



Transmitters

Sensors



Pressure / Temperature / Humidity / Air velocity and airflow / Air quality / Solar / Light

Many models available

From the simplest to the most complete model, they can suit many applications (many possibilities of configuration and calculation)

Innovating range

Easy configuration via LCC-S software and front face input (monostats & Class 110).

Designed and manufactured in France, the new range of KIMO transmitters meets all requirements of industries, service, OEM...

Innovations

p. 03

Monostats

p. 05

Class 110

p. 31

Classe 210

p. 68

Class 310

p. 93

Innovations



Simplified calibration

Monostats / Class 110

Electronic board and sensitive element are coupled with front face: no need to remove or touch the installation to proceed to the configuration or calibration of the transmitters.



PC connection on front face

Monostats / Class 110

This new range has an input on front face to allow the configuration of transmitters on a PC via LCC-S software.



Configuration via keypad

Class 210

The new Class 210 transmitters have a keypad on front face which allows their configuration easily, with no need to touch the installation of the transmitter.



Perforated housing for
ambient transmitter



Automatic
autozero in pressure



power supply **LED**



CO/CO₂
Transmitters



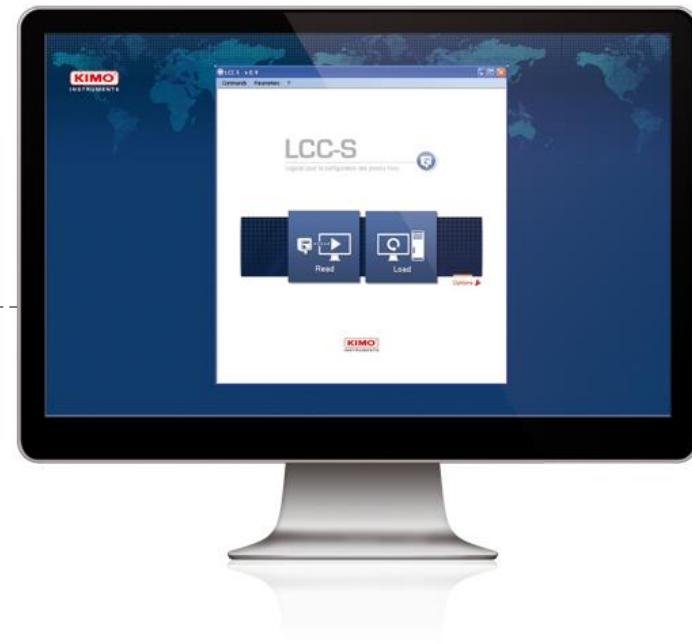
Light / solar
transmitters



Atmospheric
pressure

Software (coming in option)

LCC-S software allows to configure the new transmitters: monostats, class 110, 210 & 310. You can configure the measuring units, the measuring range, the relays, the thresholds, the channels, outputs...





MONOSTATS

Pressure - Temperature - Humidity - CO - CO₂

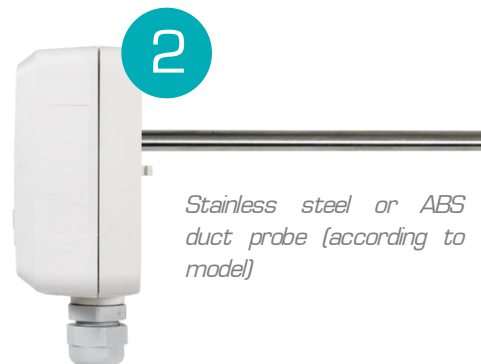


Applications ↻ **Cold – Air-conditioning**

Key features of the range

Fast to install, easy to configure: monostats allow to trigger a relay once a threshold is exceeded, and allow to send this information via the relay on the regulation system or on any automaton.

- 3 A / 230 Vac RCR relay output
- 24 Vac/Vdc power supply
- visual and sound alarm, red LED on front face
- easy-mounting system housing



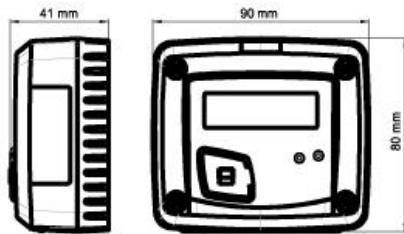
Features of housing and display

ABS VO housings as per UL94

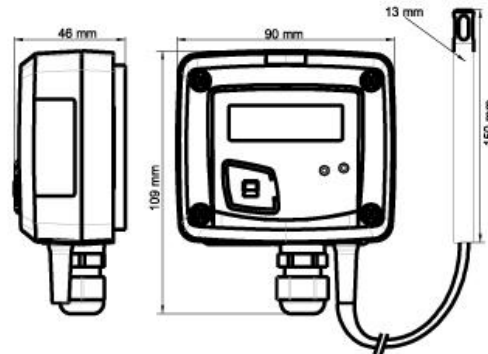
IP65 protection (IP20 on ambient model)

Compression fitting (except on ambient model) for Ø8 mm cable (maximum diameter)

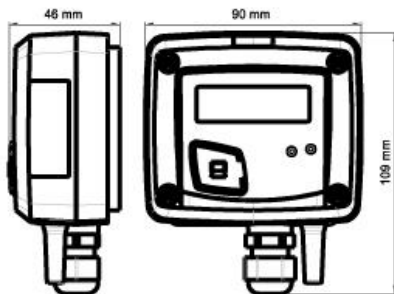
Ambient model



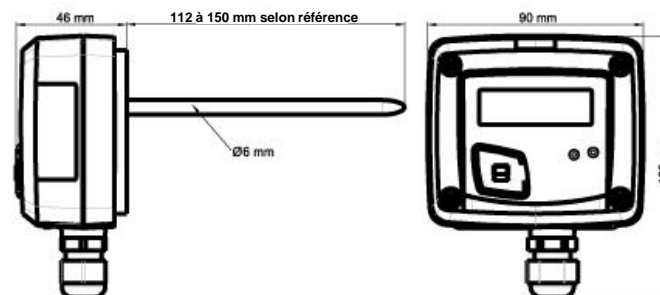
Remote model



Model with terminal block



Duct model



10-digit LCD display

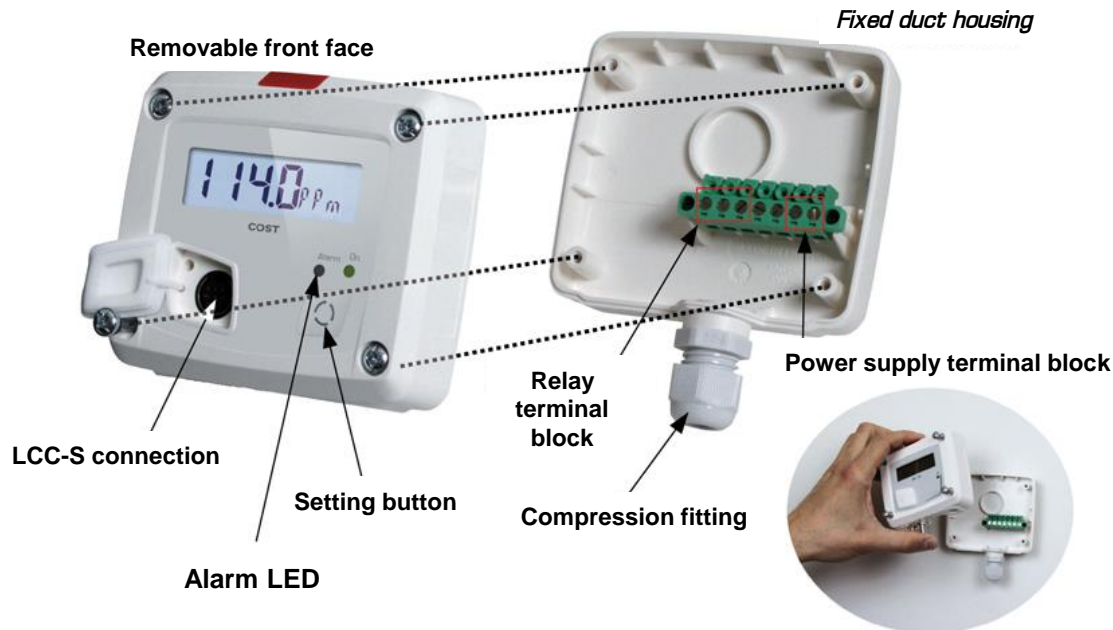
Dimensions : 50x17 mm



Digit height: 10mm (values)
and 5mm (units)

Features of housing

Electronic board and sensitive element are coupled with front face, for easy calibration.



Fixing plate



Easy and fast installation with the ¼ turn system



PST manostat



PST manostat

PRESSURE

Measuring range
From ± 100 Pa
to ± 2000 mbar

PST manostat

Technical features

Measuring units	Pa, mmH2O, inWG, mmHG, daPa, kPa, hPa, mbar (PST-11, PST-12, PST-13) mbar, inWG, mmHG, PSI, mmH2O, daPa, hPa, kPa (PST-14, PST-15)
Accuracies	PST11 : ±1% of the reading ±2 Pa ; PST12 : ±1.5% of the reading ±3 Pa PST13 : ±1.5% of the reading ±3 mmH2O ; PST14 et PST15 : ±1.5% of the reading ±3 mbar
Response time	1/e (63%) 0.3 s
Resolution	1 Pa ; 0.1 mmH2O ; 0.01 mbar ; 0.01 inWG ; 0.01 mmHG ; 0.1 daPa ; 0.001 kPa
Autozero	Manual, with push-button Automatic with solenoid valve (exclusively on PST11)
Type of fluid	Air and neutral gas
Allowed overpressure	PST11, PST12 : 21 000 Pa ; PST13 : 69 000 Pa PST14 : 1400 mbar ; PST15 : 4100 mbar
Operating temperature	From 0 to +50 °C
Storage temperature	From -10 to +70 °C
Connections	Grooved Ø6.2 mm (PST11 – PST12 – PST13) Safety Ø6.2 mm (PST14 – PST15)



Key points of the range



PST

=



Mechanical pressostat

+



Liquid column manometer

Self-calibration solenoid valve (exclusively on PST11)

Part numbers



Measuring ranges

- PST11 : -100/+100 Pa
- PST12 : -1000/+1000 Pa
- PST13 : -10 000/+10 000 Pa
- PST14 : -500/+500 mbar
- PST15 : -2000/+2000 mbar

PST-11 : Manostat with a measuring range from -100 to +100 Pa

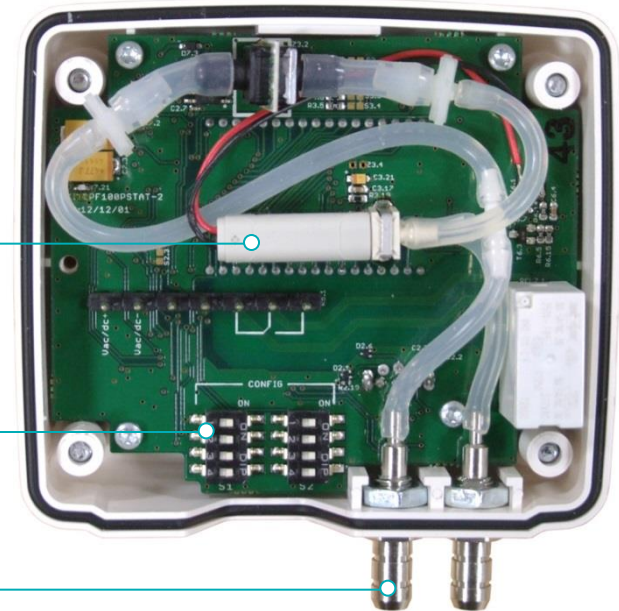
PST manostat

Connectors

Solenoid valve
(exclusively on PST11)

Configuration DIP switches
(range, threshold, relay...)

Pressure connections



Options

- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable
- Connection tubes
- Connectors
- Through-connection for wall
- Junction
- Plug valves

PST applications

Applications :

Overpressure in cleanrooms (PST11)

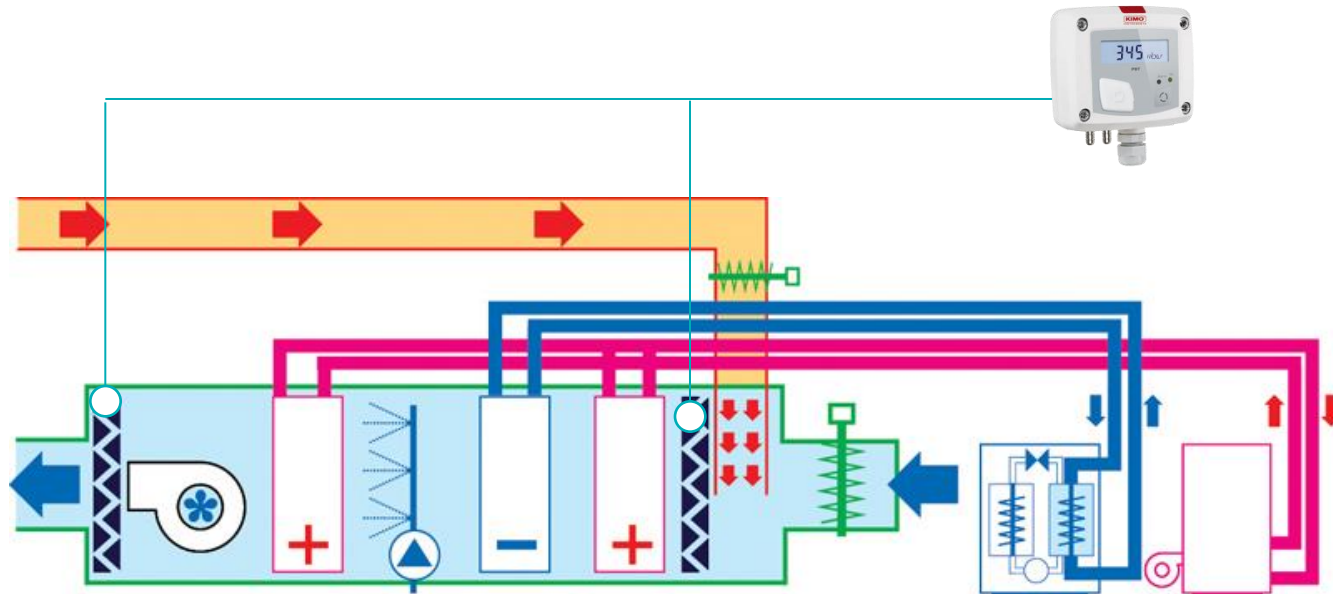
Monitoring of filter fouling



PST11
with
self-calibration
solenoid valve

PST applications

Applications :
Air Handling Unit (filter fouling)





TST thermostat



TST thermostat

TEMPERATURE

Measuring range

From 0 to 50 °C (*ambient model*)

From -20 to +80 °C (*duct model*)

From -100 to +400 °C (*PT100 terminal block model*)

TST thermostat

Technical Features

Measuring units	°C, °F
Measuring ranges	From 0 to 50 °C (ambient model), from -20 to +80 °C (duct model) and from -100 to +400 °C (model with terminal block)
Accuracies	Pt100 : ±0.5 % of the reading ±0.5 °C NTC : ±0.3°C (from -40°C to 70°C) ; ±0.5°C beyond
Type of transmitter	Pt100 (terminal block model and stainless steel duct model) NTC (ambient and duct model)
Response time	1/e (63%) 5 sec. (ambient) 1/e (63%) 20 sec. (airtight)
Resolution	0.1 °C
Type of fluid	Air and neutral gas
Operating temperature	From 0 to +50 °C
Storage temperature	From -10 to +70 °C

Key points of the range:

- IP65 airtightness (duct and remote model) or IP20 (ambient model)
- cable on remote probes: length 2m and Ø4.8 mm, made of PVC

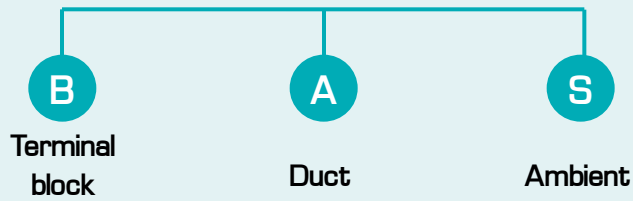


TST thermostat

Part numbers



Type of housing

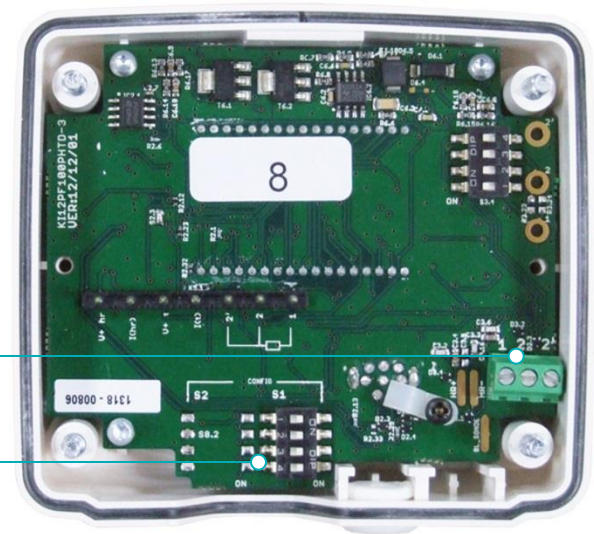


Type of probe



TST-AI : Thermostat with stainless steel duct probe

Connectors



Terminal block
(exclusively on terminal block model)

Configuration DIP switches
(range, threshold, relay...)

Options

- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable
- PT100 stainless steel probes, 2 or 3 wires, NTC probes for duct and terminal block models.



