

MEASURING INSTRUMENTS

Export General Catalogue





 **sauermann®**


KIMO®
INSTRUMENTS


E INSTRUMENTS

For over 40 years, the Sauermann Group has designed, manufactured and sold products and services dedicated to industrial and HVACR markets. The Group specifically focuses on the detection, measurement and control of indoor air quality (IAQ).

We operate three main brands: Sauermann for condensate removal pumps (including accessories and solution kits) and instruments for improving indoor air quality, as well as Kimo and E Instruments for instruments aimed at measuring and monitoring air parameters.

The Group has a worldwide presence, is located on three continents (Europe, Asia and North America), has 21 sites (including four production plants).

Content

Services & maintenance	03	LoRa® Powered Data Loggers	14	Temperature probes	26
Combustion gas analysers	04	Data loggers	18	Liquid column manometers.	27
HVAC portable instruments.	11	Wireless data loggers	20		
Thermometers	12	Calibration benches	21		
Airflow meter	13	Sensors / transmitters	22		

Services & Maintenance

Control / Repair



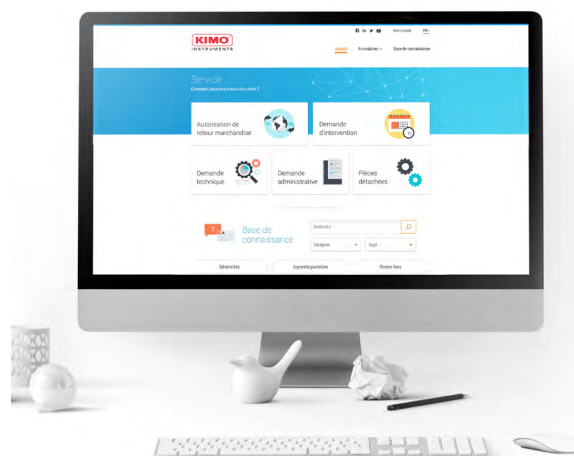
Customer support

On receipt of your instrument, our technicians take care of it in accordance with our quality procedures. A complete check is performed and a quotation is issued.

The instrument is cleaned and repaired.
A complete test is done prior to return shipment.

1,500 m² of laboratories

- Air flow
- Air velocity
- Combustion
- Temperature
- Humidity
- Pressure
- Electrical current
- Tachometry



Customer service portal

Use our new services portal to contact us.

<http://kimo-fr.custhelp.com>



**Field
services**



Help line



**Calibration
and settings**



Accredited temperature laboratory as per ISO 17025 standard

KIMO can perform COFRAC calibrations on any type of thermometer: measuring chain, PT100, Thermocouple) within a range from -70 to +200°C, in sterilizer or in baths.



Accredited hygrometry laboratory as per ISO 17025 standard

KIMO can perform COFRAC calibrations on any type of hygrometer within a range from 5 to 95 %RH for a dry temperature from +10 to +50°C.

CONTROL OF BOILERS

Combustion gas analysers

Kigaz

Gas analysis / Temperature / Pressure

KIGAZ 50 / 80 / 110 / 210 / 310

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.



Up to 4
interchangeable
sensors



Elastomere
protective cover



Data processing
software



Any type
of boiler

SOFTWARE



Ligaz-2

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



Logaz-2

KIGAZ mobile

Application iOS and Android

- Real-time measurement display
- Graphical display
- Data recording
- CSV, XML and PDF export





Interchangeable sensors

The sensor electronics contain calibration data, which means that the operator can replace them without returning the unit to the factory.

Kimo equips its KIGAZ (excluding KIGAZ 80 and 50) units with a lead-free O_2 sensor with a lifetime of 5 years.



**Lead-free
 O_2 sensor**

Connected instruments

Available as an option, the low consumption Bluetooth® module is compatible with all KIGAZ units (excluding the class 50) and provides significant time gains by wirelessly connecting analysers with LIGAZ-2 or LOGAZ-2 software or the mobile KIGAZ application.



