



Key features

- Digital output
- Pre-calibrated
- Proprietary optical sensor technology
- Pumped or Diffusive air flow configuration
- Protective case with slim profile

Detection of NO₂ in ambient air

Insplorion InAir-NO2 is an optochemical sensor based on Insplorion's patented Nanoplasmonic Sensing technology (NPS). The active sensor element is a semi-transparent glass chip covered with plasmonic nanostructures and a functional coating. Readout is accomplished using light-emitting diodes and photosensitive detectors to measure the interaction between the sensor element and NO₂ gas molecules. Concentrations in the range of a few $\mu\text{g}/\text{m}^3$ (ppb) can be detected.

InAir-NO2 is a miniaturized high performance sensor that enables cost effective detection and measurement of NO₂ levels in ambient air.

The InAir-NO2 is available for both diffusive measurements and with connections for pumped air flow. Both configurations come with a precalibrated sensor element.

The sensor can be calibrated for optimal performance at a certain temperature and humidity. The drift and temperature compensated signal is presented in ppb by volume [1 ppb NO₂ = 1.88 $\mu\text{g}/\text{m}^3$]. For purposeful and adaptive calibration at a certain location of interest the raw uncalibrated signal is also presented.

Air Pollution Sensor Insplorion INAIR-NO2

For detection of NO₂ in ambient air



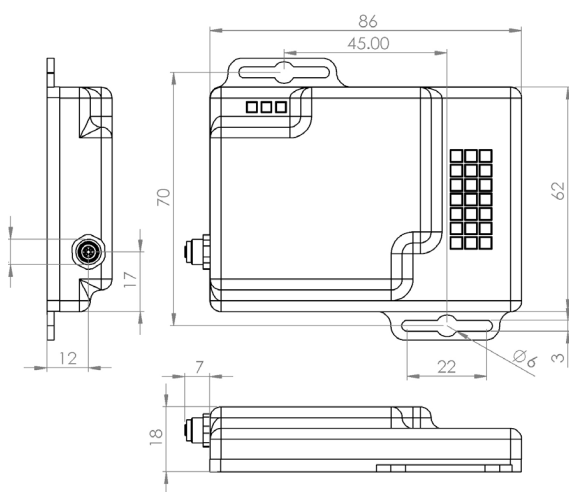
Dimensions

Diffusion measurements (Standard)

Order code: INAIR-NO2-DIF

Size: 86x62x18 mm
Weight: 150 g

Water-proof filters

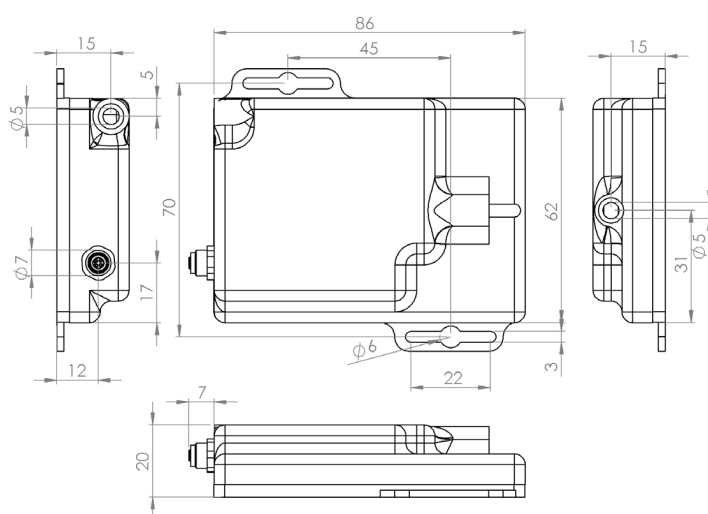


Pumped air flow

Order code: INAIR-NO2-TUB

Size: 86x62x20 mm
Weight: 160 g

Connectors for 5 mm outer diameter soft tubing



Connection

4-pin connector

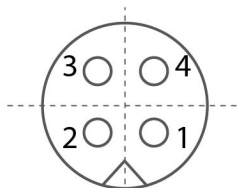
Recommended:

0.25 mm² (AWG 24)
binder 707-series M5 connector Sensor module connector

Corresponding cable with welded plug:
manufacturer order-no: 79-3107-32-04
Length: 2 m
Order code: INAIR-CAB-42S

Optional RS232-USB adapter (for cable mount)
Order code: INAIR-ADA-1

Optional MODBUS adapter (for cable mount)
Order code: INAIR-ADA-2



Pin-out	Colour	
1	Brown	+5 V
2	White	Rx (3.3 V)
3	Blue	Tx (3.3 V)
4	Black	Ground