HST hygostat



HST hygostat

HUMIDITY

Measuring range

From 5 to 95% RH and :

- from 0 to +50 °C (*ambient model*)
- from -20 to +80 °C (*duct or remote model*)

HST hygrostat

Technical features in TEMPERATURE

Measuring range	Ambient model: from 0 to 50 °C Remote and duct model: from -20 to +80 °C
Accuracies	CMOS : ± 0.4 % of the reading ± 0.3 °C NTC : ± 0.3 °C (from -40°C to 70°C) ; ± 0.5 °C beyond
Measuring units	°C / °F
Response time	1/e (63%) 15 s
Type of transmitter	Ambient model: CMOS Duct and remote model: NTC
Resolution	0.1 °C
Type of fluid	Air and neutral gas

Technical features in HUMIDITY

Measuring range	from 5 to 95% RH
Accuracies	± 1.5 % RH (if $15^{\circ}\text{C} \leq T \leq 25^{\circ}\text{C}$) on remote and duct model ± 2 % RH (if $15^{\circ}\text{C} \leq T \leq 25^{\circ}\text{C}$) on ambient model
Drift linked to the temperature	$\pm 0.04 \times (T-20)$ % Rh (IF $15^{\circ}\text{C} \leq T \leq 25^{\circ}\text{C}$)
Measuring units	% RH
Response time	1/e (63%) 4 s
Type of transmitter	Ambient model: CMOS Duct and remote model: capacitive
Resolution	0.1% RH
Uncertainty of adjustment at our factory	± 0.88 % RH
Type of fluid	Air and neutral gas



- Key points of the range:**
- alternating display of humidity and temperature
 - cable on remote probes: length 2m and $\varnothing 4.8$ mm made of silicone

HST hygrostat

Part numbers



Type of probe

D

Remote

A

Duct

S

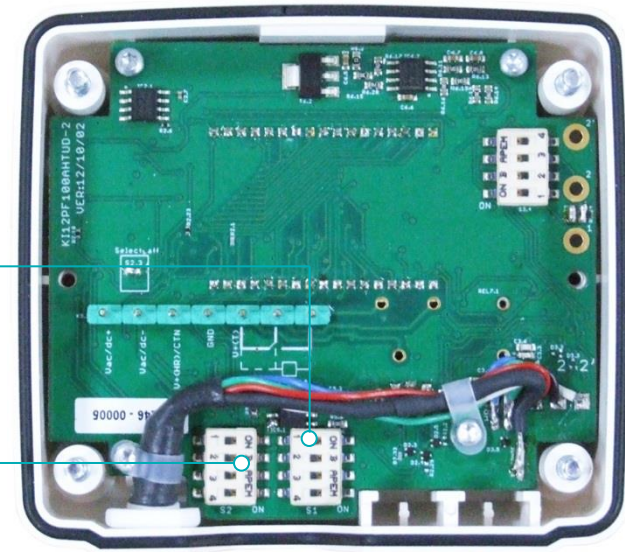
Ambient

HST-A : Hygrostat with duct probe

Connectors

Active DIP switch (S1)

Inactive DIP switch



Options

- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable
- Stainless steel sliding connector
- stainless steel fixing clamp
- PC compression fitting
- wall-mount fixing plate for remote humidity probe
- ABS fixing clamp with compression fitting

COST - CO stat



COST: CO stat

CO LEVEL

Measuring range

From 0 to 500 ppm

COST: CO stat

Technical Features

Measuring units	ppm
Measuring range	From 0 to 500 ppm
Accuracies	±3 ppm or 3% of the measured value
Type of sensor	Electro-chemical sensor
Life duration of the sensor	5 years
Response time	T63 = 35 s
Resolution	0.1 ppm
Type of fluid	Air and neutral gas
Operating temperature	From 0 to +50 °C
Storage temperature	From -10 to +70 °C



COST: CO stat

Part numbers



Type of probe

A

Duct

S

Ambient

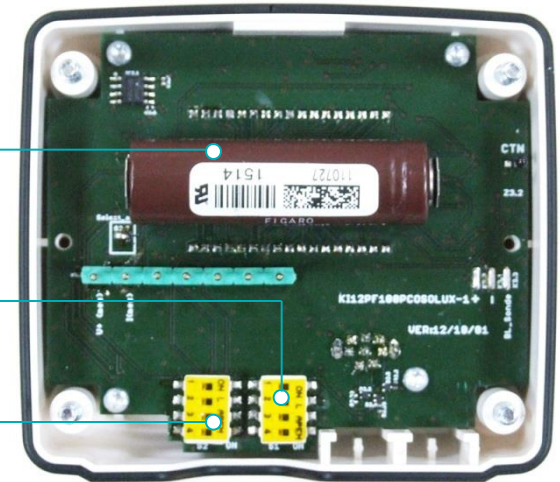
CCOST-A = CO stat with duct probe

Connectors

Electro-chemical sensor

Active DIP switch (S1)

Inactive DIP switch



Options

- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable

CO2ST: CO₂ stat



CO2ST

AIR QUALITY

Measuring range

From 0 to 5000 ppm

CO2ST: CO₂ stat

Technical Features

Measuring units	ppm
Measuring range	From 0 to 5000 ppm
Accuracies	±3 ppm or 3% of the measured value
Type of sensor	Electro-chemical sensor
Life duration of the sensor	5 years
Response time	T63 = 35 s
Resolution	0.1 ppm
Type of fluid	Air and neutral gas
Operating temperature	From 0 to +50 °C
Storage temperature	From -10 to +70 °C



CO2ST: CO₂ stat

Part numbers



Type of probe

A

Duct

S

Ambient

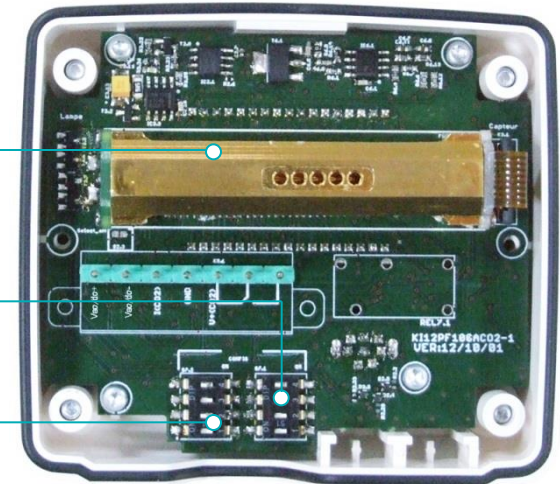
CO2ST-A = CO2 stat with duct probe

Connectors

Infrared sensor

Active DIP switch (S1)

Inactive DIP switch

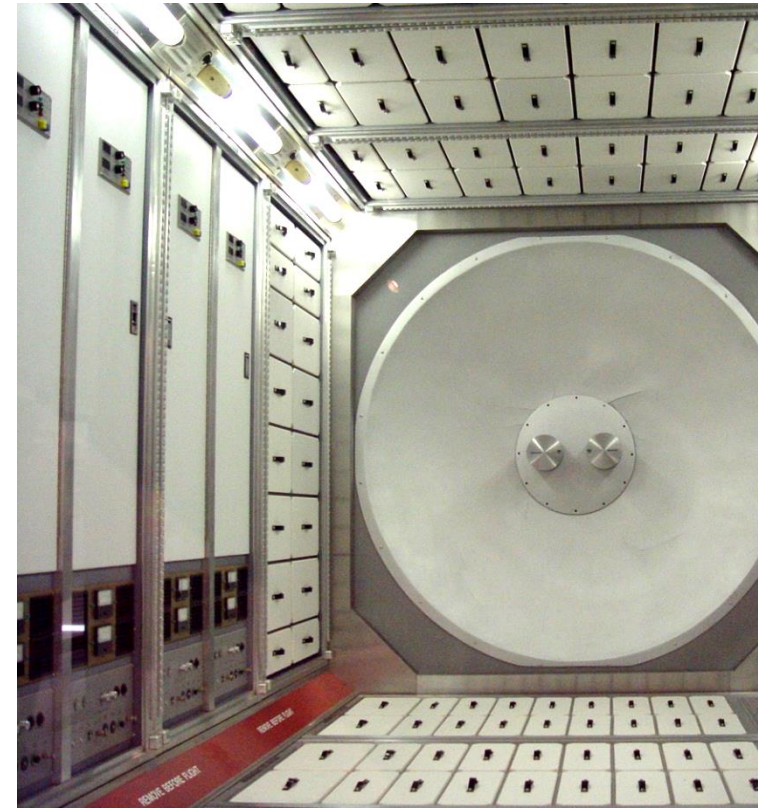


Options

- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable

MONOSTATS applications

Cold room



MONOSTATS applications

Air handling unit
Industrial humidificator



MONOSTATS applications

Protection of wall-mounted boiler



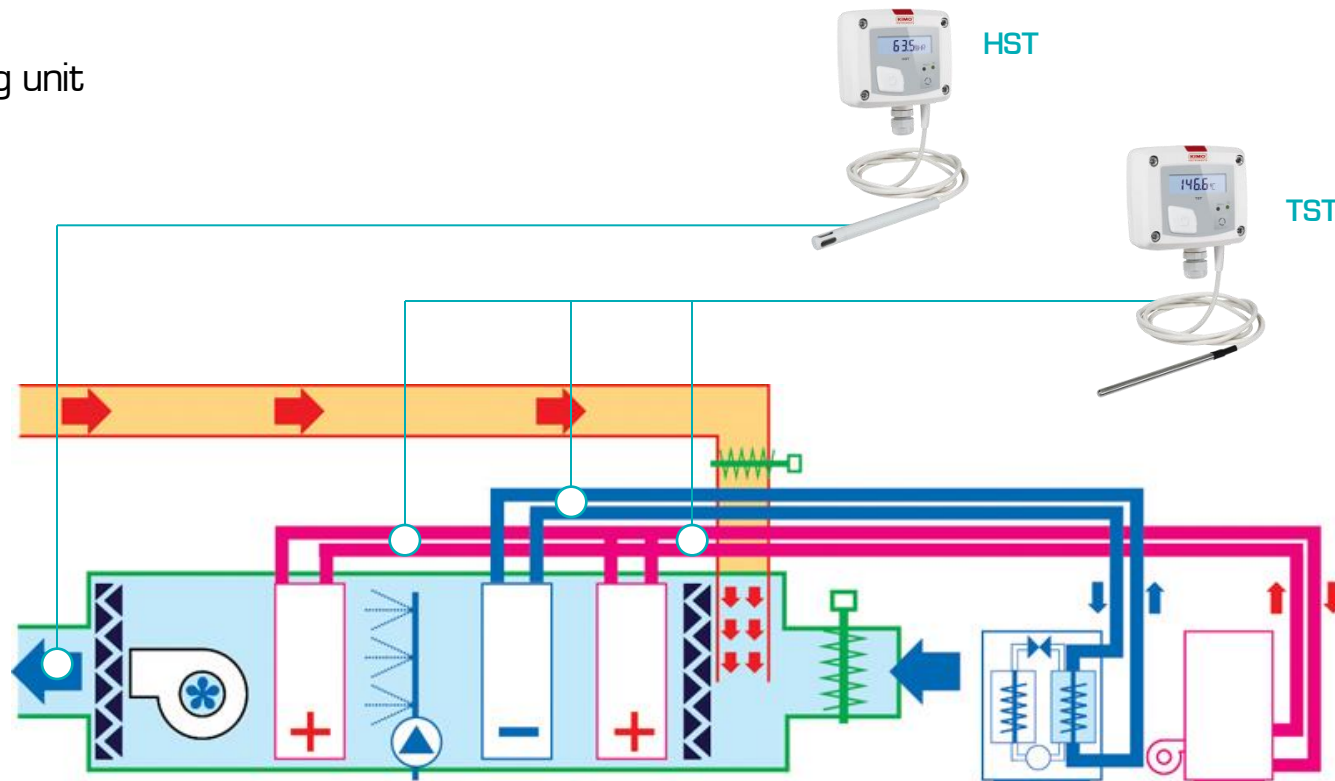
MONOSTATS applications

Air handling unit
Offices (vent)



MONOSTATS applications

Air handling unit





CLAS 110

Pressure – Atmospheric pressure – Temperature – Humidity – Air velocity – Air quality - Light - Solar



Applications **cold – HVAC – industrial field - OEM**

Key points of the range

This range can send a signal in current or in voltage.

To meet with different applications, the sensitive elements are available in ambient, remote or duct versions.

Analogue outputs automatically match with the measuring range which is configured via the DIP switches (on the transmitter) or via the LCC-S software.

- 0-10 V output, active
- 24 Vac/Vdc power supply (3-4 wires) or 4-20 mA output
- Housing with easy-mounting system



1 or 2 **analogue** outputs



Airtight ABS housing



24 Vdc/Vac power supply



Configurable outputs



Housing with remote probe



Stainless steel or ABS duct probe (according to model)



Perforated housing for integrated IP 20 ambient probe

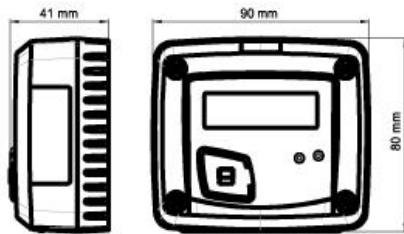
Features of housing / display

ABS VO housings as per UL94

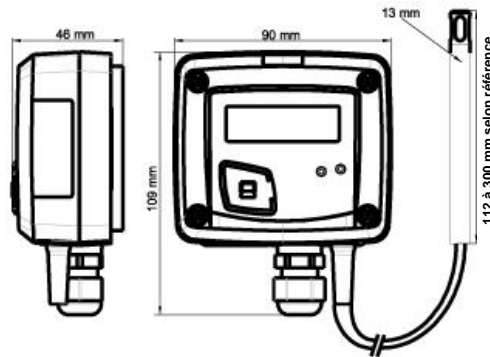
IP65 protection (IP20 on ambient model)

*Compression fitting (except on ambient model) for Ø8 mm cable
(maximum diameter)*

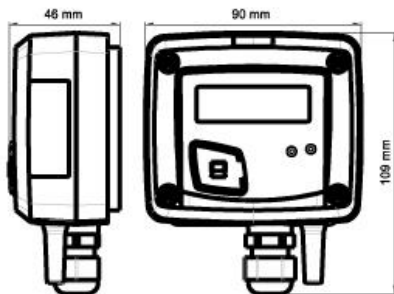
Ambient model



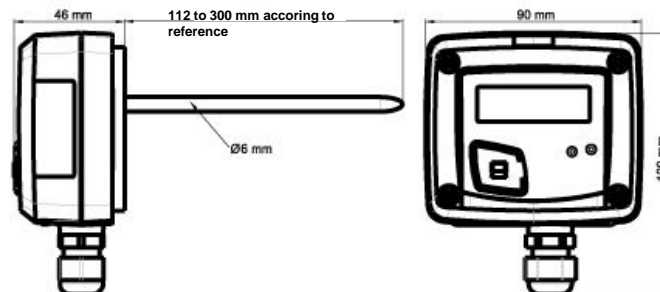
Remote model



Terminal block model



Duct model



10-digit LCD display

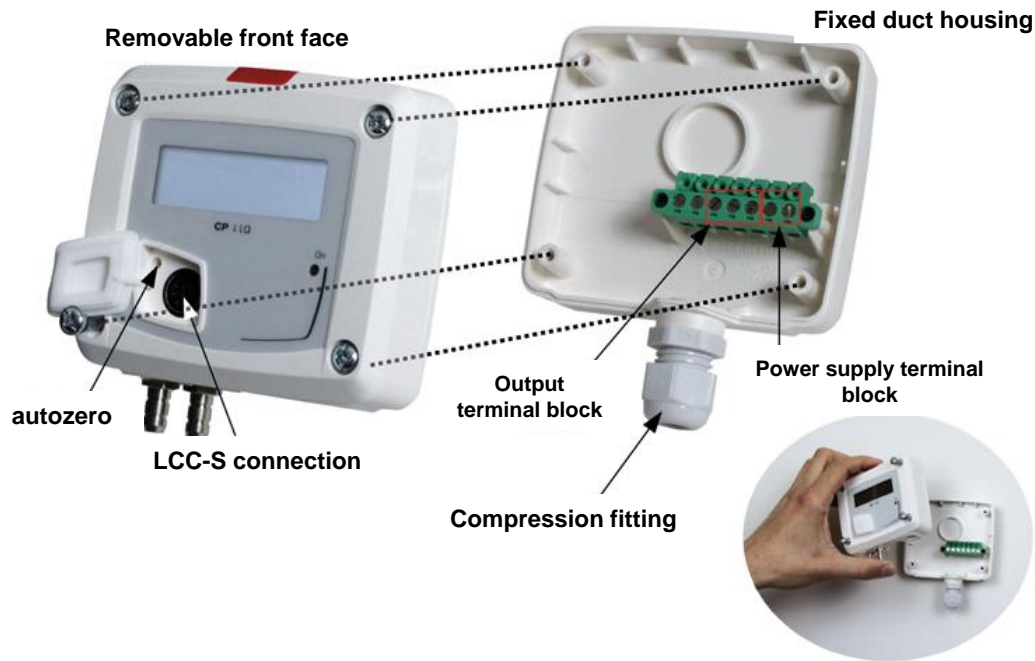
Dimensions : 50x17 mm



Height of digit:
10 mm (values)
5 mm (units)

Features fo the housing

Electronic board and sensitive element are coupled with front face, for easy calibration.