**Bluetooth®
connection**



Expert KIGAZ 310

- Up to 4 interchangeable sensors
- Changeable probe length
- Wide color screen
- Customized procedures
- Built-in water trap
- 3 pressure sensors
- Supplied with Ligaz-2 software, protective cover and transport case



**Auto-zero
in the flue**



**O_2 / CO / H_2 / NO / NO_2 / SO_2 / CH_4
sensors, standard or option**



CO dilution



Mobile application



**Long Life
 O_2 sensor**



**Bluetooth®
connection**



**DHW network
2 TcK inputs**



Built-in printer



Supplied with
CALIBRATION
certificate

Flexible KIGAZ 210

- Up to 3 interchangeable sensors
- CO sensor protection by solenoid valve
- Auto-zero in the flue
- Reports printing
- Supplied with Ligaz-2 software, protective cover and transport bag



O₂LL / CO-H₂ / NO / CH₄
interchangeable sensors



Mobile
application



Long Life
O₂ sensor



Built-in
printer



Supplied with
CALIBRATION
certificate

Essential KIGAZ 110

- 2 interchangeable sensors
- Sensor protection by pump shutdown
- Reports printing
- Supplied with Ligaz-2 software, protective cover and transport bag



O₂LL / CO-H₂
interchangeable sensors



Mobile
application



Long Life
O₂ sensor



Built-in
printer

Compact KIGAZ 80

- 2 interchangeable sensors
- Sensor protection by pump shutdown
- Supplied with Ligaz-2 software, protective cover and transport bag



O₂ / CO-H₂
interchangeable sensors



Mobile
application



External printer
(option)



Supplied with
CALIBRATION
certificate



Supplied with
ADJUSTMENT
certificate

Economical KIGAZ 50

- 2 fixed sensors
- 10h battery life
- Backlight
- Automatic shutdown
- Supplied with transport bag



External printer
(option)



O₂ / CO
sensors



DHW network
1 TcK input



Auto-zero in
30 seconds

Additional measurements



Gas detection FG 110

- Detection of gas such as methane (CH₄), LPG (isopropanol and isobutane) and other combustible gases (hydrocarbons)
- Flexible hose



Gas network MP 110

Gas tightness special
manometer for gas network

- 0 to ±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

- 0 to 500 ppm
- -20 to +80°C

HVAC Portable

Instruments

Temperature / Humidity / Pressure / Air velocity / Airflow
Air quality / Gas detection / Light / Tachometry

Class 50, 110, 210 & 310

The range of portable devices is ideal for technicians responsible for maintaining heating, ventilation, and cooling installations.

- Wireless and Smart+ probes
- Graphical wide screen
- Data recording
- Ergonomic design



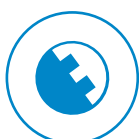
Graphical display



Magnetic protective cover



IP54 housing

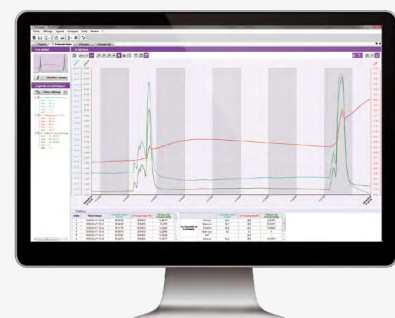


Interchangeable probes & modules

Datalogger

Configure / Measure / Data processing

- Configuration of instruments
- Instruments management
- Reports creation
- Customized channels
- Insert commands
- Insert legends and statistics
- Add mathematical functions





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.

Interchangeable modules

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



Air quality

CO 50/110
AQ 110/HQ 210

- CO: 0 to 500 ppm
- CO₂: 0 to 5,000 ppm
- -40 to +180°C
- 3 to 98 %RH
- 0 to 5 m/s



Manometers

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

- Differential pressure
- ± 500 Pa to $\pm 2,000$ mbar
- Air velocity with Pitot tube
- 3 to 85 m/s
- Atmospheric pressure
- 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 m³/h



Class 50, 110 & 210



Hygrometers

HD 50/110 HQ 210

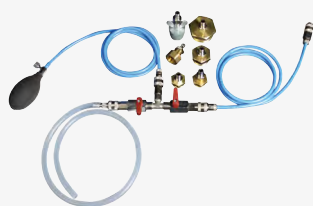
- 3 to 98 %RH
- -40 to +180°C
- -50 to +80°Ctd
- CO: 0 to 500 ppm
- CO₂: 0 to 5,000 ppm

