

## Technical Data Sheet

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

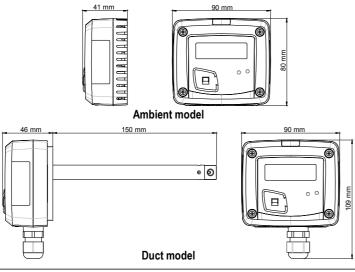
# CO transmitter CO 110

## **KEY POINTS**

- Range from 0 to 500 ppm
- 0-10 V active output, power supply 24 Vac/Vdc (3-4 wires) or 4-20 mA output, passive loop, power supply from 16 to 30 Vdc (2 wires)
- ABS V0 housing, IP65 (depending on model), with or without display
- "1/4 turn" system mounting with wall-mount plate
- Housing with simplified mounting system



## FEATURES OF HOUSING



Material: ABS V0

#### Protection:

- duct model : IP65 - ambient model: IP20

Display: LCD 10 digits. Size: 50 x 17 mm Height of digits: Value: 10 mm; Unit: 5 mm

Cable gland (only for duct model) : for cables  $\emptyset$  8 mm

maximum

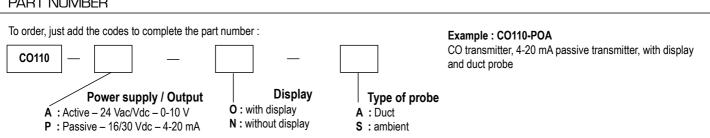
Weight: 138 g (ambient model); 150 g (duct model)

## **TECHNICAL FEATURES**

Unit of measurement	ppm		
Measuring range	From 0 to 500 ppm		
Accuracy*	±3 ppm or 3% of the measured value		
Type of sensor	Electrochemical sensor		
Life-time of the sensor	5 years		
Response time	T63 = 35 s		
Resolution	0.1 ppm		
Type of fluid	Air and neutral gas		
Conditions of use (°C/%RH/m)	From 0 to +50 °C. In non-condensing condition. From 0 to 2000 m.		
Storage temperature	From -10 to +70 °C		

\*All the accuracies indicated in this technical datasheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation

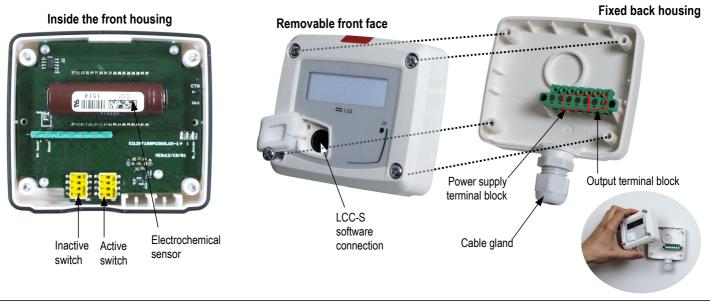
## PART NUMBER



## TECHNICAL SPECIFICATIONS

Output / Power supply	- active 0-10 V (power supply 24 Vac/Vdc ± 10%), 3-4 wires - passive loop 4-20 mA (power supply 16/30 Vdc), 2 wires - Common mode voltage <30 VAC - maximum load : 500 Ohms (4-20 mA) / minimum load : 1 K Ohms (0-10 V)	
Consumption	2 VA (0-10 V) or 0.6 VA (4-20 mA)	
European directives	2004/108/EC EMC; 2006/95/EC Low Voltage; 2011/65/EU RoHS II; 2012/19/EU WEEE	
Electrical connection	Screw terminal block for cables from 0.05 to 2.5 mm <sup>2</sup> or from 30 to 14 AWG Carried out according to the code of good practice.	
Communication to PC	USB-mini DIN cable	
Environment	Air and neutral gas	

## CONNECTIONS

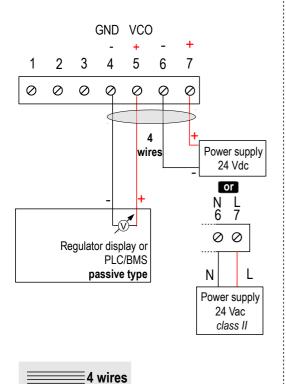


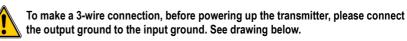
## ELECTRICAL CONNECTIONS - as per NFC15-100 standard

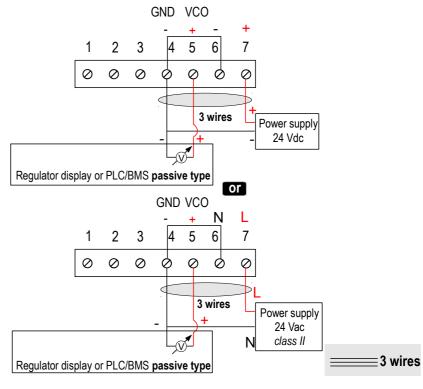


This connection must be made by a qualified and trained technician. To make the connection, the transmitter must not be energized.