Fixing plate



Easy and fast installation with the ¼ turn system



Differential Pressure - CP 110



CP 111
with
self-calibration
solenoid valve



CP 110

PRESSURE

Measuring range

From ± 100 Pa to $\pm 10\ 000$ Pa

Differential Pressure - CP 110

Technical Features

Measuring units	Pa, mmH2O, inWG, mmHG, daPa, kPa, hPa, mbar (CP111, CP112, CP113) mbar, inWG, mmHG, PSI, mmH2O, daPa, hPa, kPa (CP114, CP115)
Accuracies	CP111 : ±1% of the reading ±2 Pa ; CP112 : ±1.5% of the reading ±3 Pa CP113 : ±1.5% of the reading ±3 mmH2O ; CP114 et CP115 : ±1.5% of the reading ±3 mbar
Response time	1/e (63%) 0.3 s
Resolution	1 Pa ; 0.1 mmH2O ; 0.01 mbar ; 0.01 inWG ; 0.01 mmHG ; 0.1 daPa ; 0.001 kPa ; 0.1 PSI
Autozero	Manual, with push-button Automatic by solenoid valve (exclusively on CP111)
Type of fluid	Air and neutral gas
Allowed overpressure	CP111, CP112 : 21 000 Pa ; CP113 : 69 000 Pa CP114 : 1400 mbar ; CP115 : 4100 mbar
Operating temperature	From 0 to +50 °C
Storage temperature	From -10 to +70 °C
Connectors	Grooved Ø6.2 mm (CP111 – CP112 – CP113) Safety Ø6.2 mm (CP114 – CP115)



Key points of the range:

- intermediate configurable ranges
- passive loop, power supply from 16 to 30 Vdc (2 wires)
- self-calibration by solenoid valve (exclusively on CP 111)

Differential Pressure - CP 110

Part numbers



Range

CP111 : -100/+100 Pa
 CP112 : -1000/+1000 Pa
 CP113 : -10 000/+10 000 Pa
 CP114 : -500/+500 mbar
 CP115 : -2000/+2000 mbar

Power supply / Output

A

Active – 24 Vac/Vdc
 0-10 V ou 4-20 mA

P

Passive – 16/30 Vdc
 4-20 mA

Display

O

With display

N

Without display

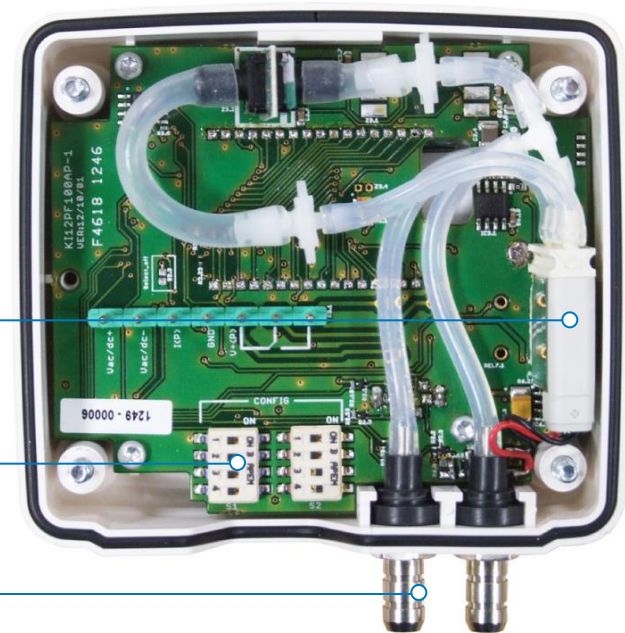
CP113 – AO : Pressure transmitter with a range from -10 000/+10 000 Pa, 0-10 V or 4-20 mA active transmitter, with display

Connectors

Solenoid valve
 (exclusively on CP 111)

Configuration DIP switches
 (ranges, thresholds, relays..)

Pressure connections



Options

- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable
- connection tubes
- connectors
- through-connection for wall
- junction
- plug valves

Atmospheric Pressure - CP 116



CP 116

ATMOSPHERIC PRESSURE

Measuring range

From 800 to 1100 hPa

Atmospheric Pressure - CP 116

Technical Features

Measuring units	hPa, mbar, mmHG
Accuracies	±3 hPa
Response time	<10 seconds
Resolution	1 mbar ; 1 hPa ; 1 mmHG
Type of fluid	Air and neutral gas
Operating temperature	From 0 to +50 °C
Storage temperature	From -10 to +70 °C
Connectors	Grooved Ø6.2 mm

Key points of the range:

- Pressure indication in hPa, mbar or mmHG
- Passive loop, power supply from 16 to 30 Vdc (2wires)



Atmospheric Pressure - CP 116

Part numbers



Power supply / Output

A

Active – 24 Vac/Vdc
0-10 V or 4-20 mA

P

Passive – 16/30 Vdc
4-20 mA

Display

O

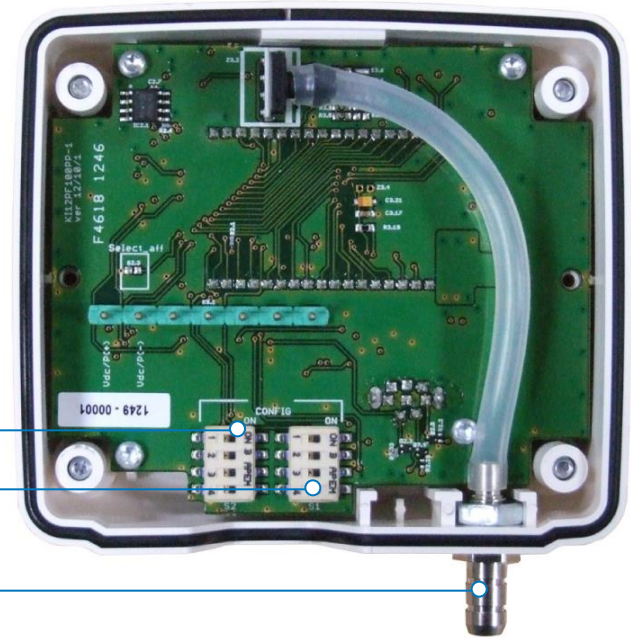
With display

N

Without display

CP116 – PO : atmospheric pressure transmitter, passive transmitter with display

Connectors



Inactive DIP switches

Active DIP switch

Pressure connections

Options

- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable
- connection tubes
- junction
- connectors
- plug valves
- through-connection for wall

Temperature - TM 50



TM 50

TEMPERATURE

Measuring range

From -20 to $+80^{\circ}\text{C}$
or from -100 to $+400^{\circ}\text{C}$
(according to model)

Temperature - TM 50

Technical Features

Measuring range	From -20 to +80°C (model: ambient airtight stainless steel duct and contact) From -100 to +400 °C (model: terminal block)
Accuracies	According to Pt100 probe
Type of sensor	Class A Pt100
Probe (stainless steel duct and airtight model)	316L stainless steel
Environment	Air and neutral gas
Operating temperature	From -20 to +80°C
Storage temperature	From -20 to +80°C

Key points of the range:

- connection on terminal block, 2 or 3 wires output
- stainless steel probe



Temperature - TM 50

Part numbers



Specific features

- no display
- Pt100 2-3 wires output exclusively
- available in ambient, airtight, duct stainless steel, contact and terminal block model

Options

- Pt100 temperature probes

S

Ambient temperature transmitter
Pt100 2/3 wires output

E

Airtight temperature transmitter
Pt100 2/3 wires output

AI

Temperature transmitter with duct output
Stainless steel probe Ø6mm and length
150mm. Pt100 2/3 wires output

C

Contact temperature transmitter
Pt100 2/3 wires output

B

Temperature transmitter with terminal block.
Pt100 2/3 wires output.
Pt100 2/3 wires input.



Duct stainless steel model



Contact model

Temperature - TM 110



TM 110

TEMPERATURE

Measuring range

From -100 to +400°C

Temperature - TM 110

Technical Features

Measuring units	°C, °F
Measuring range	From 0 to 50°C (ambient model), from -20 to +80°C (duct and airtight models) and from -100 to +400°C (model with terminal block)
Accuracies	Pt100 : ±0.5% of the reading ±0.5°C NTC : ±0.3°C (from -40 to +70°C) ; ±0.5°C beyond
Type of sensor	Pt100 (models with terminal block, stainless steel duct and airtight models) NTC (ambient and duct models)
Response time	1/e (63%) 5 sec. (ambient) 1/e (63%) 20 sec. (airtight)
Resolution	0.1°C
Type of fluid	Air and neutral gas
Operating temperature	From 0 to +50 °C
Storage temperature	From -10 to +70 °C

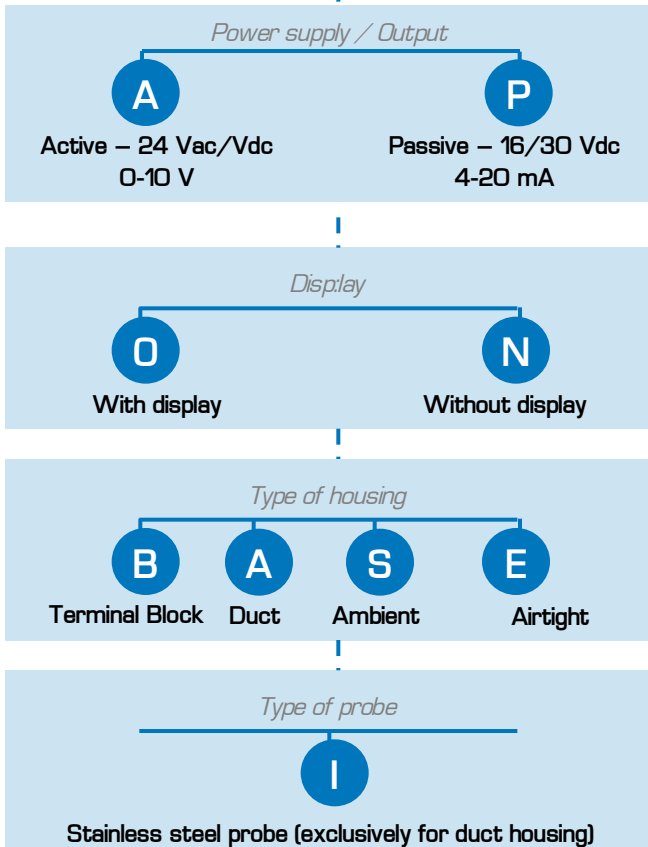


Key points of the range:

- on remote probes, PVC cable length 2m and Ø4.8 mm
- passive loop, power supply from 16 to 30 Vdc (2 wires)

Temperature - TM 110

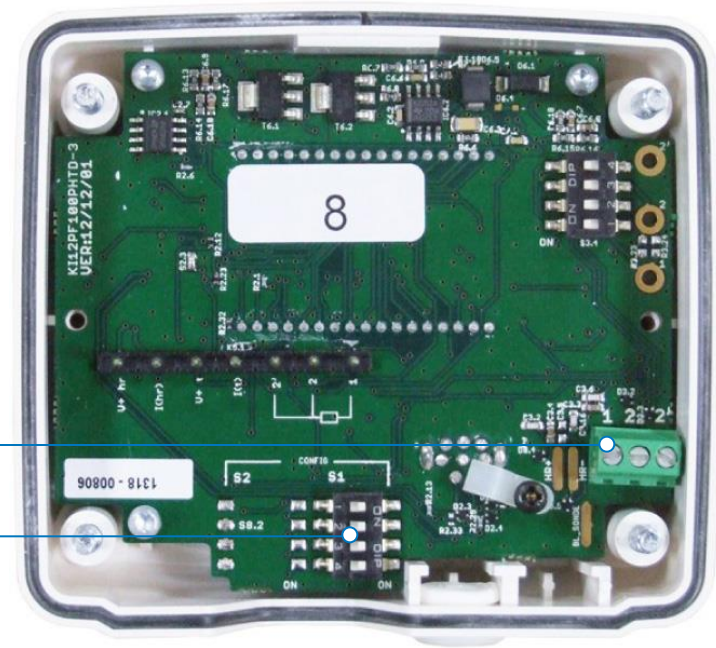
Part numbers



Connectors

Terminal block
(exclusively on model with terminal block)

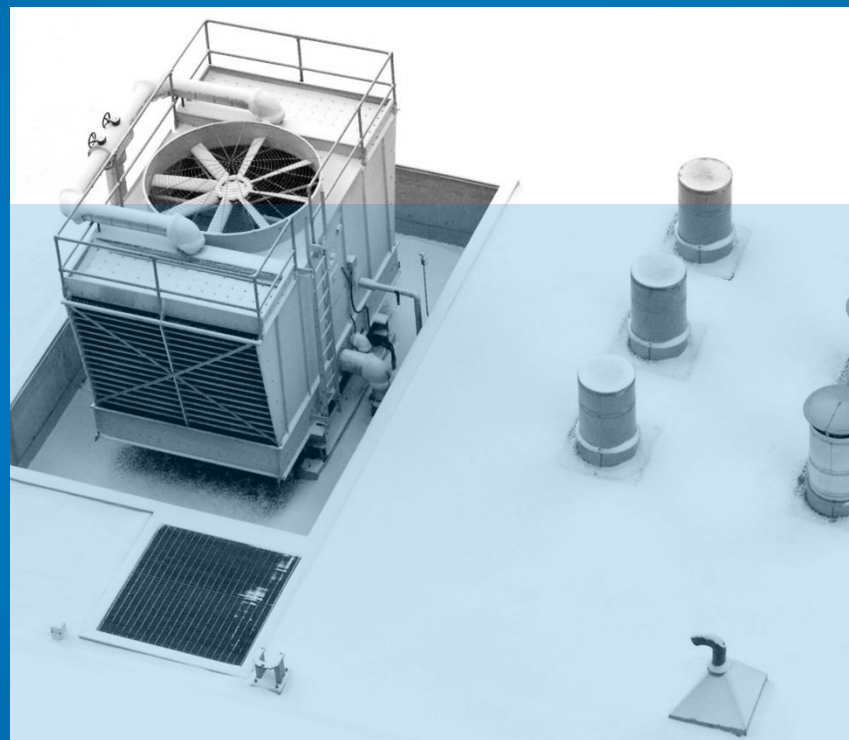
Configuration DIP switches
(ranges, thresholds, relays..)



Options

- PT100 2 or 3 wires stainless steel probes, or NTC probes on duct and remote models
- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable

Temperature & Humidity - TH 110



TH 110

TEMPERATURE / HUMIDITY

Measuring range

From -20 to +80°C

From 5 to 95 %RH

Temperature & Humidity - TH 110

Technical Features in TEMPERATURE

Measuring range	Ambient model: from 0 to 50 °C – Remote and duct models: from -20 to +80 °C
Accuracies	CMOS : $\pm 0.4\%$ of the reading $\pm 0.3\text{ °C}$ NTC : $\pm 0.3\text{ °C}$ (from -40 °C to 70 °C) ; $\pm 0.5\text{ °C}$ beyond
Measuring units	°C / °F
Response time	1/e (63%) 15 s
Type of sensor	Ambient model: CMOS – Remote and duct models: NTC
Resolution	0.1 °C
Type of fluid	Air and neutral gas

Technical features in HUMIDITY

Measuring range	From 5 to 95% RH
Analogue output	From 0 to 100 % RH
Accuracies	$\pm 1.5\%$ RH (if $15\text{ °C} \leq T \leq 25\text{ °C}$) on remote and duct models $\pm 2\%$ RH (if $15\text{ °C} \leq T \leq 25\text{ °C}$) on ambient model
Drift linked to the temperature	$\pm 0.04 \times (T-20) \% \text{ RH}$ (if $15\text{ °C} \leq T \leq 25\text{ °C}$)
Measuring units	% RH
Response time	1/e (63%) 4 s
Type of sensor	Ambient model: CMOS – Duct and remote models: NTC
Resolution	0.1% RH
Uncertainty of adjustment at factory	$\pm 0.88\%$ RH
Type of fluid	Air and neutral gas



Key points of the range:

- alternating display of humidity and temperature
- on remote probes, silicone cables length 2m and \varnothing 4.8 mm
- passive loop, power supply from 16 to 30 Vdc (2 wires)

Temperature & Humidity - TH 110

Part numbers



Power supply / Output

A

Active – 24 Vac/Vdc
0-10 V

P

Passive – 16/30 Vdc
4-20 mA

Display

O

With display

N

Without display

Type of probe

D

Remote

A

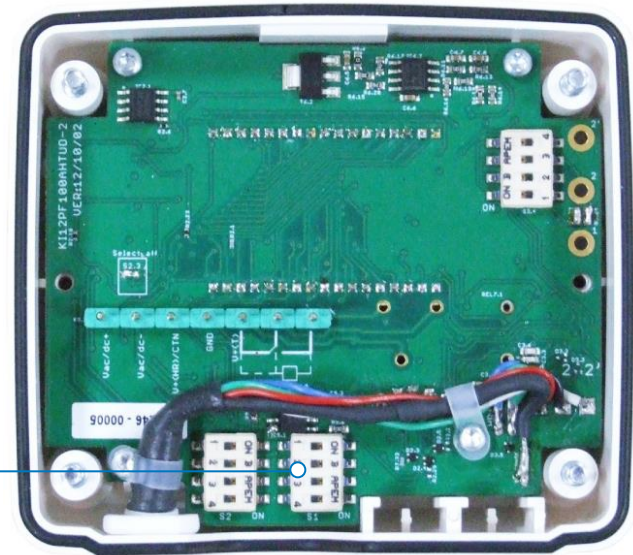
Duct

S

Ambient

TM110 – PCB : Passive temperature transmitter, with display and terminal block

Connectors



Configuration DIP switches
(ranges, thresholds, relays..)

