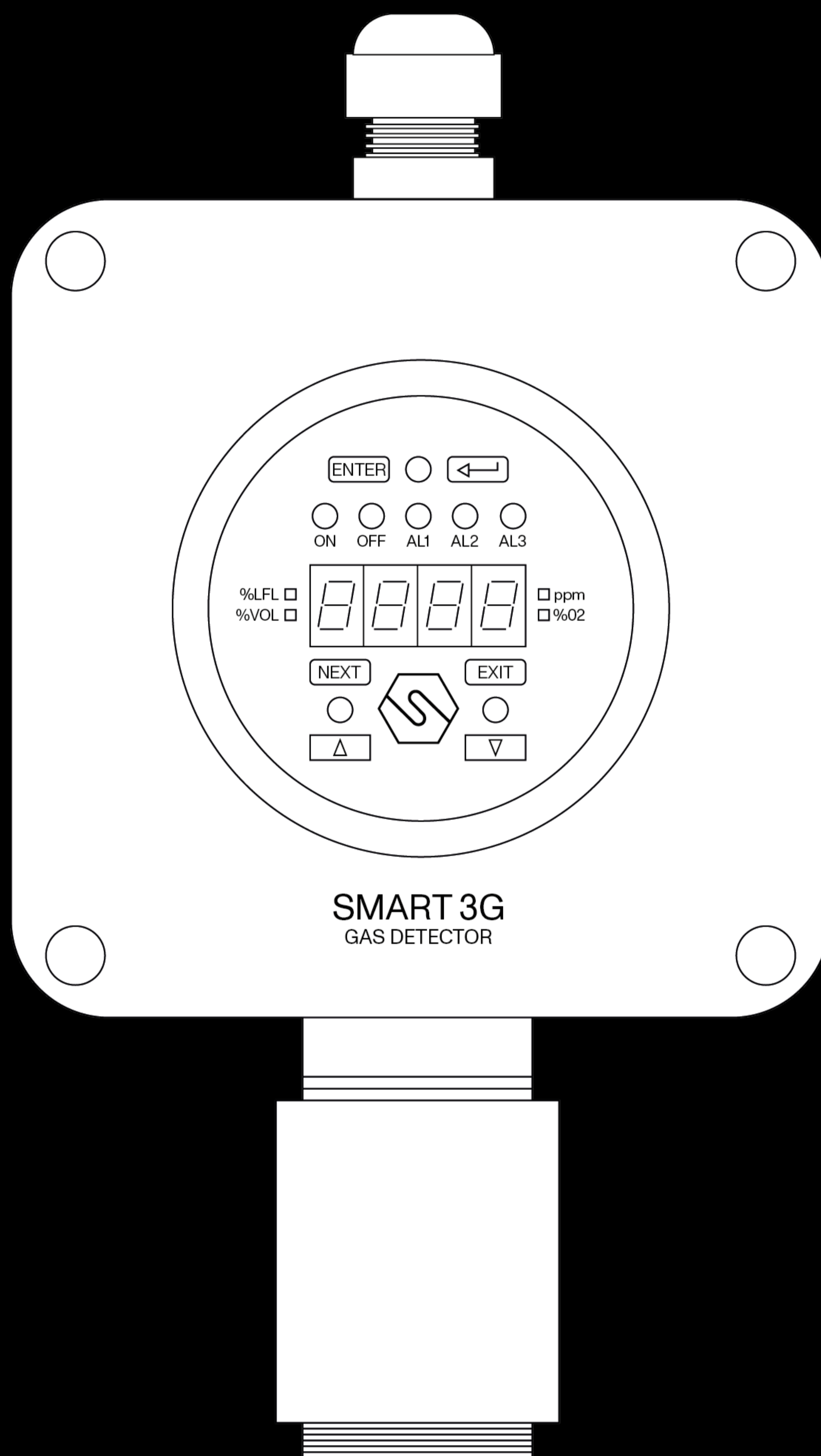


SMART 3G-D3

With photoionizator sensor



Datasheet





SMART3G-D3 gas detector is designed to meet industrial requirements; the enclosure is explosion proof and can be installed in ATEX Zone 2 and, when equipped with dust adapter, in Zone 22.

