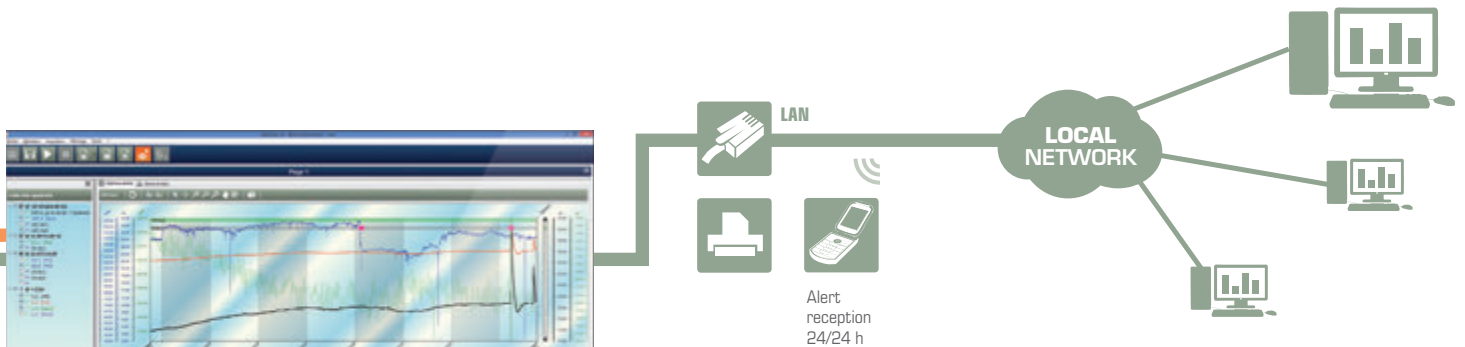
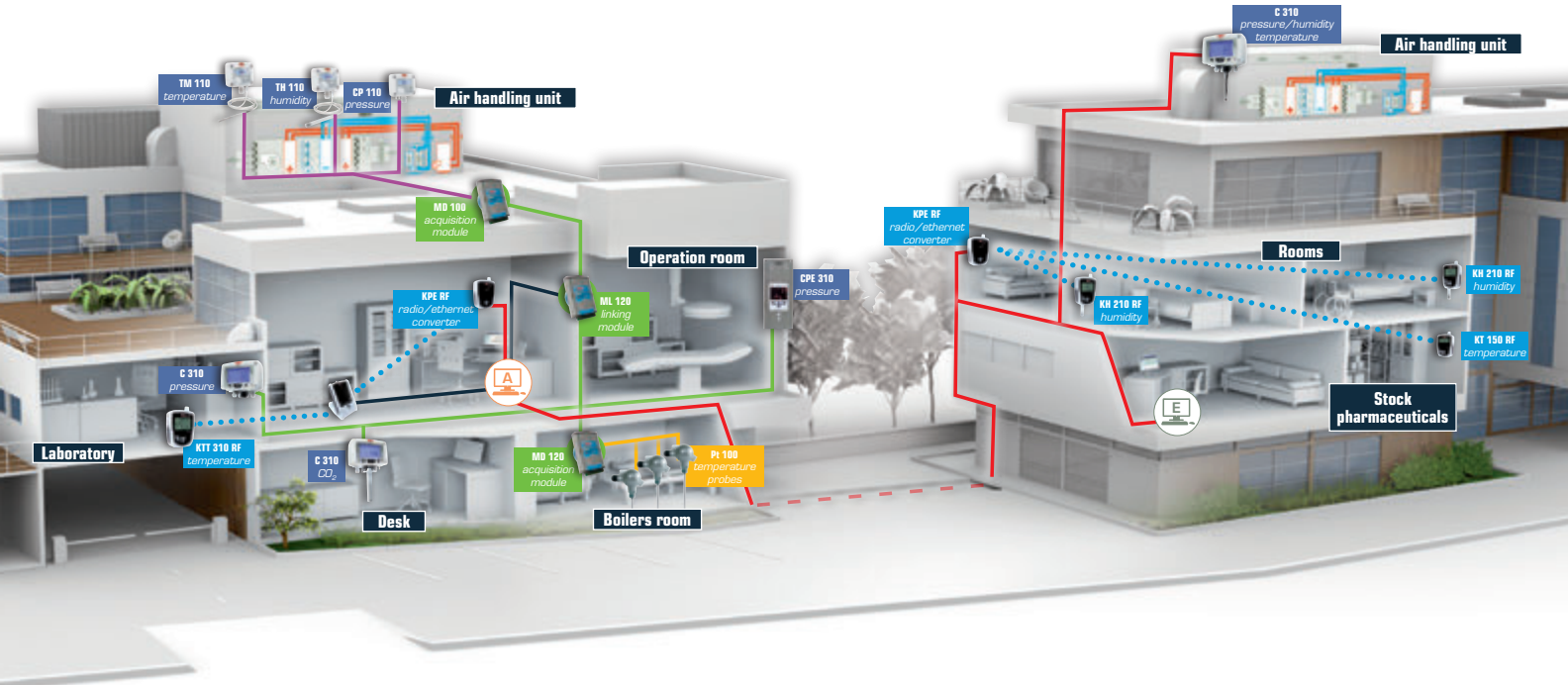
Remote lookup and display of your records