Options

- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable
- Stainless steel sliding connectors
- stainless steel fixing clamp
- PC compression fittings
- wall-mount fixing plate for remote humidity probe
- ABS fixing clamp with compressing fitting

Humidity - HM 110



TH 110

HUMIDITY

Measuring range

From 5 to 95 % RH

Humidity - HM 110

Technical Features

Measuring range	From 5 to 95% RH
Accuracies	±1.5% RH (if 15°C ≤ T ≤ 25°C) on remote and duct models ±2% RH (if 15°C ≤ T ≤ 25°C) on ambient model
Drift linked to temperature	±0.04 x (T-20) %RH (if 15°C ≤ T ≤ 25°C)
Measuring units	% RH
Response time	1/e (63%) 4 s
Type of sensor	Ambient model: CMOS Remote and duct models: capacitive
Resolution	0.1 % RH
Uncertainty of adjustment at our factory	±0.88 % RH
Type of fluid	Air and neutral gas

Key points of the range:

- Passive loop, power supply from 16 to 30 Vdc (2 wires)



Humidity - HM 110

Part numbers



Power supply / Output

A

Active – 24 Vac/Vdc
0-10 V

P

Passive – 16/30 Vdc
4-20 mA

Display

O

With display

N

Without display

Type of probe

D

Remote

A

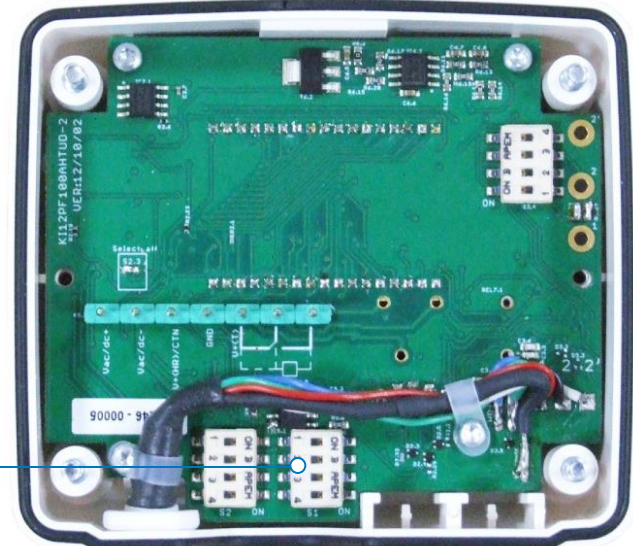
Duct

S

Ambient

HM110 – ANS : HM110 transmitter with 0-10V active sensor, without display

Connectors

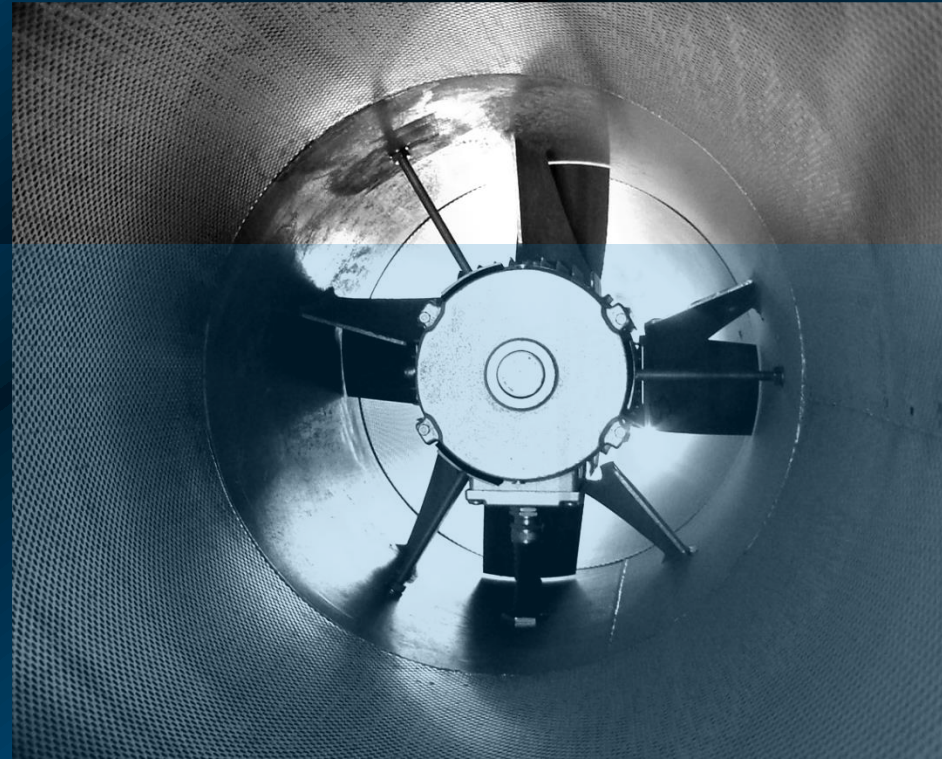


Configuration DIP switches
(ranges, thresholds, relays...)

Options

- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable
- stainless steel sliding connector
- stainless steel fixing clamp
- PC compression fitting
- wall-mount fixing plate for remote humidity probe
- ABS fixing clamp with compression fitting

Air velocity & Temperature - CTV 110



CTV 110

AIR VELOCITY & TEMPERATURE

Measuring range

From 0 to 30 m/s

From 0 to 50 °C

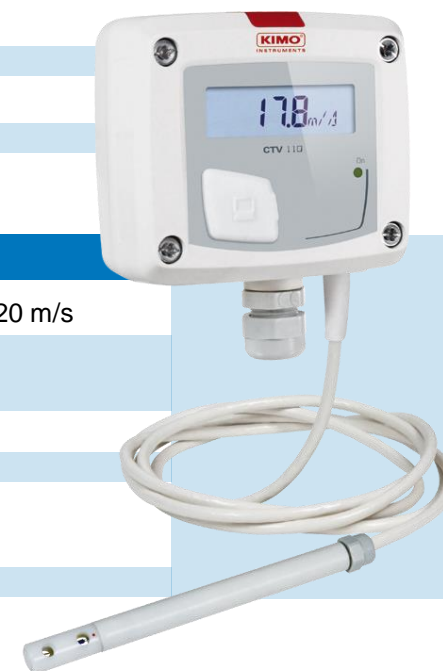
Air velocity & Temperature - CTV 110

Technical features in TEMPERATURE

Measuring range	From 0 to 50°C (possibility to configure the output from -20 to 80°C, -50 to +50°C and 0 to +100°C)
Accuracies	±0.3% of the reading ±0.25°C
Measuring units	°C, °F
Response time	1/e (63%) 5 s
Type of sensor	Pt100 1/3 DIN
Resolution	0.1°C
Type of fluid	Air and neutral gas

Technical features in AIR VELOCITY

Configuration of outputs	From 0 to 5m/s, from 0 to 10 m/s, from 0 to 15 m/s, from 0 to 20 m/s and from 0 to 30 m/s
Accuracies	From 0 to 3 m/s : ±3% of the reading ±0.05 m/s From 3 to 30 m/s : ±3% of the reading ±0.2 m/s
Measuring units	m/s and fpm
Response time	1/e (63%) 2 s
Resolution	From 0 to 3 m/s : 0.01 m/s From 3 to 30 m/s : 0.1 m/s
Type of fluid	Filtered air

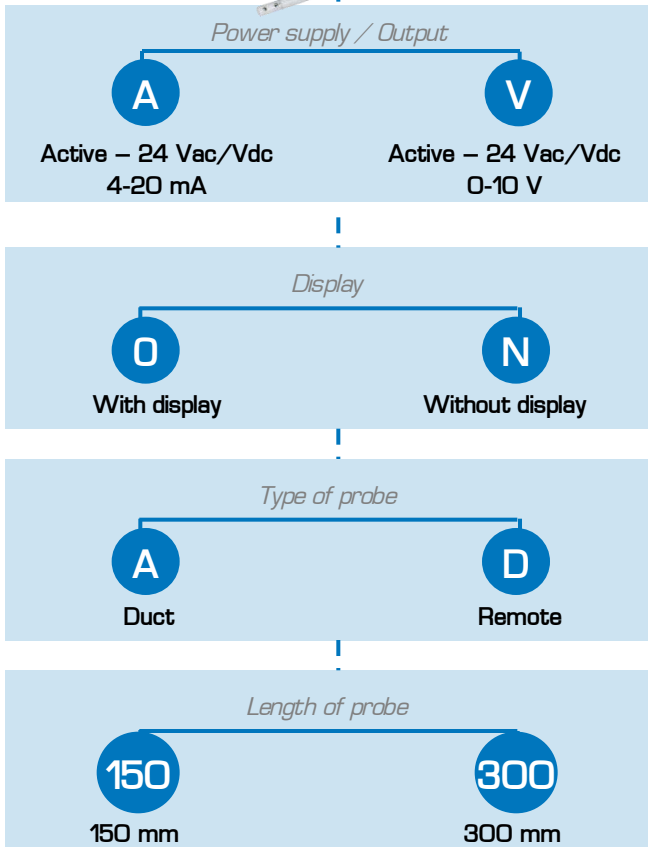


Key points of the range:

- alternating display of the air velocity and the temperature
- on remote probes: PVC cable length 2m and Ø4.8 mm

Air velocity & Temperature - CTV 110

Part numbers



Connectors



Configuration DIP switches
(ranges, thresholds, relays..)

Options

- Sliding connector; fixing clamp for hotwire probe
- Class 2 powersupply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable

CO - CO 110



CO 110

CO

Measuring range
From 0 to 500 ppm

CO - CO 110

Technical Features

Measuring range	From 0 to 500 ppm
Accuracies	±3 ppm or 3% of the measured value
Measuring units	ppm
Type of sensor	Electro-chemical sensor
Life duration of the sensor	5 years
Response time	T63 = 35 s
Resolution	0.1 ppm
Type of fluid	Air and neutral gas
Operating temperature	From 0 to +50°C
Storage temperature	From -10 to +70°C



Key points of the range:

- passive loop, power supply from 16 to 30 Vdc (2 wires)

CO - CO 110

Part numbers



Power supply / Output

A

Active – 24 Vac/Vdc
0-10 V

P

Passive – 16/30 Vdc
4-20 mA

Display

O

With display

N

Without display

Type of output

A

Duct

S

Ambient

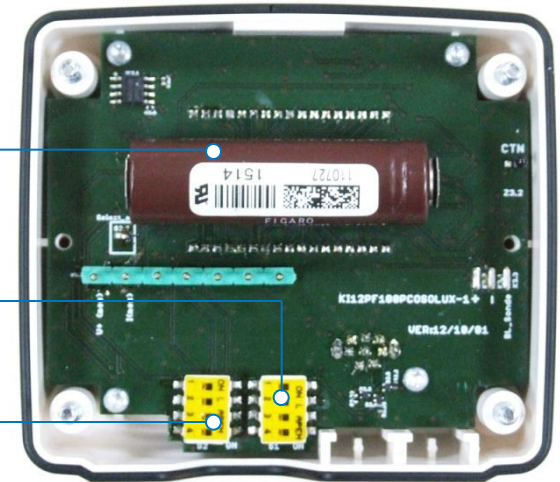
CO110 – POA : CO transmitter, passive transmitter with display and duct probe

Connectors

Electro-chemical sensor

Active DIP switch (S1)

Inactive DIP switch



Options

- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable

CO₂ - CO 112



CO 112

CO₂

Measuring range
From 0 to 5000 ppm

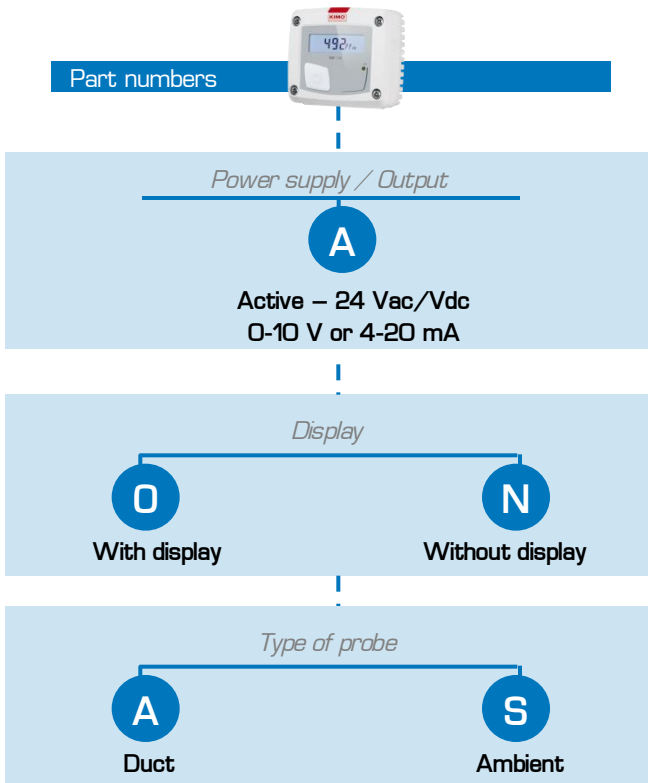
CO₂ - CO 112

Technical Features

Measuring range	From 0 to 5000 ppm
Accuracies	±3 % of the reading ±50 ppm
Measuring units	ppm
Type of sensor	Infrared sensor
Response time	T63 = 30 s
Resolution	1 ppm
Type of fluid	Air and neutral gas
Operating temperature	From 0 to +50°C
Storage temperature	From -10 to +70°C



CO₂ - CO 112



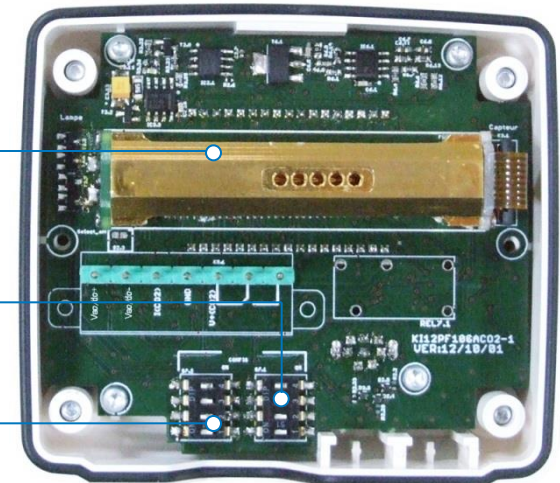
CO112 – AQA : CO₂ transmitter; active transmitter with display and duct probe

Connectors

Infrared sensor

Active DIP switch (S1)

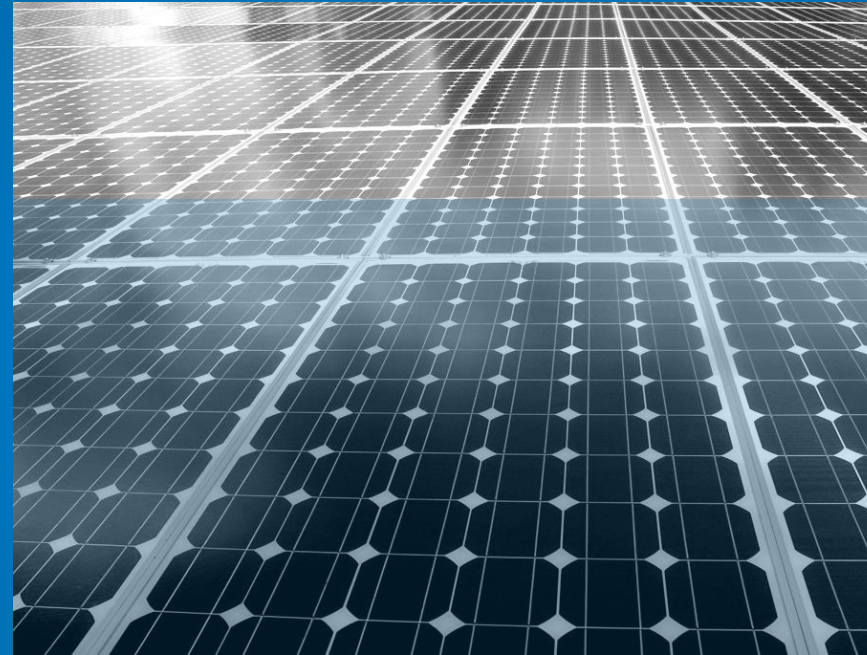
Inactive DIP switch



Options

- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable

Solar radiation - CR 110



CR 110

SOLAR RADIATION

Measuring range

From 0 to 1500 W/m²

Solar radiation - CR 110

Technical Features

Measuring range	From 0 to 1500 W/m ²
Accuracies	5 % of the reading
Measuring units	W/m ²
Resolution	1W/m ²
Type of fluid	Air and neutral gas
Operating temperature	From 0 to +50°C
Storage temperature	From -10 to +70°C

Key points of the range:

- passive loop, power supply from 16 to 30 Vdc (2 wires)
- PVC remote probe with 2m cable

Technical features of the SOLAR SENSORS

Measuring range	From 0 to 1500 W/m ²
Spectral response	400-1100 nm
Nominal sensivity	100 mv for 1000 W/m ² STC (Standard Test Conditions 25°C – Solar spectrum AM 1.5)
Response in cosinus	Corrected up to 80 °
Temperature coefficient	+0.1 %/°C
Active surface	1 cm ²
Operating temperature	From -30 to +60 °C
Relative humidity in continuous	100% RH
UV resistance	Very good (PPMA filter)
Mode	Photovoltaic
Material	Silicium polycristallin
Front face	PPMA translucent
Airtightness	PU resin and PPMA and polyacétol housing
Weight	60 g
Dimensions	30 x 32 mm
Protection	IP65



