

# **Technical Data Sheet**

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

# CO meter **CO 110**

# **KEY POINTS**

- CO max display

- Easy to use

- Two configurable alarm thresholds

- Adjustable backlight

# **TECHNICALS FEATURES**

Measuring elements	CO : electrochemical sensor Température : NTC		
Display	4 lines, LCD technology. Sizes 50 x 36 mm 2 lines of 5 digits with 7 segments (value) 2 lines of 5 digits with 16 segments (unit)		
Cable	Retractable, lenght. 0.45 m, extension : 2.4 m		
Housing	ABS, protection IP54		
Keypad	5 keys		
European directives	2004/108/EC EMC ; 2006/95/EC Low Voltage ; 2011/65/EU RoHS II ; 2012/19/EU WEEE		
Power supply	4 batteries AAA LR03 1.5 V		
Battery life	200 hours		
Ambience	Neutral Gas		
Conditions of use (°C, %RH, m)	From 0 to +50 °C. In non condensing conditions. From 0 to 2000 m.		
Storage temperature	From -20 to +80 °C		
Auto shut-off	Adjustable from 0 to 120 min		
Weight	310 g		



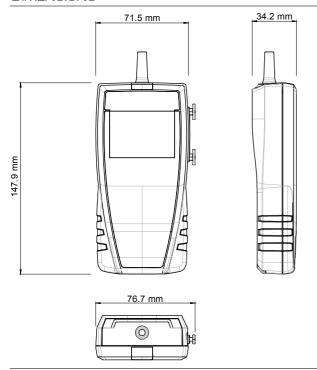
Measuring units	Measuring range	Accuracy <sup>1</sup>	Resolution	
СО				
ppm	From 0 to 100 ppm From 100 to 500 ppm	±3 ppm ±3 % of reading	0,1 ppm	
Ambient temperature				
°C, °F	From - 20 to +80 °C	±0.4% of reading ±0.3°C	0,1°C	

<sup>&</sup>lt;sup>1</sup>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



# **FUNCTIONS**

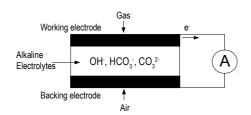
- CO maximum
- 2 configurable alarms
- Selection of temperature units
- Hold function
- Display of minimum and maximum values
- Adjustable and reseatable Auto shut-off
- Backlight



#### **OPERATING PRINCIPLES**

#### **Electrochimical sensor**

When CO goes through an alectrolyte solution, it intercedes in the reactions of electrolyse and produces an increase of the quantity of produced electrons. The source electrons of a current which is around microampere are directly proportional to CO concentration.



#### Thermometer: NTC probe

Negative temperature coefficient probes are thermistors with a resistance that decreases with temperature according to the equation below:

$$R_{(T)} \! = \! R_{(T0)} \! e^{-\left(\frac{\alpha}{100} \times (T_0 \! + 273.15)^2 \times (\frac{1}{T + 273.5} - \frac{1}{T_0 + 273.5})\right)}$$

RT= resistance sensor value at temperature T R(T0)= resistance sensor value at reference temperature T<sub>0</sub>

T and  $\mathrm{T_0}$  in  $^{\circ}\mathrm{C}$ 

 $\alpha$  et  $T_{\mbox{\tiny 0}}$  sensor specific constants

# SUPPLIED WITH

Instruments are supplied with:

- Calibration certificate\*
- Transport case (ref : ST 110)



\*Except class 110 S

#### **ACCESSORIES**

**CQ 15**: Magnetic protective housing



RTE: Telescopic extension, length 1m, with index at ±90°

MT 51 : ABS transport case



#### MAINTENANCE

We carry out calibration, adjustment and maintenance of your instruments to guarantee a constant level of quality of your measurements. As part of Quality Assurance Standards, we recommend you to carry out a yearly checking.

#### **GUARANTEE**

Instruments have 1-year guarantee for any manufacturing defect (return to our After-Sales Service required for appraisal).

Distributed by:

e-mail: export@kimo.fr