Tachometers

CT 50/110

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

Accessories



Gas network pack



ABS transport case



Saturated salt solutions



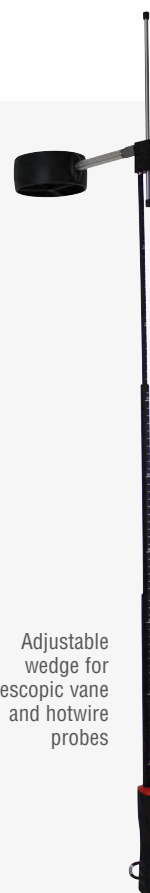
Measuring cones



Debimo blades



Protective housing



Adjustable wedge for telescopic vane and hotwire probes



Pitot tubes

Multi-function

Class 310

AMI 310

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

- ± 500 Pa / $\pm 2,500$ Pa / $\pm 10,000$ Pa
- ± 500 mbar / $\pm 2,000$ mbar
- Thermocouple: -200 to $+1,760^{\circ}\text{C}$
- Pt 100: -200 to $+600^{\circ}\text{C}$
- Humidity: 3 to 98 %HR
- CO: 0 to 500 ppm
- CO₂: 0 to 5,000 ppm
- Air velocity: -5 to 35 m/s
- Airflow: 0 to 99,999 m³/h
- Gas detection: 0 to 10,000 ppm
- Tachometry: 30 to 60,000 rpm



Wireless probes



Data processing software



Graphical display



Interchangeable probes & modules



Micro-SD card



Colour wide screen



Thermometers

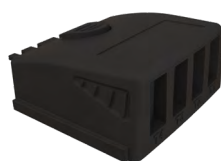
Portable instruments

Temperature

Class 210

TM 210

- -200 to +1,760°C
- 2 Pt 100 channels
- 4 thermocouple inputs
- 1,000 datasets



Thermocouple module
4 inputs



Wireless
probes



Elastomere
overmoulding



NEW

TR 61/62

- 1 or 2 inputs
- Pt 100
- -100 to +400°C



NEW

TK 61/62

- 1 or 2 inputs
- Thermocouple K, J, T, S
- -200 to +1,760°C



Hold/min/max
functions



Infrared

KIRAY 100/200/300

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



Airflow meter

Airflow / Air velocity / Pressure



Airflow meter

DBM 610

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 m³/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:
 - 720x720 mm
 - 720x1320 mm
 - 420x1520 mm
 - 1020x1020 mm



Calculation functions and autonomous micro-manometer

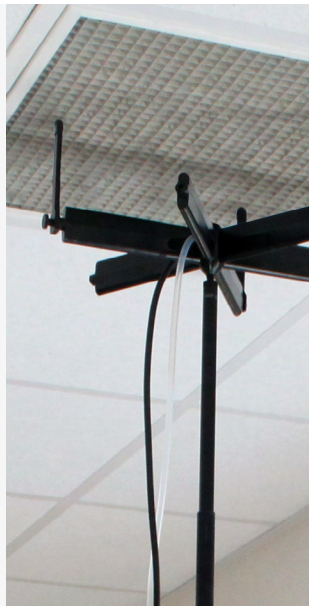


NEW

Remote velocity grid

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

- Average air velocity from 24 points
- Telescopic and articulated pole: maximum length 2.05 m, 0 to 90°, positioning strut
- Backpack