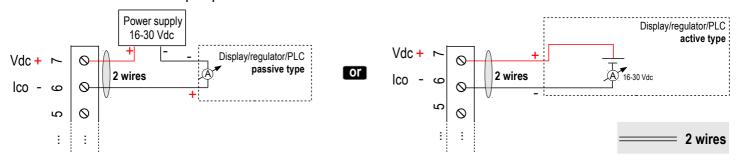
For CO110-A models with 0-10 V output - active:







For CO110-P models with 4-20 mA output – passive :



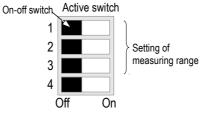
## SETTINGS AND USE OF THE TRANSMITTER

### Configuration



To configure the transmitter, it must not be energized. Then you can make the required settings thanks to the DIP switches as shown on the drawing below. When the transmitter is configured, you can power it up.

To configure the transmitter, unscrew the 4 screws of the housing then open it. DIP switches allowing the different settings are accessible.



## Measuring range setting

To set a measuring range, put the on-off switches 2, 3 and 4 as shown below:

Measuring ranges	Configuration via PC (from 0 to 500 ppm by default)	From 0 to 100 ppm	From 0 to 200 ppm
Combinations	1 2 3 4	1 2 3 4	1 2 3

Configuration via PC

Switch 1

2

3

## CONFIGURATION VIA LCC-S SOFTWARE (optional)

## An easy and friendly configuration with the software!

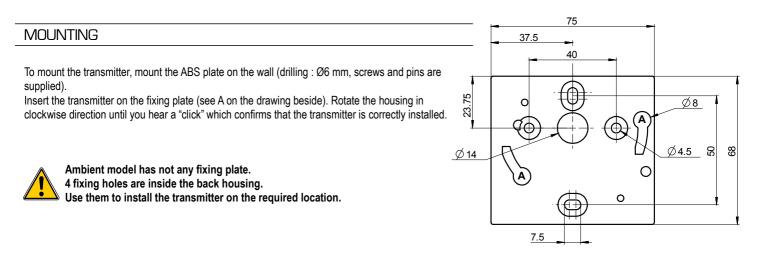
It is possible to configure intermediary ranges.

Attention: the minimum difference between the minimum scale and the maximum scale is 20.

Example : for a 0-500 ppm transmitter, the minimum delta is 20 ppm. So the transmitter could be configure from 0 to 70 ppm from 0 to 20 ppm.

- To access to the configuration via software :
  - Set the switch as shown beside.
  - Connect the cable of the LCC-S to the connection of the transmitter.
- To configure the transmitter, please refer to the LCC-S user manual.

Caution: The configuration of the parameters can be done either by DIP switch, or by software (you cannot combine both solutions).

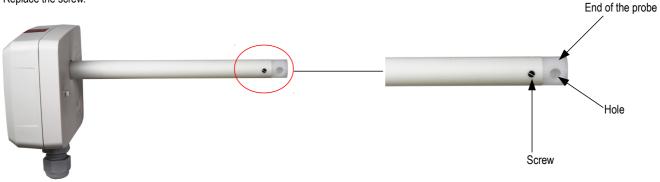


## POSITIONING OF THE PROBE

For duct models, the positioning of the probe is important to get accurate measurements: the hole located next to the screw at the end of the probe must face the air flow.

Procedure to modify the positioning of the end of the probe:

- Unscrew the screw.
- Turn the end of the probe : the hole must face the air flow.
- Replace the screw.



## **MAINTENANCE**

Please avoid any aggressive solvent. Please protect the transmitter and its probes from any cleaning product containing formol, that may be used for cleaning rooms or ducts.

## OPTIONS AND ACCESSORIES

- KIAL-100A: Power supply class 2, 230 Vac input, 24 Vac output
- KIAL-100C: Power supply class 2, 230 Vac input, 24 Vdc output
- LCC-S: configuration software with USB cable



Only the accessories supplied with the device must be used.

## PRECAUTIONS FOR USE

Please always use the device in accordance with its intended use and within parameters described in the technical features in order not to compromise the protection ensured by the device.



Once returned to KIMO, required waste collection will be assured in the respect of the environment in accordance with European guidelines relating to WEEE.

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