*All our ranges of sensors, dataloggers and temperature sensors are compatible.*

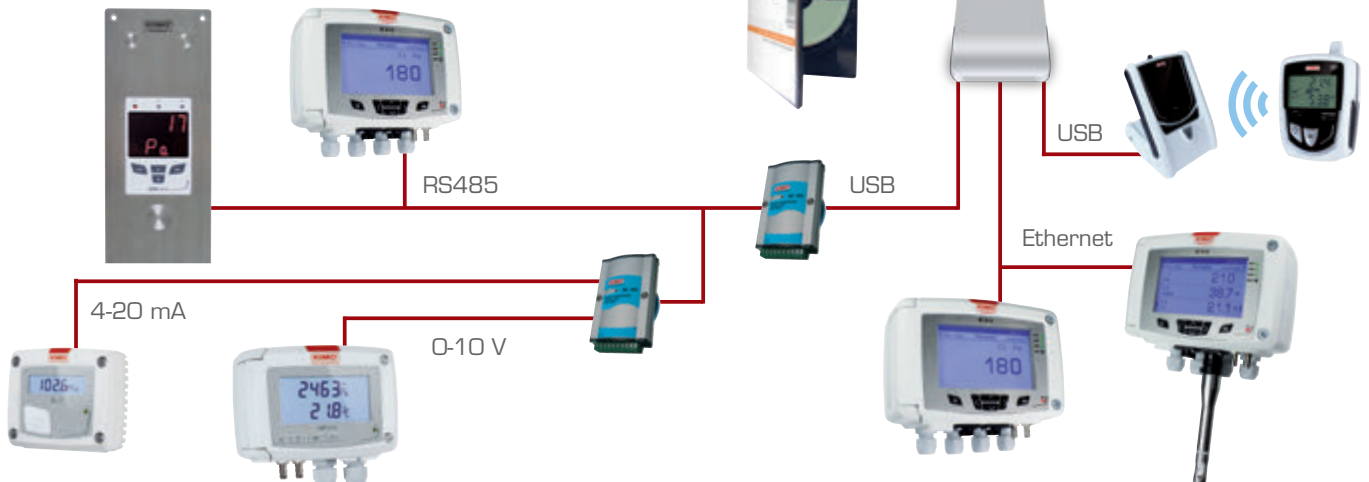


**SETUP EXAMPLE**  
hospital application



*Real-time  
alarms warning*

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



# Temperature probes

Applications: **Air conditioning - Industries - Food industry**

*Thermocouple K, J, T, N probes*

*Pt 100 / Pt 1000 probes*

*NTC probes*



## Connection head

**Alu / Noryl® / Stainless steel head**

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

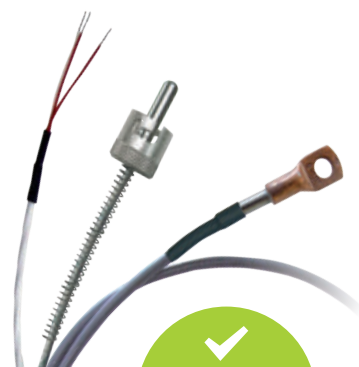
Single pair or multipair

**Pipe contact**

**Interchangeable probe system**

**Aggressive application**

**Heat-resisting steel protector**



Output DIN connector  
With fixing fitting  
With cable

## Wire probes

**PVC / Silicon / Teflon® / Glass silk cable**

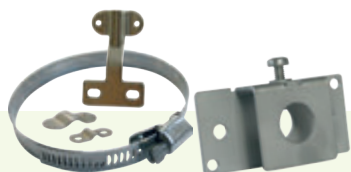
Stainless steel hose

Wire mounting: 2, 3, 4, 6 wires

Single pair or multipair

### Your need, your probe

Your application is specific, we manufacture your customized probe.  
**CONTACT US !**