Solar radiation - CR 110

Part numbers



Power supply / Output

A

Active – 24 Vac/Vdc
0-10 V

P

Passive – 16/30 Vdc
4-20 mA

Display

O

With display

N

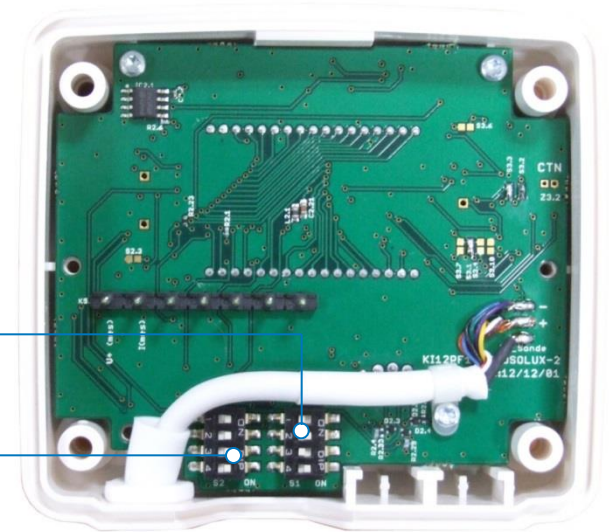
Without display

CR110 – PD : Light transmitter, passive with display

Connectors

Active DIP switch (S1)

Inactive DIP switch



Options

- fixing t-square
- fixing set for solar panel
- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable



Light - LR 110



LR 110

LIGHT

Measuring range
From 0 to 10 000 lux

Light - LR 110

Technical features of SOLAR SENSORS

Measuring units	lux, fc
Measuring range	From 0 to 10000 lux / From 0 to 929 fc
Accuracies	3% of the reading
Resolution	1 lux / 0.1 fc
Type of fluid	Air and neutral gas
Operating temperature	From 0 to +50 °C
Storage temperature	From -10 to +70 °C
Spectral field	As per the standard photopic curve V (λ) NF C 42-710 class C
Estimated of uncertainty on V(λ) (f1)	<10 %
Directional sensivity (f2)	<6 %
Linearity (f3)	<3 %

Key points of the range:

- on remote probe, PVC cable length 2m
- passive loop, power supply from 16 to 30 Vdc (2 wires)



Light - LR 110

Part numbers



Power supply / Output

A

Active – 24 Vac/Vdc
0-10 V

P

Passive – 16/30 Vdc
4-20 mA

Afficheur

O

With display

N

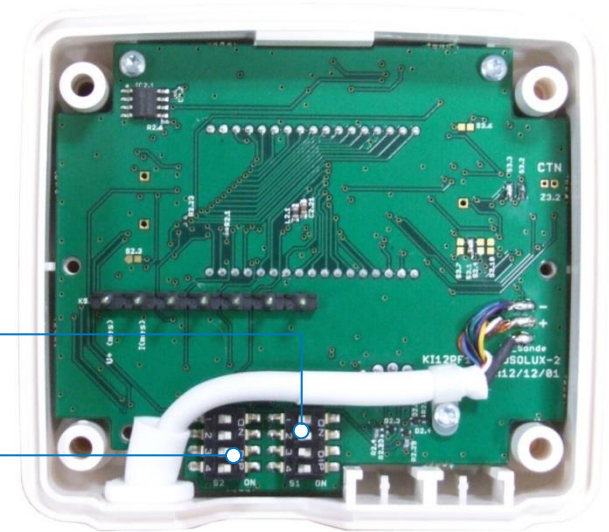
Without display

LR110 – PO : Light transmitter, passive, with display

Connectors

Active DIP switch (S1)

Active DIP switch



Options

- Class 2 power supply, 230 Vac input, 24 Vac output
- LCC-S configuration software with USB cable



CLASSE 210

Pressure - Temperature - Humidity - Air velocity & airflow - CO - CO₂



Applications **industrial field - laboratories**

Key points of the range

Class 210 are equipped with a strong and airtight ABS housing, LCD 2-line large display and configuration keypad on front face.

They can measure several parameters and have advanced calculation function which allows accurate measurements of your process.

- 4-wire analogue output 0-5/10 V or 0/4-20 mA
- 24 Vac/Vdc or 115/230 Vac power supply
- trend indicator



1 or 2 **analogue** output



IP65 ABS **airtight** housing



Lock-system code



Calculation functions



24 Vdc/Vac
115/230 Vac
power supply



Configurable outputs



Remote probes



Housing with built-in probe

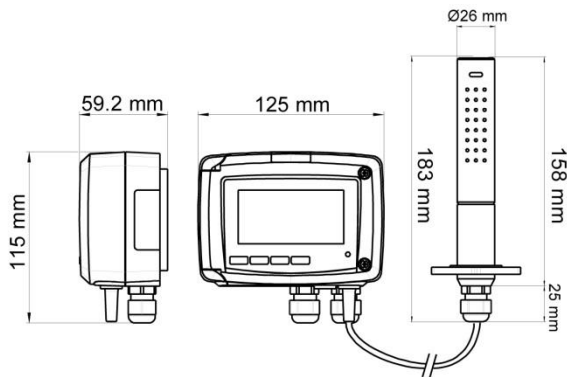
Housing / Display features

ABS VO housing as per UL94

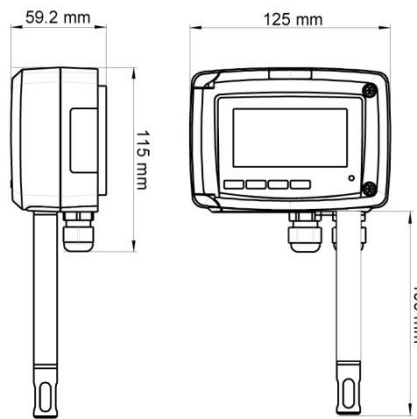
IP65 protection

Compressing fitting for Ø8 mm cable (maximum)

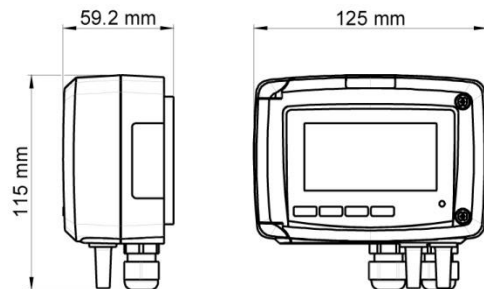
Remote probe



Ambient model



Terminal block model



Fixing plate



Easy and fast mounting with ¼ turn system

2-line 20-digit LCD display

Dimensions : 75x40 mm



*Height of digit
10 mm (values)
5 mm (units)*

Pressure & Temperature - CP 210



CP 211 & CP 212
with
solenoid valve
for self-calibration



CP 210

PRESSURE & TEMPERATURE

Measuring range

From ± 100 Pa to ± 2000 mbar

OPTION : PT100

Pressure & Temperature - CP 210

Technical features

Measuring units	<p>CP211/212/213 : Pa, mmH2O, mbar, inWG, mmHG, daPa, kPa, hPa</p> <p>CP214/215 : mbar, mmH2O, kPa, inWG, mmHG, hPa, daPa, PSI</p> <p>CP211/212/213/214/215 (Pt100 temperature) : °C / °F</p>
Accuracies	<p>CP211/212 : ±0.5% of the reading ±2 Pa</p> <p>CP213 : ±0.5% of the reading ±10 Pa</p> <p>CP214 : ±0.5% of the reading ±0.5 mbar</p> <p>CP215 : ±0.5% of the reading ±2 mbar</p> <p>CP211/212/213/214/215 (Pt100 temperature) : ±0.5 % of the reading ±0.5 °C</p>
Response time	1/e (63%) 0.3 s
Resolution	<p>CP211/212 : 1 Pa ; 0.1 mmH2O ; 0.01 mbar ; 0.01 inWG ; 0.01 mmHG ; 0.1 daPa ; 0.001 kPa ; 0.01 hPa</p> <p>CP213 : 1 Pa ; 0.1 mmH2O ; 0.01 mbar ; 0.01 inWG ; 0.01 mmHG ; 0.1 daPa ; 0.01 kPa ; 0.01 hPa</p> <p>CP214 : 0.1 mbar ; 1 mmH2O ; 0.01 kPa ; 0.1 inWG ; 0.1 mmHG ; 0.1 hPa ; 1 daPa ; 0.01 PSI</p> <p>CP215 : 1 mbar ; 1 mmH2O ; 0.1 kPa ; 0.1 inWG ; 1 mmHG ; 1 hPa ; 1 daPa ; 0.1 PSI</p>
Allowed overpressure	<p>CP211/212 : 21 000 Pa – CP213 : 69 000 Pa</p> <p>CP214 : 1400 mbar – CP215 : 4100 mbar</p>

Key points of the range:

- configurable intermediate ranges
- self-calibration solenoid valve (CP211 & CP212)
- grooved connector Ø6.2 mm (CP211 & CP212/213)
- connector with ring for tubes Ø4x6 mm (CP214/215)
- wiring grommet for cables Ø6 mm (maximum)



Pressure & Temperature - CP 210

Part numbers



Range

CP211 : -100/+100 Pa
 CP212 : -1000/+1000 Pa
 CP213 : -10 000/+10 000 Pa
 CP214 : -500/+500 mbar
 CP215 : -2000/+2000 mbar

Power supply / Output

B **H**

24 Vac/Vdc 115 ou 230 Vac

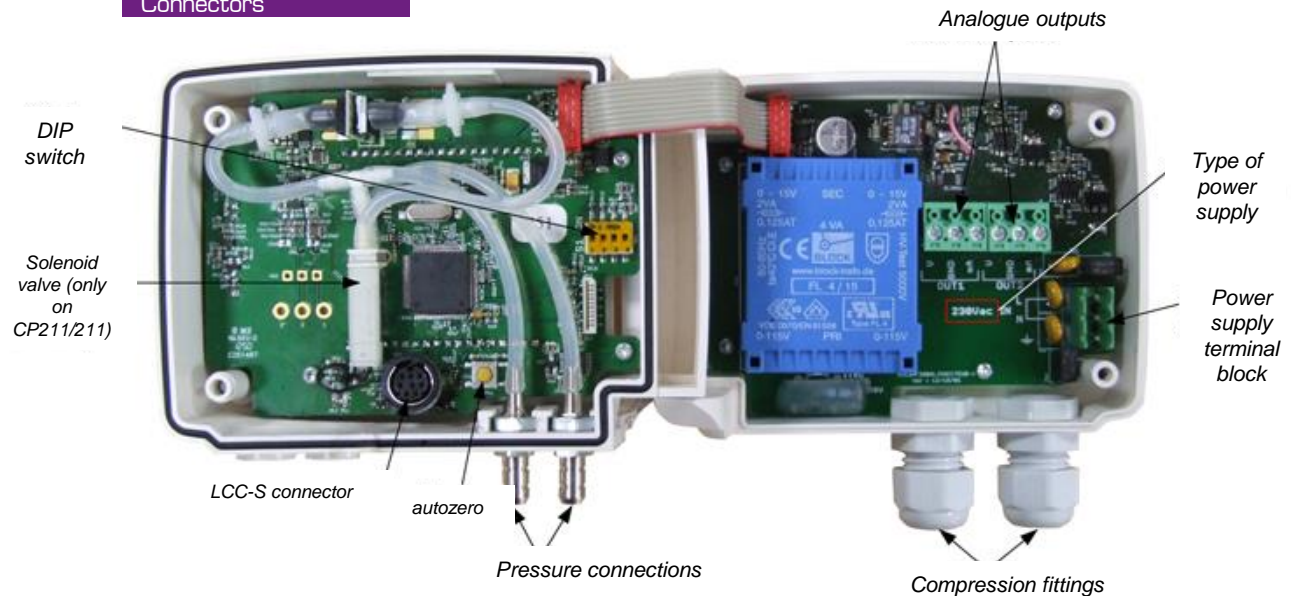
Display

O **N**

With display Without display

CP211 – HD : Transmitter with range from -100/+100 Pa, 115 or 230 Vac, with display

Connectors



Options

- LCC-S configuration software with USB cable
- calibration certificate
- SQR/3 function: square root extraction for air velocity and airflow measurement (exclusively on CP211/212/213)
- connection tubes / connectors / through-connection for wall
- junctions / plug valve / PT100 temperature probes



Temperature - TM 210



TM 210

TEMPERATURE

Measuring range

From -100 to +400°C

Temperature - TM 210

Technical features

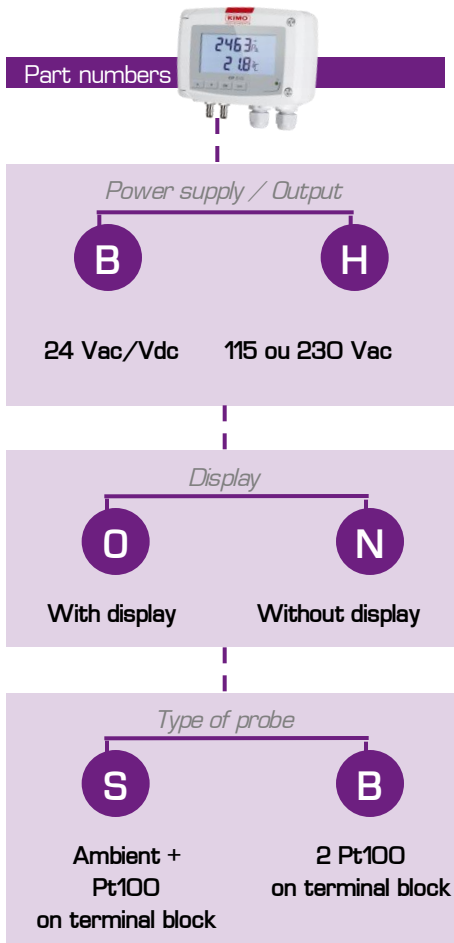
Measuring range	From -20 to +80 °C (ambient model) From -100 to +400 °C (model with terminal block)
Measuring units	°C / °F
Accuracies	±0.3 % of the reading ±0.25 °C
Response time	T ₉₀ = 0.9 second for V _{air} = 1 m/s
Resolution	0.1 °C
Type of sensor	Pt100 1/3 DIN IEC751
Type of fluid	Air and neutral gas

Key points of the range

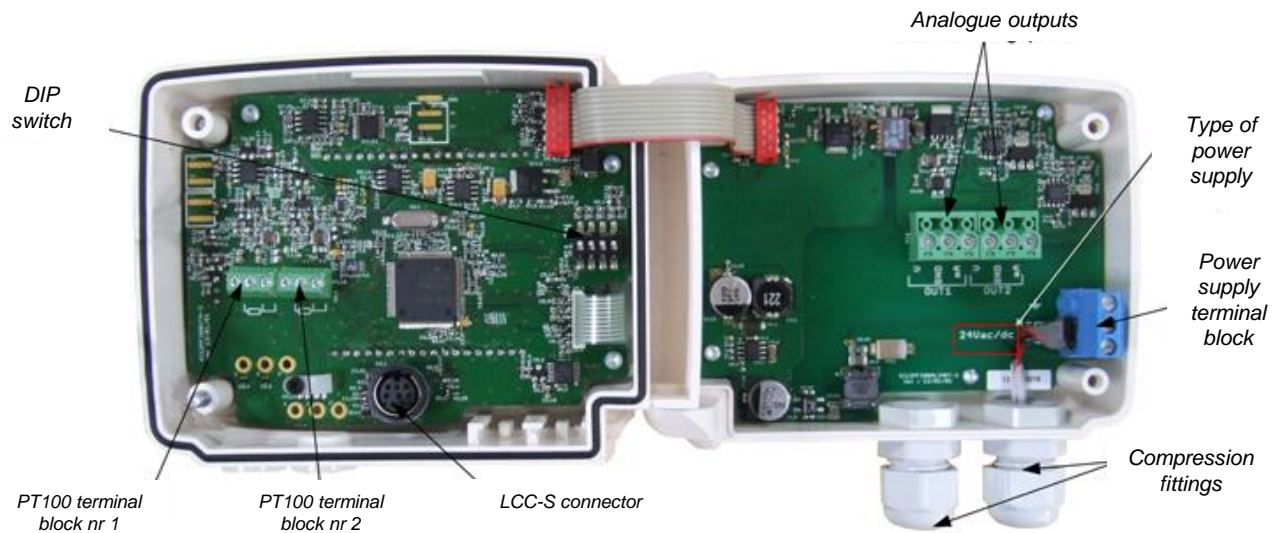
- possibility to connect a second remote probe on terminal block
- display of minimum and maximum values and trend indicator
- different PT100 temperature probes are available on the range from -100 to +400 °C, with different type of probes (angled model made of stainless steel, straight model made of stainless steel, penetration type.....). Feel free to contact KIMO to have a quote of the probe meeting your technical specifications.
- difference of temperature: TM210 can measure up to 2 temperatures (temperature 1 and temperature 2). When 2 temperature probes are connected, the transmitter can display the difference between the 2 measured temperatures.