CONNECTED DATA LOGGERS

TrackLog

LoRa® Powered Data Loggers

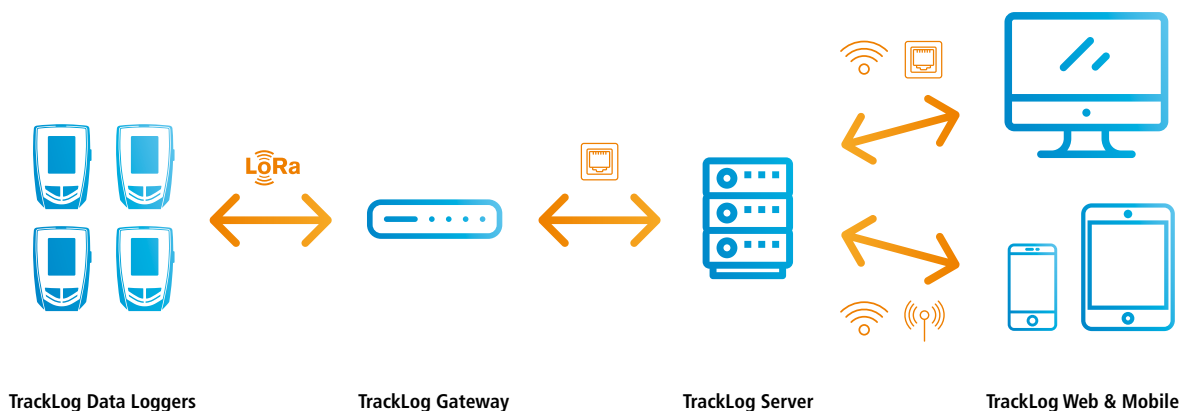
Temperature / Humidity / Pressure / Air Quality / Atmospheric Pressure



LoRa
Alliance
Member™

Sauermann has released a new TrackLog line of Data Loggers featuring LoRa® wireless technology that allows customers to monitor multiple parameters over long distances, using an interference resistant connectivity and a high strength signal.

LoRa® is a Low Power Wide Area Network. It offers a mix of long range, low power consumption and secure data transmission that is making our world a Smart Planet.



Product overview

TrackLog Data Loggers



LoRa® is a Low Power Wide Area Network or LPWAN technology developed by the chip manufacturer, Semtech. LoRaWAN™ is a communication protocol specification built on top of the LoRa® technology.



Measure multiple parameters

Temperature, humidity, CO₂, atmospheric pressure, differential pressure



Long-distance connectivity

LoRaWAN™ provides extended range



Long battery life

LoRaWAN™ provides extended battery life



Lower overall cost of ownership

A single receiver covers your entire site in most cases



Easy to set up, use and maintain

A single receiver covers your entire site in most cases with simple configuration



Data integrity

Accuracy and consistency ensured over the entire life-cycle



2-line LCD display



High accuracy
0.01 resolution



Interchangeable probes



TrackLog App

Web/mobile software

- Continuous monitoring
- For multi-site use and distance monitoring
- Easy installation
- Configurable alarms and alerts via PC, e-mail and SMS
- Secured, accessible and exportable data to facilitate audit report

LoRa

LoRa

LoRa



KT TrackLog



KTT TrackLog



KP TrackLog



KCC TrackLog



Technical information

TrackLog Data Loggers



KT TrackLog







KTT TrackLog



KP TrackLog



KCC TrackLog

Memory capacity	20,000 points	20,000 points	20,000 points	20,000 points
Recording frequency	From 1 minute to 24 hours	From 1 minute to 24 hours	From 1 minute to 24 hours	From 1 minute to 24 hours
Parameters	Relative humidity Temperature	Thermocouple temperature	Differential pressure	Temperature Relative humidity Atmospheric pressure CO ₂
Internal sensors	1	-	1	4
External probes	Up to 2	Up to 4	-	-
Temperature range	Internal NTC -40 to +70°C External: see probes data sheet	-	-	-40 to +60°C
Relative humidity range	0 to 100 %RH	-	-	0 to 100 %RH
Thermocouple range	-	K -200 to +1,300°C J -100 to +750°C T 200 to +400°C N -200 to 1,300°C S 0 to +1,760°C	-	-
Differential pressure	-	-	-1,000 to +1,000 Pa	-
Atmospheric pressure	-	-	-	800 to 1,100 hPa
CO ₂	-	-	-	0 to 5,000 ppm
Protection	IP65	IP54	IP65	IP40
Battery life	3 years*	3 years*	3 years*	1 year*
Safety lock				
LoRa® frequency	868 Mhz (Europe)	868 Mhz (Europe)	868 Mhz (Europe)	868 Mhz (Europe)
Additional benefits	High relative humidity/ temperature accuracy**	NA	NA	High relative humidity/ temperature accuracy***