### Accessories

- Thermocouple connectors (K, J, T, N...)
- Snap-on connectors for thermocouple
- Connector panel for snap-on connectors
- Converters



- Mounting brackets
- Stainless steel thermowells
- Watertight connections

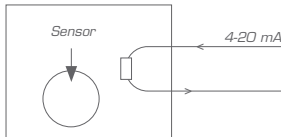


OPTIONS

# Useful information

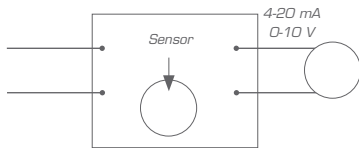
## Range **Sensors - Transmitters**

### Power supply



#### Transmitters with Passive loop

Principle: the transmitter is supplied with a continuous voltage => we measure the current used by the transmitter. This current varies between 4 and 20 mA, proportionally to the measured parameter (pressure, temperature, relative humidity...).



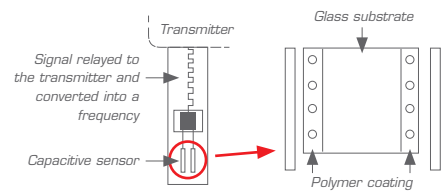
#### Active transmitter

Principle: the transmitter provides a current (4-20 mA) or a voltage (0-10 V) loop. It can work in either direct (DC) or alternative current (AC). The power supply connected to the transmitter enables it to generate a current of 4-20 mA or a voltage of 0-10 V proportional to the measured parameter.

### Humidity transmitters

#### Capacitive humidity sensor

Principle: the dielectric constant of the humidity sensor varies according to the ambient humidity. This information is then relayed to the transmitter and converted into a digital value. The measuring signal is not affected by the ambient pressure.



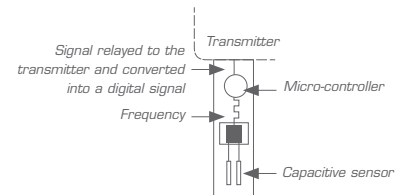
#### Digital humidity sensor (class 300)

Principle: the dielectric constant of the humidity sensor varies according to the ambient humidity. This information is then relayed by the micro-controller to the transmitter and converted into a digital value.

Smart-Pro



System



### Temperature transmitters

#### Pt100

Principle: a Pt100 sensor is a resistance, with positive temperature coefficient, which varies according to the temperature. The value of the resistance varies according to the increase of the temperature.

For 0°C ≈ 100 Ω

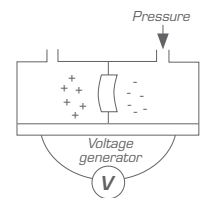
For 100°C ≈ 138,5 Ω



### Pressure transmitters

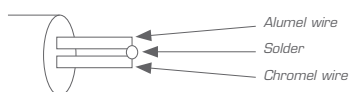
#### Principle

A pressure transmitter (piezoresistive type) makes a voltage proportional to the pressure applied on the transmitter.



#### Thermocouple

Principle: a thermocouple works thanks to voltage drop across dissimilar metals which are placed in contact. This voltage is proportional to the measured temperature.



### Security

#### Secured installation

Locking system with access code, to secure the installation.

#### Electromagnetical

The KIMO transmitters comply with the EMC norm.

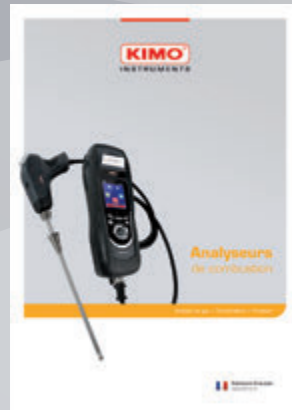


## DISCOVER ALL OUR PRODUCT RANGES

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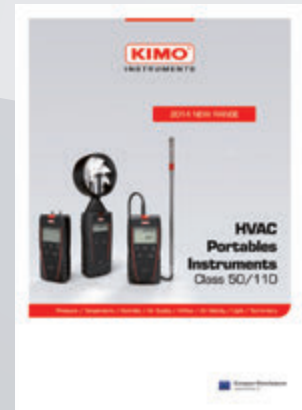
General Catalogue



Combustion gas  
Analysers



Dataloggers



HVAC Portable  
Instruments

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