Temperature - TM 210



Connectors



Options

- LCC-S configuration software with USB cable
- calibration certificate
- PT100 temperature probes

Humidity & Temperature - TH 210



TH 210

HUMIDITY & TEMPERATURE

Measuring range

From 5 to 95 %RH

From -40 to +180°C

Humidity & Temperature - TH 210

Technical features in HUMIDITY

Measuring range	From 5 to 95% RH
Analogue output	Configurable from 0 to 100% RH
Measuring units	% RH
Accuracies	(Repeatability, linearity, hysteresis) $\pm 1.5\%$ RH (if $15^{\circ}\text{C} \leq T \leq 25^{\circ}\text{C}$)
Drift linked to the temperature	$\pm 0.04 \times (T-20)\%$ HR (if $T < 15^{\circ}\text{C}$ or $T > 25^{\circ}\text{C}$)
Resolution	0.1% RH
Uncertainty of adjustment at our factory	$\pm 0.88\%$ RH
Response time	< 10 seconds (from 10 to 80% RH, $V_{\text{air}} = 2 \text{ m/s}$)
Type of sensor	Capacitive
Type of fluid	Air and neutral gas

Technical features in TEMPERATURE

Measuring range	Ambient model: from -20 to $+80^{\circ}\text{C}$ Remote model with Polycarbonate probe: from -20 to $+80^{\circ}\text{C}$ Remote probe with stainless steel probe: from -40 to $+180^{\circ}\text{C}$
Measuring units	$^{\circ}\text{C} / ^{\circ}\text{F}$
Accuracies	$\pm 0.3\%$ of the reading $\pm 0.25^{\circ}\text{C}$
Response time	$T_{90} = 0.9$ seconds for $V_{\text{air}} = 1 \text{ m/s}$
Resolution	0.1°C
Type of sensor	Pt100 1/3 DIN IEC751
Type of fluid	Air and neutral gas



Humidity & Temperature - TH 210

Technical features of the PROBES

White Polycarbonate probe

Measuring range	From -20 to +80 °C
Length of standard probe	100 mm
Length of remote probe	150 or 300 mm (other lengths available on request)
Cable	Silicone Ø4.8 mm, length 2 m (other lengths available on request) <i>Polycarbonates probes are supplied with a perforated protection tip made of Polycarbonate with 25 µ stainless steel filter (part number: EPP2).</i>

316 L stainless steel probe

Measuring range	From -40 to +180 °C
Length of remote probe	150 ou 300 mm (autres sur demande)
Cable	Silicone Ø4.8 mm, longueur 2 m (autres sur demande) <i>Les sondes en inox sont livrées avec un embout de protection ajouré en inox avec filtre inox 25 µ (référence : EPI25).</i>

Key points of the range:

- functions : relative humidity, absolute humidity, dew point, dry and wet temperature, enthalpy
- probes made of stainless steel or Polycarbonate

Class 210 transmitters have 2 analogue outputs corresponding to the 2 displayed parameters. You can activate 1 or 2 outputs, and select on each output: humidity or temperature or below functions*:

Absolute humidity: from 0 to 30 000 g/kg ; unit : 1 g/kg

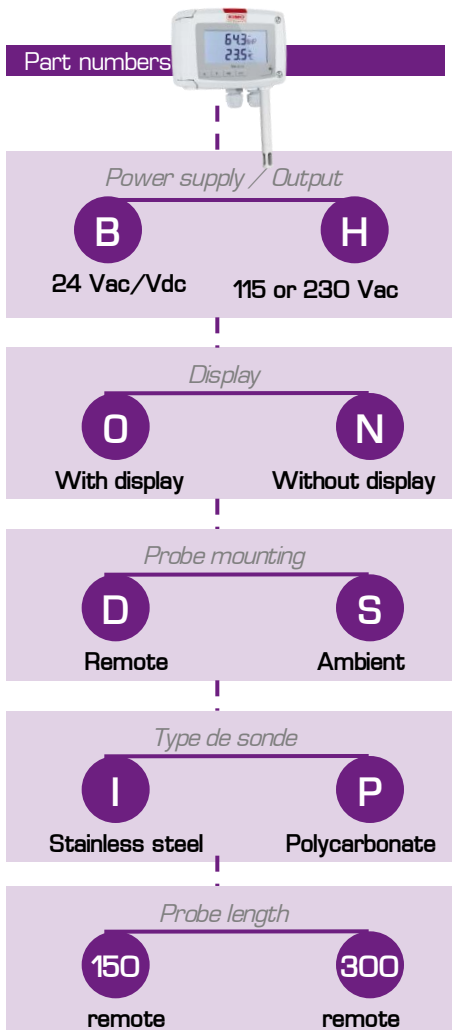
Dew point: from -60 to +100 °Ctd ; unit : 0.1°Ctd / 0.1°Ftd

Wet temperature: from 0 to +102 °C ; unit : 0.1°C / 0.1°F

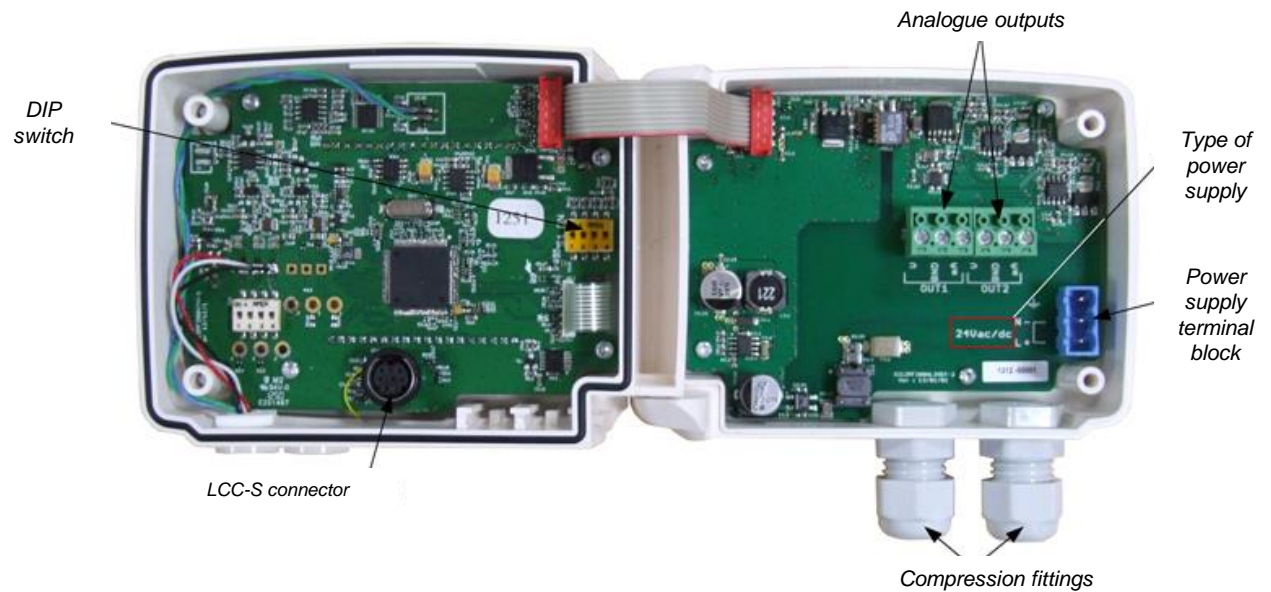
Enthalpy : from 0 to 15 000 Kj/kg ; unit : 0.1 Kj/kg



Humidity & Temperature - TH 210



Connectors



Options

- LCC-S configuration software with USB cable
- calibration certificate
- fixing clamp, sliding connector, compression fitting
- protection tips, wall-mounting plate for remote humidity probe

Air velocity & Temperature - CTV 210



CTV 210

AIR VELOCITY & TEMPERATURE

Measuring range

From 0 to 30 m/s

From to 50°C

Air velocity & Temperature - CTV 210

Technical features in AIR VELOCITY

Measuring range	Standard model: from 0 to 30 m/s Omni-directional model: from 0 to 5 m/s
Measuring units	m/s, fpm, km/h
Accuracies	Standard model: - from 0 to 3 m/s : $\pm 3\%$ of the reading ± 0.03 m/s - from 3 to 30 m/s : $\pm 3\%$ of the reading ± 0.1 m/s Omni-directional model: from 0 to 5 m/s : $\pm 3\%$ of the reading ± 0.05 m/s
Resolution	Standard model: from 0 to 3 m/s : 0.01 m/s and from 3 to 30 m/s : 0.1 m/s Omni-directional model: from 0 to 5 m/s : 0.01 m/s All models: 1 fpm / 0.1 km/h
Response time	T63 = 1.6 s
Type of fluid	Clean air

Technical features in TEMPERATURE

Measuring range	From 0 to +50 °C
Measuring units	°C / °F
Accuracies	$\pm 0.3\%$ of the reading ± 0.25 °C
Response time	T90 = 0.9 seconds for $V_{air} = 1$ m/s
Resolution	0.1 °C / 0.1 °F
Type of sensor	Pt100 1/3 Din selon IEC751
Type of fluid	Air and neutral gas



Air velocity & Temperature - CTV 210

Technical features of the PROBES

Hotwire probe

Material of the probe	316 L stainless steel
Dimensions	Ø 8 mm, length 300 mm
Operating temperature	From 0 to +50 °C
Cable	PVC Ø4.8 mm, length 2 m

Omni-directional probe

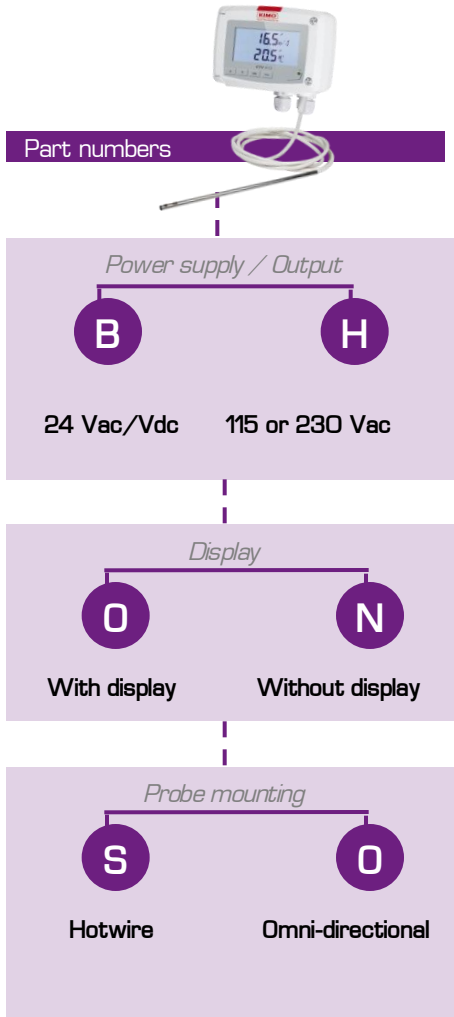
Material of probe	316 L stainless steel
Dimensions	Length: 300 mm ; height : 85 mm
Operating temperature	From 0 to +50 °C
Cable	PVC Ø4.8 mm, length 2 m

Key points of the range:

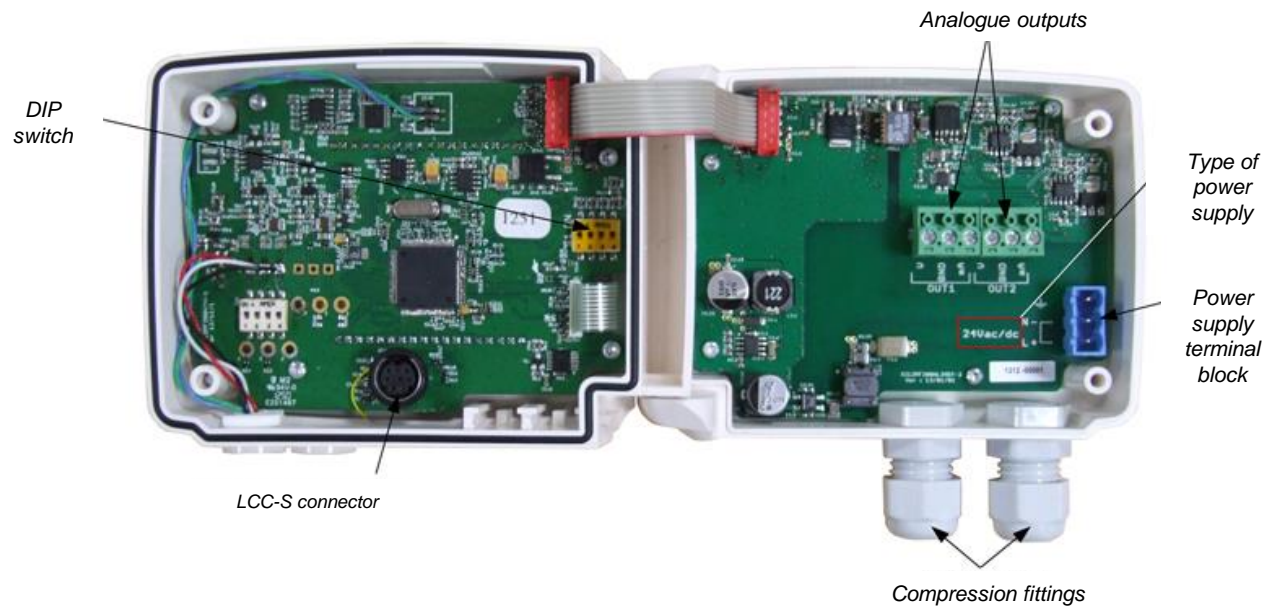
- configurable ranges from 0 to 30 m/s (hotwire probe) and from 0 to 5 m/s (omni-directional probe)
- configurable range from 0 to 50°C in temperature
- airflow function



Air velocity & Temperature - CTV 210



Connectors



Options

- LCC-S configuration software with USB cable
- calibration certificate
- sliding connector; compression fitting
- cleaning air spray for hotwire

CTV210 – B00300 : Air velocity transmitter, 24 Vac/Vdc pwer supply with display, with omni-directional probe length 300 mmm

CO & Temperature - COT 210



COT 210

CO & TEMPERATURE

Measuring range

From 0 to 500 ppm

From 0 to 50°C

CO & Temperature - COT 210

Technical features in CO

Measuring range	From 0 to +500 ppm
Measuring units	ppm
Accuracies	±3 ppm ou 3% of the measured value
Response time	T63 = 35 s
Resolution	0.1 ppm
Type of sensor	Electro-chemical sensor
Type of fluid	Air and neutral gas

Technical features in TEMPERATURE

Measuring range	From 0 to +50 °C
Measuring units	°C / °F
Accuracies	±0.3°C
Response time	T90 = 0.9 second for Vair = 1 m/s
Resolution	0.1 °C / 0.1 °F
Type of sensor	NTC
Type of fluid	Air and neutral gas



CO & Temperature - COT 210

Technical features of the PROBES

Ambient probe

Dimensions

Length: 112 mm ; diameter: 26 mm

Material

polycarbonate

Remote probe

Dimensions

Length: 158 mm (without compression fitting), 183 mm (with compression fitting) ;
Diameter: 26 mm

Material

polycarbonate

Cable

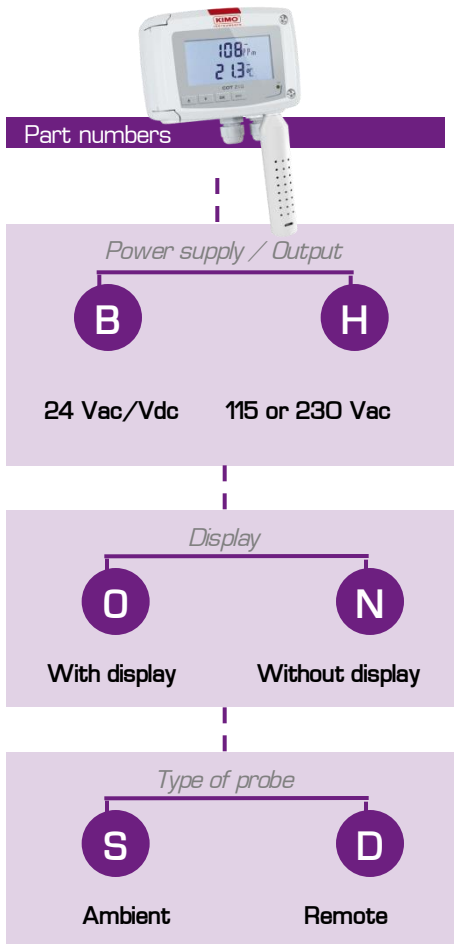
Length: 2 m ; diameter: 4.2 mm

Key points of the range:

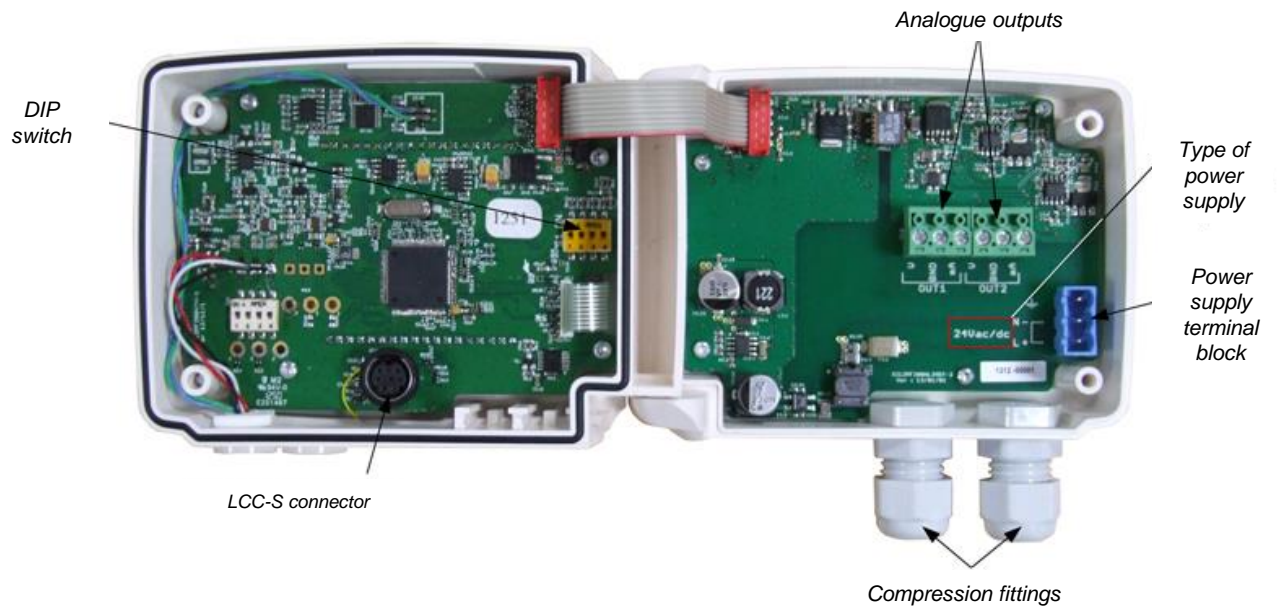
- configurable ranges from 0 to 500 ppm and from 0 to 50°C