The sensing element is placed in the stainless steel head with 47.5 mm diameter. The PID sensors employed for the Volatile Organic Compound are able to detect lower gas concentration than most of other technologies.

The gas detector has a 12-24 Vdc power supply and a standard 4-20 mA 3-wires output and three relays. Optionally, the SMART3G-D3 can be equipped with serial RS485 communication.

The enclosure has dimensions 106 x 106 x 81 mm, on the upper side there's a M20 cable gland. The SMART3G-D3 features a 7-segment display for real-time concentration visualization and Hall effect sensors for non-intrusive field calibration.

The gas detector is certification pending and it can be ATEX marked as follows:

CE 0722 Ex II 2G Ex db IIC T5 Gb

Or, when equipped with dust adapter:

CE 0722 Ex II 2GD Ex db IIC T5 Gb
Ex tb IIIC T100°C Db
IP65

Sensor

Application	Industrial area, ATEX Zone 2 e Zone 22 (when equipped with dust adapter, optional)
Sensing element	Photoionizator (PID)
Predicted sensor lifetime	>5 years
Lamp lifetime	10000 hours
Gas detected	Volatile Organic Compounds (VOC) having photoionization potential up to 10.6 eV
Full scale	0 - 20 ppm (Isobutylene) 0 - 200 ppm (Isobutylene) 0 - 2000 ppm (Isobutylene)

Electrical data

Power supply	12-24 Vdc
Output	Analogue 4-20 mA output; 3 relays; serial RS485 output (optional)
Maximum dissipated power	5.4 W
Relays contact ratings	1.0 A at 24 Vdc
Optical indications	7-segment display, 5 status LED and 4 intelligent LED
Acoustic indications	-
Hall effect sensor	Three sensors for calibration by magnet



Environmental conditions

Operating and storage temperature
 Versions with FS 200 ppm: -40 / +65°C
 Versions with FS 20 and 2000 ppm: -20 / +60°C

Operating humidity
 (non condensing)
 Versions with FS 20 and 200 ppm: 5 / 95% RH
 Versions with FS 2000 ppm: 5 / 90% RH @40°C

External case

Material
 Enclosure: Aluminium
 Sensor head: stainless steel

Protection mode
 Ex e: Increased safety protection mode
 Ex nC: Enclosed equipment protection mode
 Ex d : Explosion proof enclosure
 Ex t : Equipment dust ignition protection by enclosure (when equipped with dust adapter, optional)

Dimensions
 106 x 106 x 81 mm

Weight
 1210 g

Cable entries
 1 x M20

IP grade
 IP55 (certification pending)

Compliance

EMC
 EN 61000-6-3:2007 + A1:2011; EN 50270:2015

ATEX
 (certification pending)
 ATEX directive 2014/34/EU
 EN IEC 60079-0:2018
 EN 60079-1:2014
 EN 60079-7:2015
 EN 60079-15:2010
 EN 60079-31:2014