* On the basis of 1 measurement each 15 minutes at 25°C

** Refer to TrackLog probes data sheet for more information

*** Refer to KCC TrackLog data sheet for more information

PROCESS CONTROL

Data loggers

Kistock

Temperature / Humidity / Pressure / Air quality / Light
Current / Voltage / Pulse / Water pressure



Up to
7 YEARS
battery life



**Multi
Application**



**2 programmable
alarm thresholds**



**Up to 2,000,000
measuring points**



**Kilog software
(option)**



Anti-theft system

With the new range of Kistock stand-alone data loggers and Kilog software, you can collect and analyse all the metrics of industrial climate control engineering processes, monitor the

climatic environment of a chamber and respond to the traceability requirements of agri-food and pharmaceutical industries during transport.

ACCESSORIES



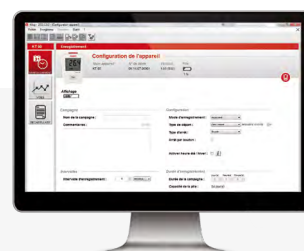
Probes

Large choice
in option



KNT 320

Data collector
20,000,000 pts



Kilog and Kilog-Lite

Configuration and
exploitation software



Anti-theft kit

For class 220 and
320



Key benefits



DISPONIBLE SUR
Google play

Télécharger dans
l'App Store

Measuring element

Calibration data



Smart plug
technology

Mobile application

- Bluetooth® connection
- Data visualisation
- Free download

Smart and interchangeable probes (class 320)

- Advanced technology
- Integrated calibration data



Mini

KH 50 / KT 50

Temperature, humidity

- -40 to +70°C
- 5 to 95 %RH
- USB connection



Waterproof
housing



USB

KH 120 / KT 120

Temperature, humidity

- -40 to +70°C
- 5 to 95 %RH
- Integrated software
- USB connector



KT 50 / KT 120
EN 12830



Multi-function

KH 220 / KT 220 / KTT 220

Temperature, humidity, water pressure, light,
current, voltage, pulse

- -200 to +1,760°C
- 5 to 95 %RH
- 0 to 10,000 lux
- 0 to 20 bar
- 0 to 20 mA, 0 to 600 A
- 0 to 10 V



Interchangeable
probes



Connected

KT 320 / KTT 320 / KCC 320
KPA 320 / KP 320-321

Temperature, humidity, pressure,
atmospheric pressure, air quality,
current, voltage, pulse



Mobile
application



Bluetooth®
communication

- -200 to +1,760°C
- 5 to 95 %RH
- 0 to 5,000 ppm
- 800 to 1,100 hPa
- -10,000 to +10,000 Pa
- 0 to 20 mA, 0 to 600 A
- 0 to 10 V