CO & Temperature - COT 210



Connectors



Options

- LCC-S configuration software with USB cable
- calibration certificate

COT212 – BOS : CO2 transmitter, 24 Vac/Vdc power supply, with display and ambient probe



CO₂ & Température - COT 212



COT 212

CO₂ & TEMPERATURE

Measuring range

From 0 to 5000 ppm

From 0 to 50°C

CO₂ & Temperature - COT 212

Technical features in CO₂

Measuring range	From 0 to +5000 ppm – Other range available from 0 to 20 000 ppm
Measuring units	ppm
Accuracies	From 0 to 5000 ppm : ±3 % of the reading ±50ppm
	From 0 to 20 000 ppm : ±5 % of the reading ±100ppm
Response time	T63 = 35 s
Resolution	1 ppm
Type of sensor	Infrared sensor
Type of fluid	Air and neutral gas

Technical features in TEMPERATURE

Measuring range	From 0 to +50 °C
Measuring units	°C / °F
Accuracies	±0.3°C
Response time	T90 = 0.9 second for Vair = 1 m/s
Resolution	0.1 °C / 0.1 °F
Type of sensor	NTC
Type of fluid	Air and neutral gas



CO₂ & Temperature - COT 212

Technical features of the PROBES

Ambient probe

Dimensions

Length: 112 mm ; Diameter: 26 mm

Material

polycarbonate

Remote probe

Dimensions

Length: 158 mm (without compression fitting), 183 mm (with compression fitting)
Diameter: 26 mm

Material

polycarbonate

Cable

Length: 2 m ; diameter: 4.8 mm

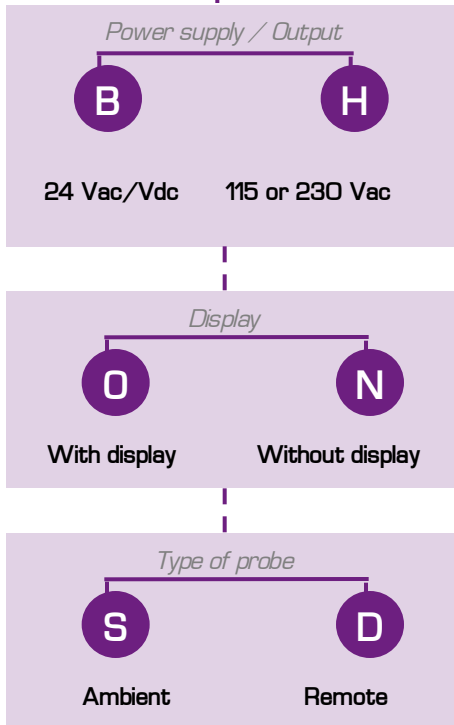
Key points of the range:

- configurable ranges from 0 to 5000 ppm and from 0 to 50°C

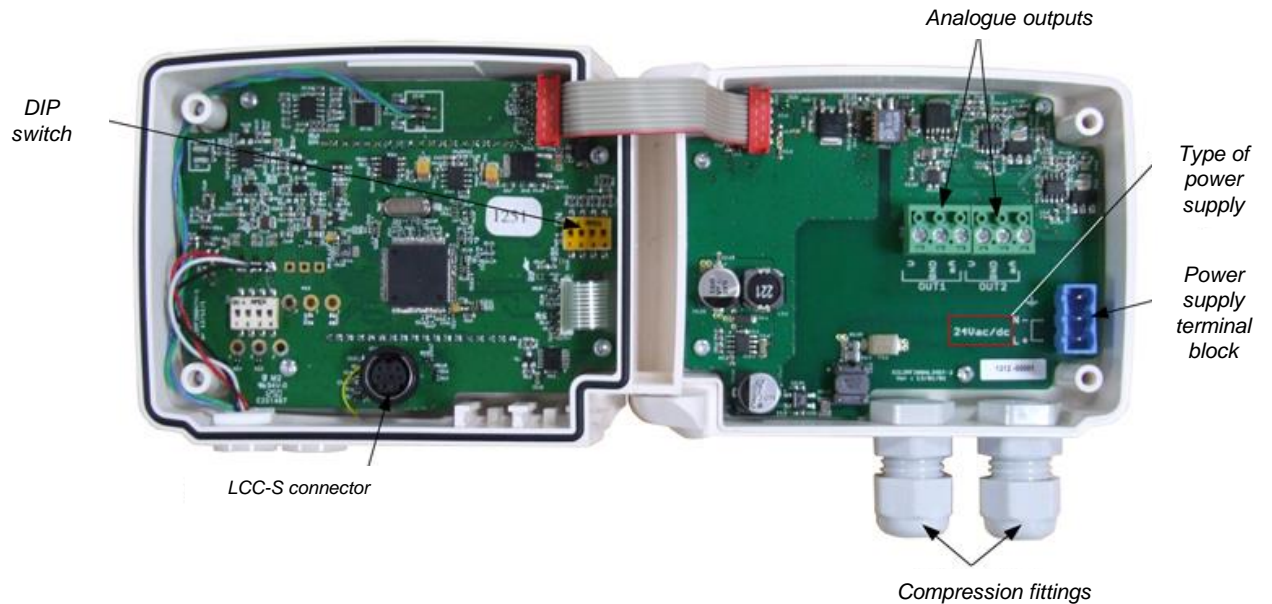


CO₂ & Temperature - COT 212

Part numbers



Connectors



Options

- LCC-S configuration software with USB cable
- calibration certificate
- sliding connector; compression fitting
- cleaning air spray for hotwire

COT210 – BOS : CO transmitter, 24 Vac/Vdc power supply. With display and duct probe

for
CLEANROOMS

KIMO[®]
INSTRUMENTS

 Fabricant Français
www.kimo.fr

CLASS 310

Pressure – Atmospheric pressure – Current voltage - Hygrometry/T° - Temperature - Air velocity/T° - CO/T° - CO₂/T



Applications **industrial field – cleanrooms - laboratories**

Key points of the range

Measurement of many parameters, accuracy of measurements, alarm system: this range is suitable many applications.

This range is perfectly suitable for monitoring process of data acquisition system.

Configuration is easily performed either on front face or via software

- multi-function instruments
- RCR relays
- Ethernet function
- Interchangeable boards and probes



Analogue
outputs



IP65
Airtight
housing



Visual and audible
alarms



Configurable
outputs



MODBUS
RS485 (option)



RCR relays

1

MODELS



Fixed installation

Flush-mount

Large display



2

SPI-2 board

3

INTERCHANGEABLE
Remote probes



Pressure – CPE 310-S



Flush-mount CPE 310-S

PRESSURE

Measuring range

From -100 to +100 Pa

Available on request : from - 1000 to +1000 Pa

Flush-mount multi-function transmitter

Interchangeable probes



Airtight

Stainless steel housing



3 Alarms

Visual and audible



3 analogue

outputs



Output **diagnostic**

**ADJUSTMENT
certificate**



Technical features of the housing

Front face: Brushed 316 L stainless steel

Duct housing: Flush-mount 304 L stainless steel

Protection : IP65 on front face

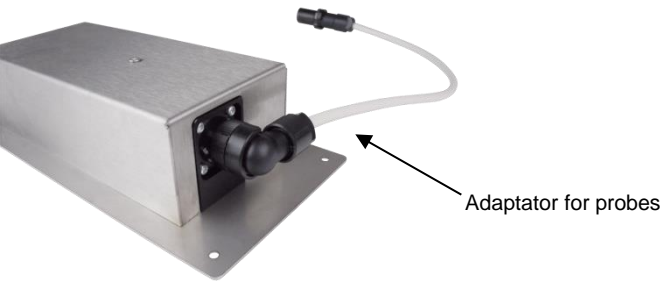
Display : Electro-luminescent alpha-numerical (38 x 48 mm)
Protection screen made of PMMA, with inactinic filter

Height of digits: 14 mm

Duct connectors: grooved Ø 5.2 mm

Weight: 640 g

Innovations and connections

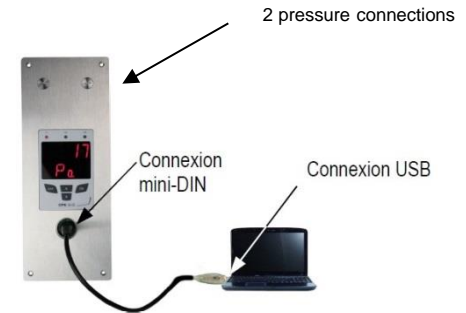


Connection of remote probes

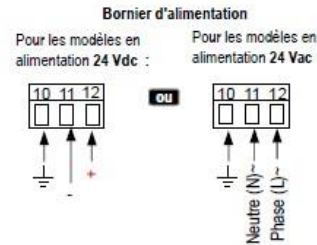
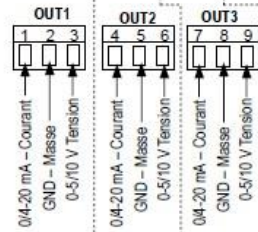
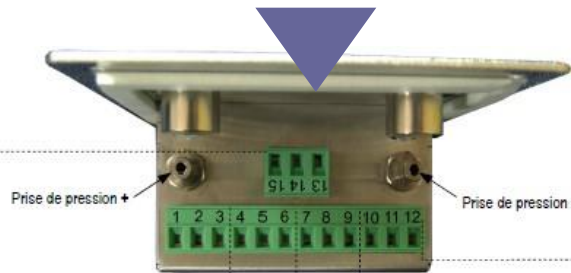
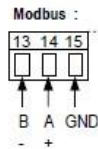
3 STRONG POINTS

- **quick connection of the hygrometry probe**
- **calibration on front face**
- **PC connection**

Connectors



Connections



Electrical connections as per NFC15-100 standards

Pressure

Interchangeable probes



CPE 310-S

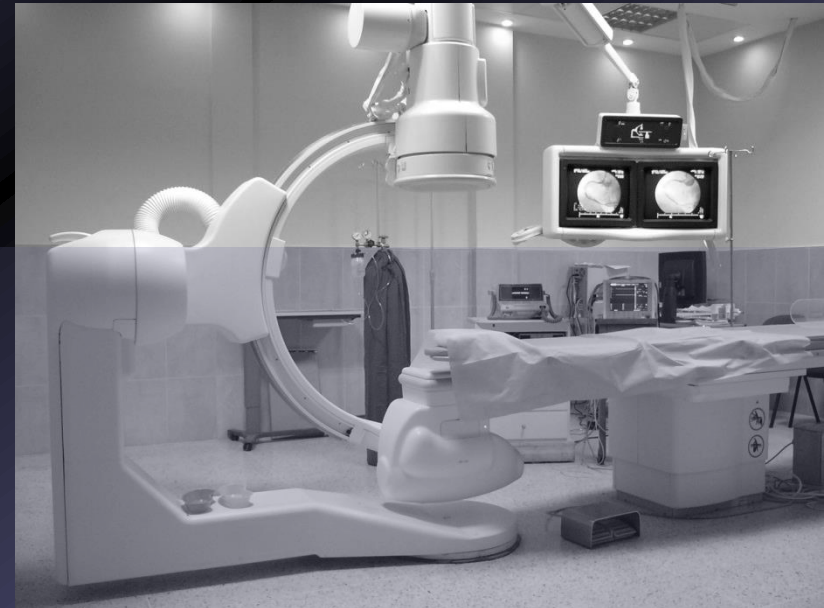
Technical features

Measuring range	From -100 to +100 Pa Other range available from -1000 to +1000 Pa
Measuring units	Pa, mmH ₂ O, mbar, inWG, mmHG, daPa, hPa
Accuracies*	From -100 to +100 Pa : $\pm 2\%$ of the reading ± 1 Pa From -1000 to +1000 Pa : $\pm 2\%$ of the reading ± 0.8 Pa (with HRP option (in: 0.1 Pa))
Zero drift	None (see « self-calibration »)
Resolution	1 Pa, 0.1 mmH ₂ O, 0.01 mbar, 0.01 inWG, 0.01 mmHG, 0.1 daPa, 0.01 hPa
Self-calibration	Manual or automatic (configurable)
Allowed overpressure	25 000 Pa
Response time	1/e (63%) 0.3 s
Type of fluid	Air and neutral gas

Fixing of HYGROMETRY
probes with a simple clip

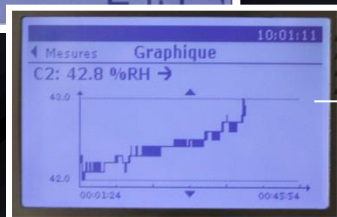


Multi-function transmitter - C 310



Trend indicator

Displays 3 parameters simultaneously



History

Display of graphs

Measured parameters

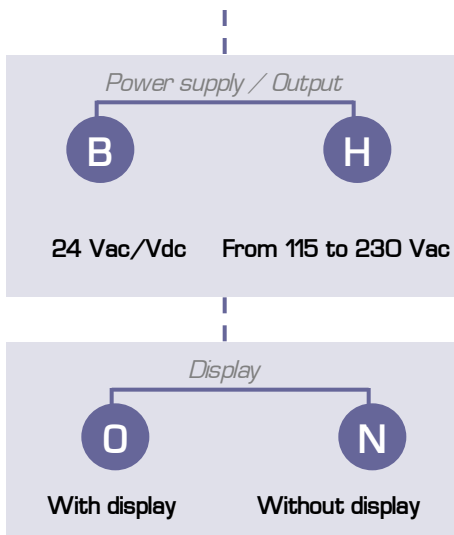
- Pressure
- Atmospheric pressure
- Hygrometry / T°
- Temperature
- Air velocity / T°
- CO/T°
- CO2/T

Multi-function transmitter

C310-B0
C310-BN
C310-H0
C310-HN

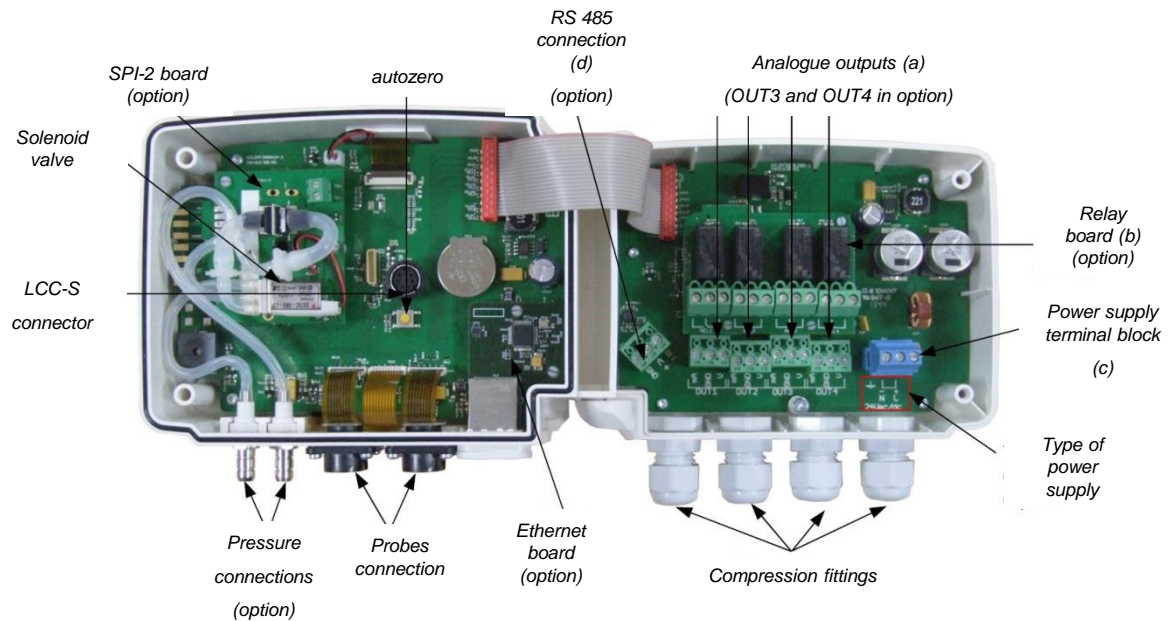


Part numbers



C310-B0: CO transmitter, 24 Vac/Vdc power supply with display

Connectors



Options

- **LCC-S**: configuration software with USB cable
- **SQR/3 function**: square root extraction for air velocity and airflow measurement
- **RS5** : RS 485 Modbus protocol digital output
- **O2S** : 2 additional analogue outputs
- **C4R** : 4-relay board
- **CETHE** : Ethernet network board
- **HRP** : high resolution in pressure (for example: 0.1 Pa) with SPI2-100 board
- calibration certificate

Large multi-function transmitter – CA 310

ADJUSTMENT
certificate



Measured parameters

- pressure
- atmospheric pressure
- current voltage
- hygrometry / T°
- temperature
- Air velocity / T°
- CO/T°
- CO₂/T

