

SMART P-1

toxic gas detection in car parks

The SMART P-1 gas detector is designed to be installed in car parks. It is compliant with the EN 50545-1 standard, which defines the requirements for the detection of CO and NO₂ in car parks and tunnels.

For the detection of these gases, the electrochemical cell is used and it is housed in the polycarbonate head. The EN 50545-1 standard defines the values of the alarm thresholds for CO and NO₂, moreover the activation of the alarms is a function of the time-weighted average of the detected gas concentration.

The SMART P-1 has a 12-24 Vdc power supply and an RS485 digital signal output. The polycarbonate enclosure has a total size of 106 x 117 x 54 mm, on the upper side it has two M20 cable glands.



Sensor

Application	Car parks
Sensing element	Electrochemical cell
Predicted sensor lifetime	EC: 2 / 3 years
Gas detected	CO, NO ₂
Fullscale	CO: 0 - 300 ppm NO ₂ : 0 - 30 ppm

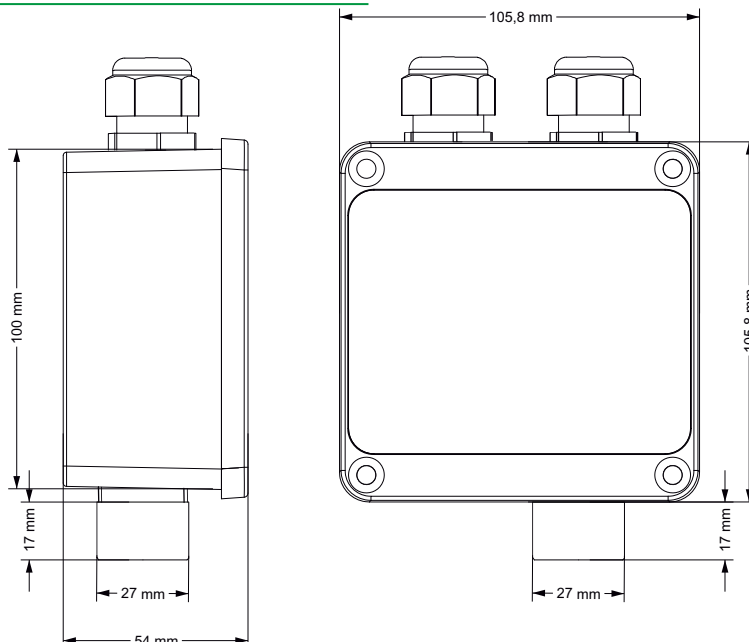
Electrical data

Power supply	12-24 Vdc
Output	RS485 serial output
Absorption	32 mA at 24 Vdc
Optical indications	-
Acoustic indications	-
Hall effect sensor	-

Environmental conditions

Storage temperature	0 / +20°C up to six months
Operating temperature	-20 / +50°C
Operating humidity	15 / 90 %RH

Mechanical drawings



External case

Material	Enclosure: Polycarbonate Sensor head: Polycarbonate
Dimensions	Box: 100 x 100 x 52 mm Cover: 105.8 x 105.8 x 7.8 mm
Weight	250 g
Cable entries	2 x M20
IP grade	IP55

Compliance

EMC	EN 50270:2015
Car park standard	EN 50545-1:2011

Product codes

S2398CO	CO (0-300 ppm) gas detector
S2399ND	NO ₂ (0-30 ppm) gas detector