

CO meter
CO 110



KEY POINTS

- CO max display
- Two configurable alarm thresholds
- Easy to use
- 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, 0.45 m length, extension: 2.4 m
Housing	ABS, protection IP54
Keypad	5 keys
European directives	2014/30/EU EMC; 2014/35/EU 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



SPECIFICATIONS

Measuring units	Measuring range	Accuracy**	Resolution
CO			
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

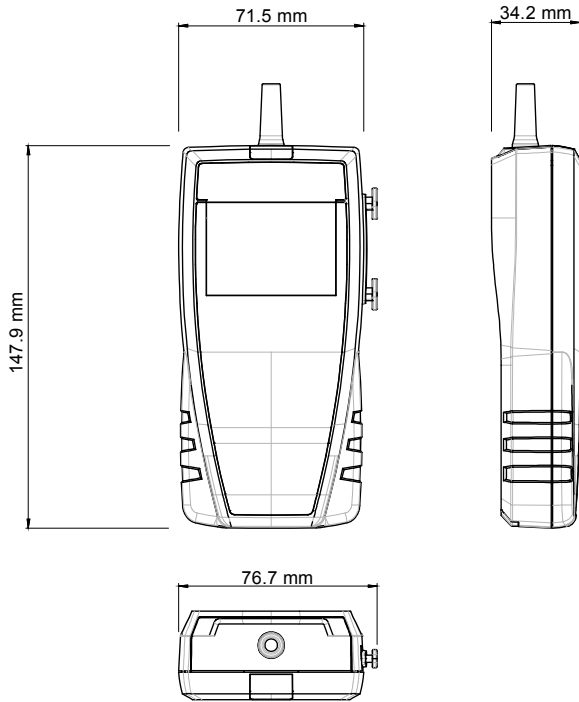
*Except class 110 S

**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
- Configurable Auto shut-off
- Backlight

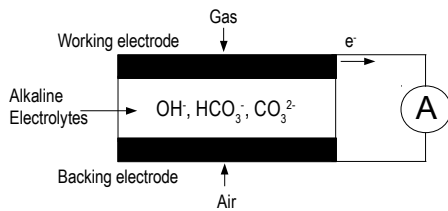
DIMENSIONS



OPERATING PRINCIPLES

Electrochemical sensor

When CO goes through an electrolyte 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:

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

R_T = resistance sensor value at temperature T

$R(T_0)$ = resistance sensor value at reference temperature T_0

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

α et T_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 $\pm 90^{\circ}$

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).