WIRELESS

Data loggers

Kistock RF

Temperature / Humidity / Pressure / Current / Voltage / Pulse



Up to 100 devices
in network



Remote
configuration



Up to 3 years
battery life



Up to 20,000
measurement points

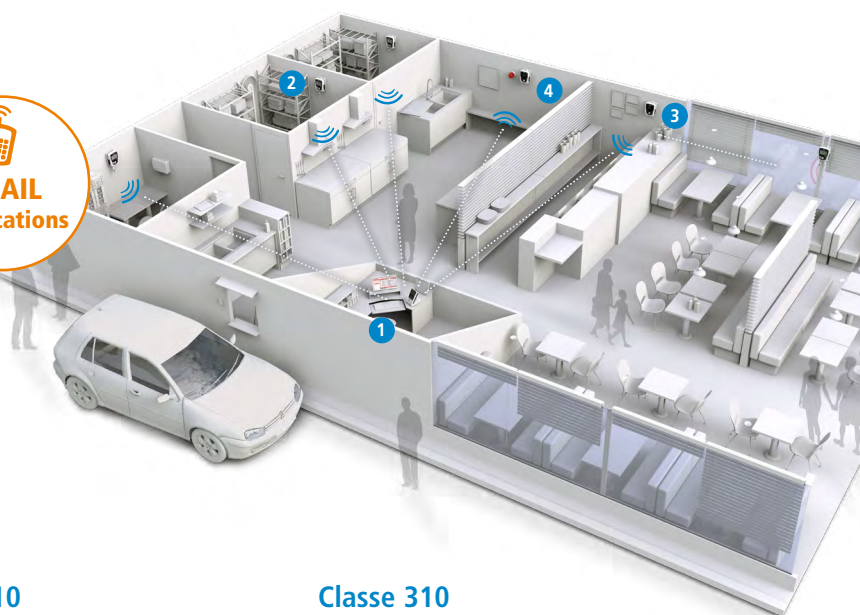


Example of application in a restaurant

1. Communication base
2. Temperature data logger
3. Network extender
4. Alarm box



EMAIL
notifications



Classe 110

KT 110-RF / KT 150-RF

Up to 1 input for external probe

- -40 to +70°C
- 0 to 20 mA, 0 to 10 V
- $\pm 1,000$ or $\pm 10,000$ Pa

Classe 210

KH 210-RF / KTU 210-RF

Up to 2 inputs for external probes

- -40 to +180°C
- 0 to 100 %RH
- 0 to 20 mA, 0 to 10 V

Classe 310

KTR 310-RF / KTT 310-RF

Up to 2 inputs for external probes

- Pt 100 remote probe or
K, J, T, S thermocouple
- -200 to +1,760°C
- 0 to 20 mA, 0 to 10 V



Calibration benches

Pressure / Humidity / Temperature

Calibration in laboratory or on-site
High accuracy
Automatic auto-zero

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



Saturated salt solutions

KSH11 / KSH44 / KSH85

Saturated salt solutions are dedicated to test and control transmitters (fixed installation) and portable instruments.

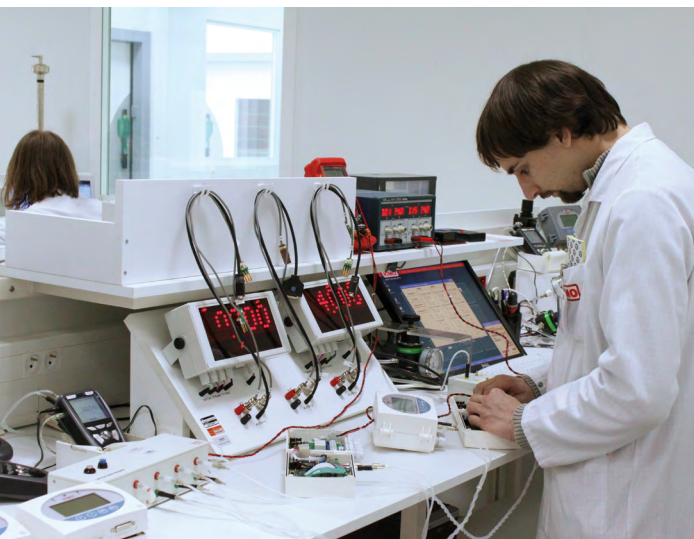


Hygrometry generator

GH 500

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

- 10 to 85 %RH



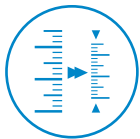
Sensors

Transmitters

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

Industry, clean room, 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



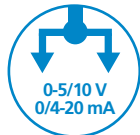
Configurable
outputs



RCR
relay



Waterproof
ABS housing



1 or 2 analogue
outputs



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

- ± 100 Pa to $\pm 2,000$ mbar
- De 0 to 100 %RH
- De -100 to +400°C
- CO: 0 to 500 ppm
- CO₂: 0 to 5,000 ppm



Class 110

CP / HM / TH / TM / CTV / CR / LR / CO
1 or 2 analogue outputs

- ± 100 Pa to $\pm 2,000$ mbar
- 800 to 1,100 hPa
- 0 to 100 %RH
- -100 to +400°C
- 0 to 30 m/s

- 0 to 1,500 W/m²
- 0 to 10,000 lux
- CO: 0 to 500 ppm
- CO₂: 0 to 5,000 ppm



CO/CO₂ sensors

KIMO designed CO/CO₂ transmitters in order to meet with requirements of new norms and decrees on air quality.