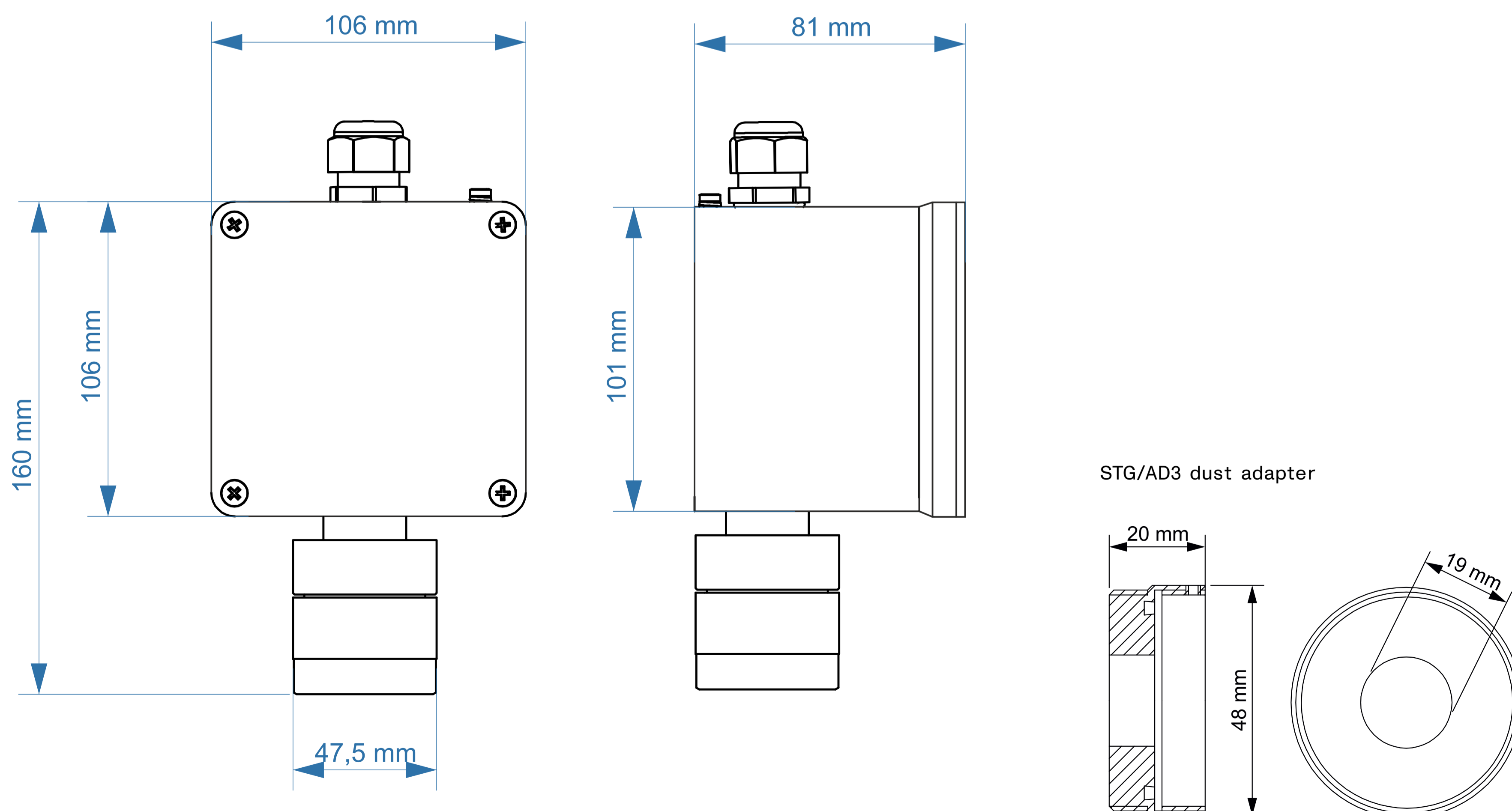


Product codes

Volatile Organic Compounds detectors, 12-24 Vdc

S3542IL	Isobutylene (0-20 ppm) gas detector
S3546IL	Isobutylene (0-200 ppm) gas detector
S5123IL	Isobutylene (0-2000 ppm) gas detector
S5022TO	Toluene (0-10 ppm) gas detector
S5026TO	Toluene (0-100 ppm) gas detector
S5030TO	Toluene (0-1000 ppm) gas detector
S5022BZ	Benzene (0-10 ppm) gas detector
S5026BZ	Benzene (0-100 ppm) gas detector
S5030BZ	Benzene (0-1000 ppm) gas detector

Mechanical drawings



Contatti/Contacts

Viale della Repubblica, 48
20007 Cornaredo (MI) – ITALY

+39 0293548155
sales@sensitron.it
sensitron.it

Sensitron S.r.l.