Large electro-luminescent multi-function transmitter

Interchangeable probes



Part numbers

CA310-A : 24 Vac

CA310-H : 115-230 Vac

CA 310

Multi-function range according to the probes

- 1 input for interchangeable probe
- 1 location for interchangeable SPI-2 board or MVA
- 24 Vdc/Vac or 115/230 Vac power supply
- outputs diagnostic



3 alarms

visual and audible



3 RCR relays



3 analogue

outputs (4 wires)

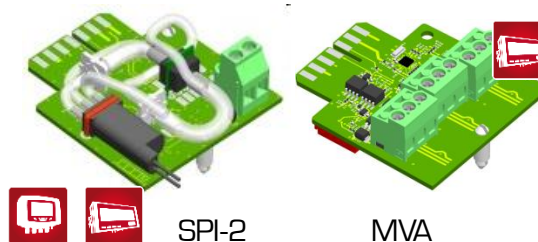


Alternating

display

Key points of the range:

- quick and easy installation
- anti-vibration fixing T-square
- output diagnostic



SPI-2

MVA

Interchangeable boards

Compatible with CA 310 | C 310

Connectors

Housing: swivelling (30°)

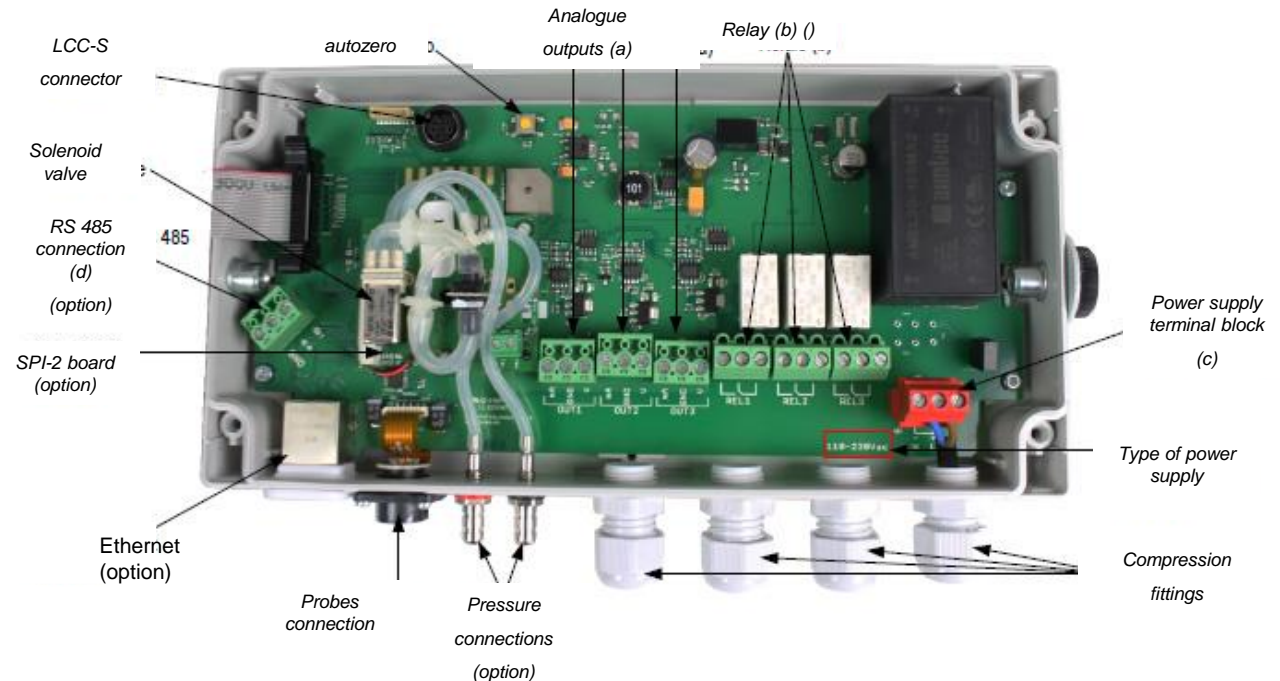
Material: ABS V0 as per UL94

Protection : IP63

Compression fitting:
made of polyamide for Ø 8 mm cable
(max.)

Connectors: grooved Ø6.2 mm

Weight: 1150 g



Options



MODBUS
RS485 (option)

- **LCC-S** : configuration software with USB cable
- **SQR/3 function** : square root extraction for air velocity and airflow measurement
- **RS5** :RS 485 Modbus protocol digital output
- **CETHE** : Ethernet (option)
- **HRP** : High resolution in pressure (for example: 0.1 Pa) with SPI2-100 board
- Calibration certificate

Large electro-luminescent display

Interchangeable probes



Technical features

Power supply	24 Vac / Vdc ± 10 % 115 Vac to 230 Vac ± 10 %, 50-60 Hz
Output	3 x 0/4-20 mA ou 3 x 0-5/10 V (4 wires) or Maximum load: 500 Ohms (0/4-20 mA) / Minimum load: 1 K Ohms (0-5/10 V)
Galvanic isolation	On the outputs
Consumption	10 W or 400 mA (24V)
Relais	3 RCR relays 5 A / 230 Vac
Audible alarm	Buzzer (80 dB)
Conformity	As per CEM 2004/108/CE et NF EN 61010-1 standards
Electrical connection	Terminal block with screws for cable from Ø05 to 2.5 mm or from 30 to 14 AWG
RS485 communication	Numerical: RTU Modbus protocol, communication speed configurable from 2400 to 115200 Bauds (option)
Ethernet communication	Ethernet communication module which allows data transmission, monitoring and maintenance of the transmitters via an Ethernet network in 10 BASE-T and 100 BASE-TX LAN/WAN compatible with TCP/IP protocol (option)

Probes | C310 | CPE310-S | CA310



Measuring ranges



106 – Pressure – Atmospheric pressure – Thermocouple K temperature – Current voltage

107 - Temperature, Hygrometry

stainless steel probes

polycarbonate probes

109 - Temperature, Hygrometry, CO et CO2

110 – Air velocity and temperature

Probes

Omni-directional

Pressure – Atmospheric Pressure – Thermocouple K probe – Current voltage

SPI-2 interchangeable boards with solenoid valve and terminal block for thermocouple K

Pressure



Measuring ranges	SPI2-100 :from 100 to +100 Pa SPI2-500 :from 500 to +500 Pa SPI2-1000 :from 1000 to +1000 Pa SPI2-10000 :from 10000 to +10000 Pa
Accuracy*	SPI2-100 :±0.2% of the reading ±0.8Pa SPI2-500 :±0.2% of the reading ±2Pa SPI2-1000 :±0.2% of the reading ±2Pa SPI2-10000 :±0.2% of the reading ±10Pa
Units and resolution	1 Pa / 0.1 mmHO / 0.01 mbar / 0.01 inWG / 0.01 mmHG / 0.1daPa / 0.001 kPa / 0.01 hPa



Thermocouple K temperature



Measuring range	From -200 to +1300 °C (according to the probe)
Accuracy*	±1.1 °C or ±0.4% of the displayed value
Units and resolution	0.1 °C / 0.1 °F



Atmospheric pressure



Measuring range	From 800 to 1100 hPa
Accuracy*	±2 hPa
Units and resolution	0.1mbar / 0.1mmHG / 0.1hPa

Current voltage



Measuring range	From 0-20 mA / 4-20 mA From 0-2,5 V / 0-10 V
------------------------	---

3 analogue inputs with terminal block



Temperature, Hygrometry

Interchangeable probes – Stainless steel – Standard and remote



Standard probe

Hygrometry / Ambient temperature		SHSI
Measuring ranges	From 5 to 95% RH and from -40 to 180 °C	Sonde standard INOX
Accuracy*	Hygrometry: - Accuracy** (Repeatability, linearity, hysteresis): $\pm 1.5\%$ RH (from 15°C to 25°C) - Uncertainty of adjustment at factory: $\pm 0.88\%$ RH - Drift linked to temperature : $\pm 0.04 \times (T-20) \%$ RH (if $T < 15^\circ\text{C}$ or $T > 25^\circ\text{C}$) Pt100 temperature: $\pm 0.3\%$ reading $\pm 0.25^\circ\text{C}$	Length: 120 mm Diameter : 13 mm with airtight connector $\frac{1}{4}$ turn
Resolution	0.1 % RH / 0.1 °C	

Hygrometry / Temperature		SHDI-150
Measuring ranges	From 5 to 95% RH and from 0 to 50 °C	Polycarbonate remote probe
Accuracy*	Hygrometry : - Accuracy** (Repeatability, linearity, hysteresis): $\pm 1.5\%$ RH (from 15°C to 25°C) - Uncertainty of adjustment at factory: $\pm 0.88\%$ RH - Drift linked to temperature: $\pm 0.04 \times (T-20) \%$ RH (if $T < 15^\circ\text{C}$ or $T > 25^\circ\text{C}$) Pt100 temperature: $\pm 0.3\%$ reading $\pm 0.25^\circ\text{C}$	Length: 150 mm Diameter : 13 mm White silicone cable: 2 m with airtight connector $\frac{1}{4}$ turn
Resolution	0.1 % RH / 0.1 °C	



Stainless steel filter

Hygrometry / Temperature		SHDI-300
Measuring ranges	From 5 to 95%RH and from -40 to +180 °C	Stainless steel remote probe
Accuracy*	Hygrometry: - Accuracy** (Repeatability, linearity, hysteresis): $\pm 1.5\%$ RH (from 15°C to 25°C) - Uncertainty of adjustment at factory: $\pm 0.88\%$ RH - Drift linked to temperature : $\pm 0.04 \times (T-20) \%$ RH (if $T < 15^\circ\text{C}$ or $T > 25^\circ\text{C}$) Pt100 temperature: $\pm 0.3\%$ reading $\pm 0.25^\circ\text{C}$	Length: 300 mm Diameter : 13 mm White silicone cable: 2 m with airtight connector $\frac{1}{4}$ turn
Resolution	0.1 %RH / 0.1 °C	



Stainless steel probe

Temperature, Hygrometry

Interchangeable probes



Hygrometry / Temperature

SHDP-150

Measuring ranges	From 5 to 95% RH and from -20 to +80 °C	Polycarbonate probe
Accuracy*	Hygrometry: - Accuracy** (Repeatability, linearity, hysteresis): ±1.5% RH (from 15°C to 25°C) - Uncertainty of adjustment at factory: ±0.88 % RH - Drift linked to the temperature $\pm 0.04 \times (T-20)$ % RH (if T<15°C or T>25°C) Pt100 temperature: ±0.3% reading ±0.25°C	Length : 150 mm Diameter: 13 mm White silicone cable: 2 m with airtight connector ¼ turn
Resolution	0.1 % RH / 0.1 °C	



Ppolycarbonate probes

Hygrometry / Temperature

SHDP-300

Measuring ranges	From 5 to 95% RH and from -20 to +80 °C	
Accuracy*	Hygrometry: - Accuracy** (Repeatability, linearity, hysteresis): ±1.5%RH (from 15°C to 25°C) - Uncertainty of adjustment at factory: ±0.88 % RH - Drift linked to the temperature $\pm 0.04 \times (T-20)$ % RH (if T<15°C or T>25°C) Pt100 temperature: ±0.3% reading ±0.25°C	Length : 150 mm Diameter: 13 mm White silicone cable: 2 m with airtight connector ¼ turn
Resolution	0.1 % RH / 0.1 °C	



Temperature, Hygrometry, CO and CO2

Interchangeable probes



CO / Temperature

SCCO

Measuring range	From 0 to 500 ppm and from 0 to 50 °C	
Accuracy*	CO : ±3% ppm or 3% of the measured value Temperature NTC: ±0.3 °C	Length : 160 mm Diameter: 26 mm
Resolution	0.1 ppm / 0.1 °C	



Supplied with fixing clamp



Temperature

STD-13

Measuring range	From -50 to +180 °C	
Accuracy*	±0.3% reading ±0.25°C	Longueur : 150 mm
Resolution	0.1 °C	
		avec connecteur étanche ¼ de tour



General use

Air velocity and temperature

Interchangeable remote probes



Air velocity / Temperature

Measuring range	From 0 to 25 m/s / from -20 to +80 °C / from 0 to 99999 m3/h
Accuracy*	Air velocity : from 0.8 to 3 m/s : ±3% of the reading ±0.1 m/s ; from 3.1 to 25 m/s : ±1% of the reading Pt100 temperature : ± 0.4% reading ± 0.3°C Débit : ± 3% reading or ± 0.03* duct surface
Resolution	0.1 m/s / 0.1 °C / 0.1 m3/h

Remote vane probe

Length: 300 mm
Vane diameter : 14 mm
PVC white cable: 2 m
with airtight connector ¼ turn system



Ø 14 mm

SVH-70 | 100

Remote Ø 70 et 100 mm vane remote probes probe
Length: 200 mm / Diameter: 14 mm / White PVC cable: 2 m / with airtight connector ¼ turn

Measuring ranges	From 0 to 35 m/s / from -20 to +80 °C / from 0 to 99999 m3/h
Accuracy*	
Resolution	



Ø 70 | 100 mm

SVS hotwire

Remote hotwire stainless steel probe
Length: 300 mm / Diameter: 8 mm / White PVC cable: 2 m / with airtight connector ¼ turn

Measuring range	From 0 to 30 m/s / from -20 to +80 °C / from 0 to 99999 m3/h
Accuracy*	
Resolution	0.1 m/s / 0.1 °C / 0.1 m3/h



Remark: the airflow function is NOT available on CPE 310 S

Air velocity and temperature

Interchangeable remote probes



Air velocity / Temperature

SVO : Omni-directional

Remote omni-directional hotwire probe made of **STAINLESS STEEL**

Length : 300 mm / Diameter : 8 mm / White PVC cable: 2 m / with airtight connector ¼ turn

Supplied with transport case and tripod



Measuring range	From 0 to 5 m/s / from 0 to +50 °C
Accuracy*	Air velocity : +/-3% reading +/- 0.05 m/s / Pt100 temperature: +/-0.4% reading +/- 0.3°C
Resolution	0.01 m/s / 0.1 °C



Applications CLASS 110 | 210 | 310

Pressure / Temperature / Humidity / Air velocity and airflow / Air quality / Solar / Light

CLASS 110 / 210 / 310 applications

Pharmaceutical laboratories



CLASS 110 / CLASSE 210 applications

Monitoring of stock premises, archives,
museums...



CLASS 110 / CLASS 210 applications

Monitoring of service field, air-conditioning systems



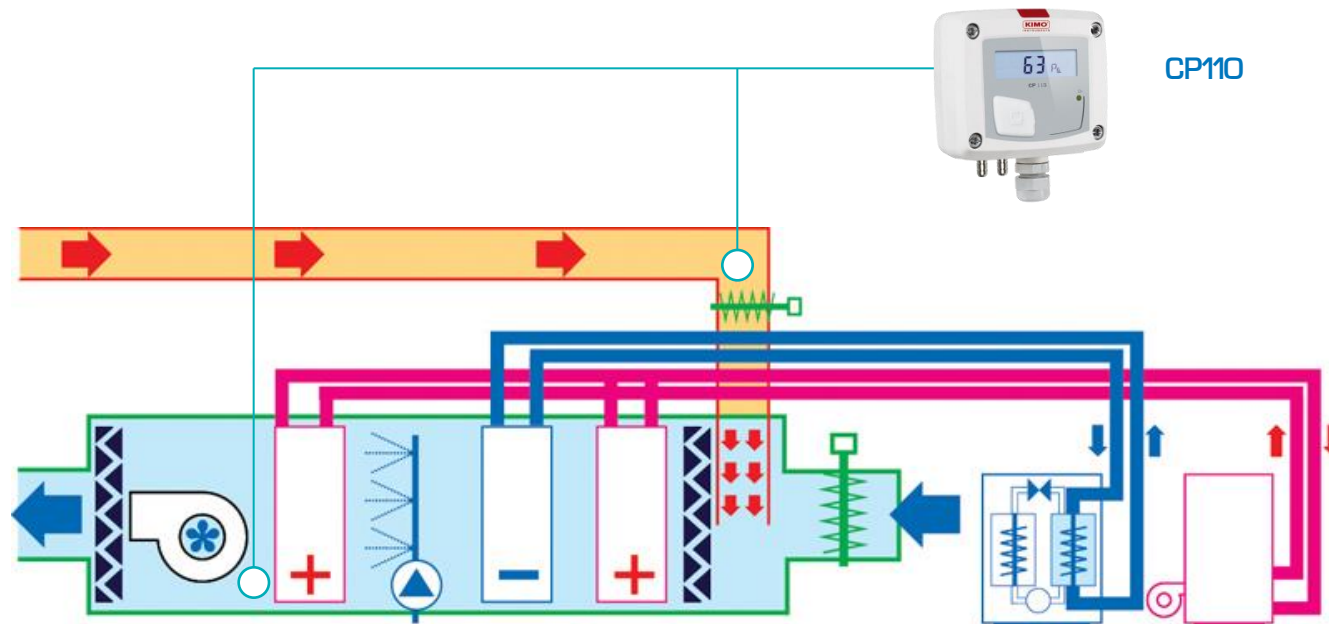
CLASS 110 / CLASS 210 applications

Air handling unit
Service field (ventilation)



CLASS 110 / CLASS 210 applications

Air handling unit



LIGHT applications

Calorie supply in light (greenhouse, blinds)



LR 110



SOLAR applications

Rendement panneaux solaires



CR 110



CP 116



Control of temperature
with contact probe



METEOROLOGICAL applications

Meteo

TH 210



CR 110



CP 116



METEOROLOGICAL applications

High humidity



CLASS 310 applications



CPE 310-S



C 310



CA 310

**CLEAN
ROOMS**