Multi-function

Class 210-R

CP / TH / TM / CTV / COT

2 analogue outputs
2 RCR relays
Calculation functions
Automatic autozero

- ± 100 Pa to $\pm 2,000$ mbar
- 0 to 100 %RH
- -100 to +400°C
- CO: 0 to 500 ppm
- CO₂: 0 to 5,000 ppm
- 3 to 85 m/s (with Pitot tube) (CP210)
- 0 to 30 m/s (with hotwire) (CTV210)



SQR/3 option

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

Multi-function

Class 310

Multi-function sensor

C 310

Display and measure 4 parameters simultaneously

1 SPI-2 card input

4 RCR relays (option)

2 analogue outputs (+2 in option):

0-5/10 V or 0/4-20 mA



**Ethernet
communication**



**MODBUS
RS485**



**Waterproof
ABS housing**



**4 visual and
audible alarms**



Large display multi-function sensor

CA 310

1 SPI-2 or MVA card input

3 RCR relays

3 analogue outputs:

0-5/10 V or 0/4-20 mA

3 visual and audible alarms



Interchangeable probes

C 310, CPE 310-S and CA 310

Temperature / Humidity / Air velocity / CO / CO₂, ...

- -10,000 to +10,000 Pa
- 0 to 100 %RH
- -50 to +180°C
- 3 to 85 m/s
- 0 to 99,999 m³/h
- CO: 0 to 500 ppm
- CO₂: 0 to 5,000 ppm
- 800 to 1,100 hPa
- 0 to 10 V
- 0 to 20 mA

1 INPUT
for probe

Flush-mount multi-function sensor

CPE 310-S / CPE 311-S

Special for clean room
Front calibration
3 analogue outputs:
0-5/10 V or 0/4-20 mA

- ± 100 Pa
- $\pm 1,000$ Pa



MODBUS
RS485



4 visual and
audible alarms



Precise
resolution



Multi-channel display

ATE 310

Flush-mount
Display 3 parameters alternatively
RS485 MODBUS



Front connection
for configuration
and calibration

Data acquisition system

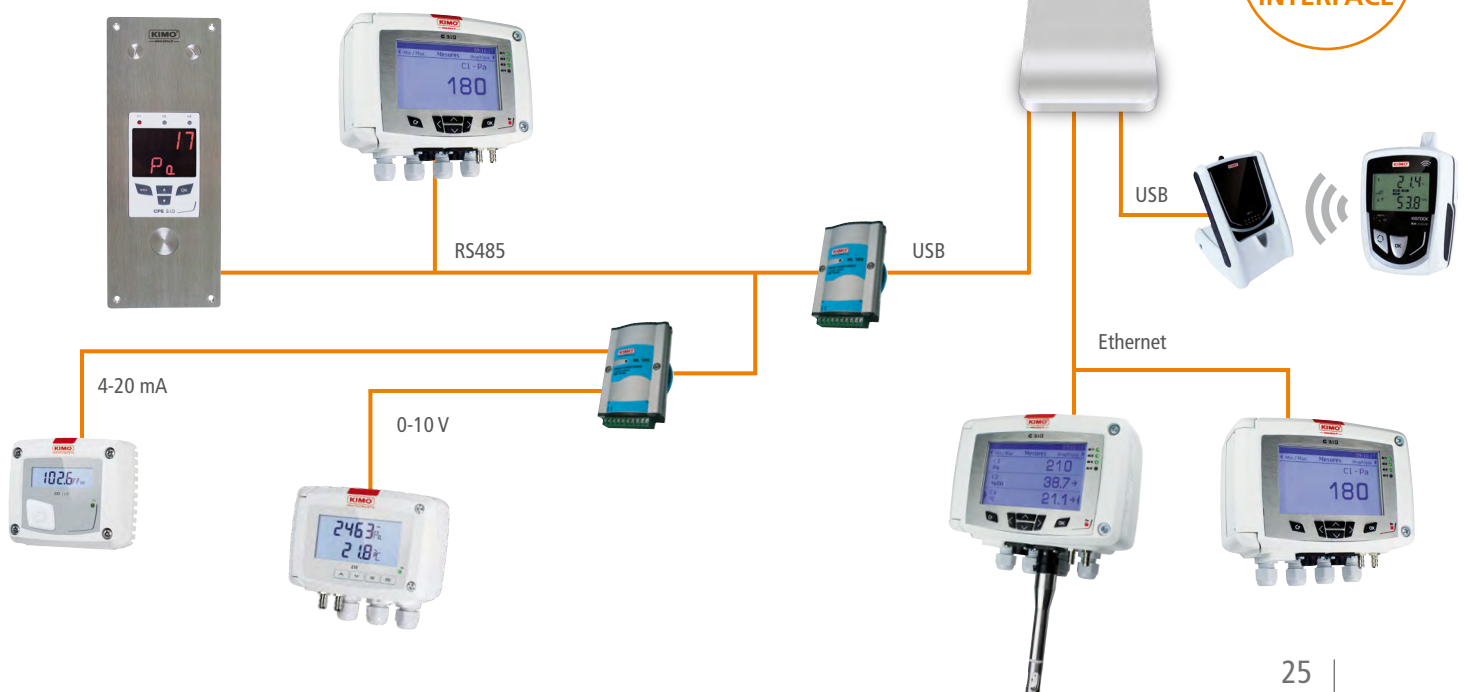
Akivision

Configure / Display / Process / Export data

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



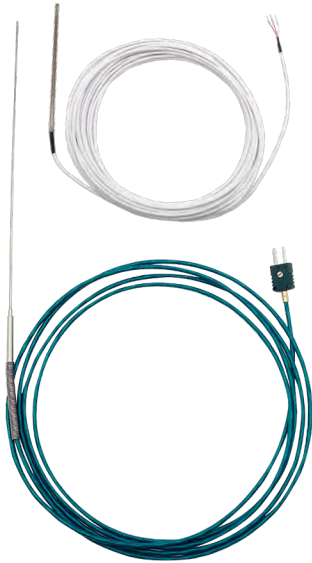
ERGONOMIC
graphical
INTERFACE



Temperature

Probes

Thermocouple / Pt100
Head / Cable / ABS Probes



Wire probes



ABS head



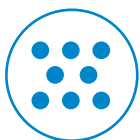
Connection head



Measuring range
-200 to +1,150 °C



Pt 100
probes



Calibration
-200 to +1,500 °C



Thermocouple
probes



Liquid column manometers

Differential pressure



Measure slight variations in differential pressure of air or neutral gases

Air treatment industry, clean rooms, ...



Inclined

- 0-5 to 0-80 mmH₂O
- Units: Pa, daPa...



Vertical

- 0-100 mmH₂O to 0-2,6 bar
- Units: mbar, Pa, daPa...



ECM

- 0-10 to 300 mmH₂O
- Manual adjustable setpoints



ACCESSORIES

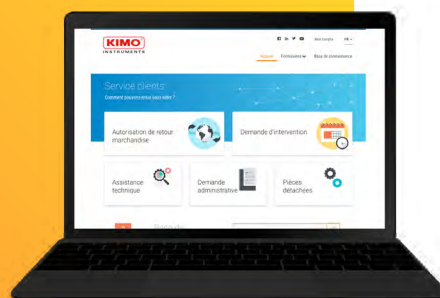
To fit any installation with proper connections

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

Manufacturer of innovative solutions
for the measurement and control of
indoor air quality.

Customer service portal
Use our customer service portal
to contact us.

<http://kimo-en.custhelp.com>



SCOPE N°2-1885
AVAILABLE ON
WWW.COFRAC.FR

Accredited temperature laboratory as per ISO 17025 standard

KIMO can perform COFRAC calibrations on any type of thermometer (measuring chain, Pt100, thermocouple, etc.) within a range from -70 to +200°C (in sterilizer or in baths).



SCOPE N°2-5553
AVAILABLE ON
WWW.COFRAC.FR

Accredited hygrometry laboratory as per ISO 17025 standard

KIMO can perform COFRAC calibrations on any type of hygrometer within a range from 10 to 95 %RH, for a dry temperature from +10 to +50°C.



More information
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