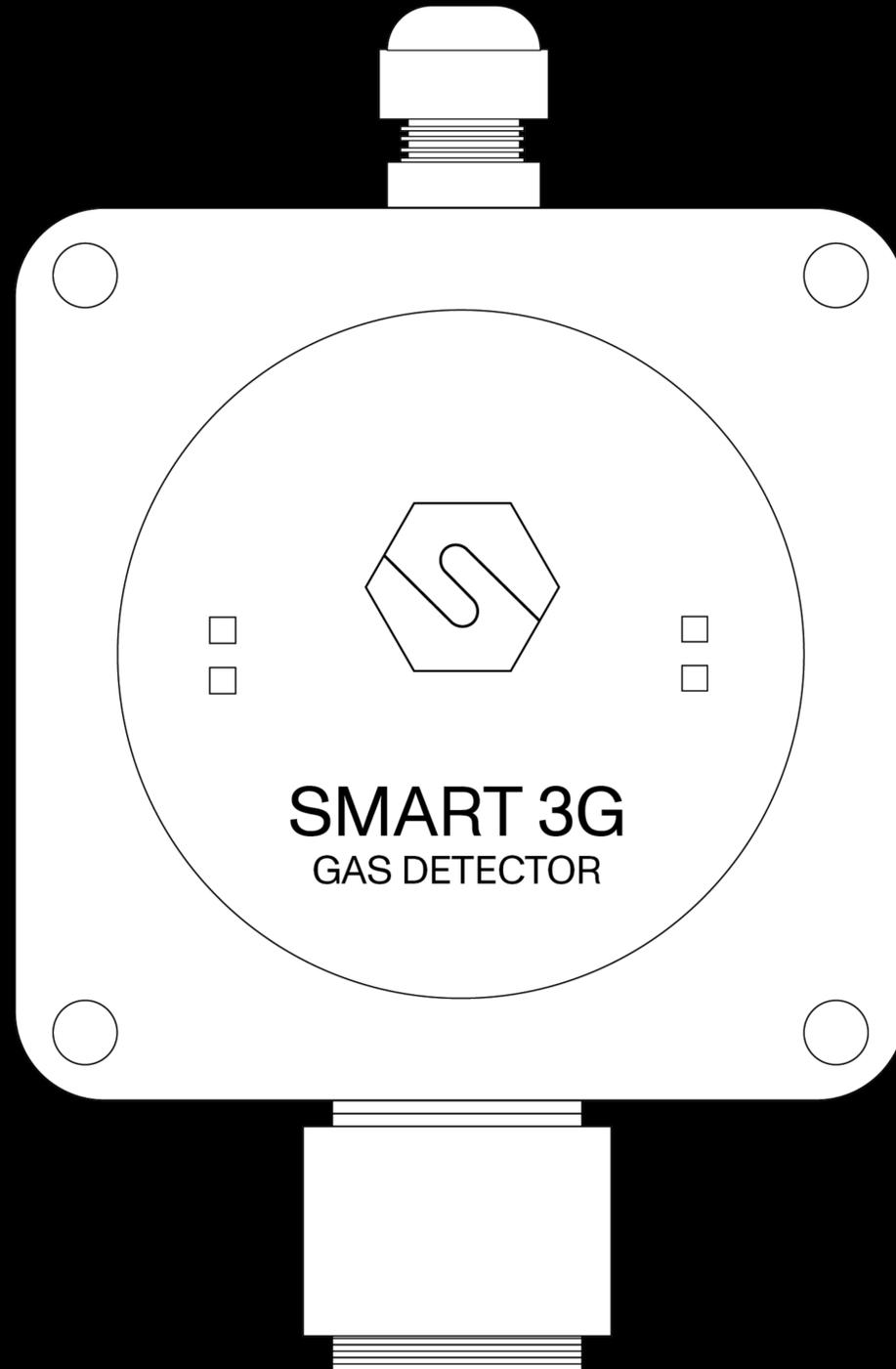


# SMART 3G-C3

With photoionizator sensor



Datasheet





SMART3G-C3 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. Optionally, the SMART3G-C3 can be equipped with serial RS485 communication and a 1 or 3 relays board.

The enclosure has dimensions 106 x 106 x 62 mm, on the upper side there's a M20 cable gland.

The gas detector can be ATEX marked as follows:

CE II 3G  
Ex db ec IIC T5 Gc

Or, when equipped with dust adapter:

CE II 3D  
 II 3G  
Ex db ec IIC T5 Gc  
Ex tc IIIC T100°C Dc 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; 1 or 3 relay board (optional); serial RS485 output (optional)
Maximum dissipated power	5.4 W
Relays contact ratings	1.0 A at 24 Vdc (optional board)
Optical indications	-
Acoustic indications	-
Hall effect sensor	-



## 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 62 mm
Weight	1023 g
Cable entries	1 x M20
IP grade	IP65 (with dust adapter)

## Compliance

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

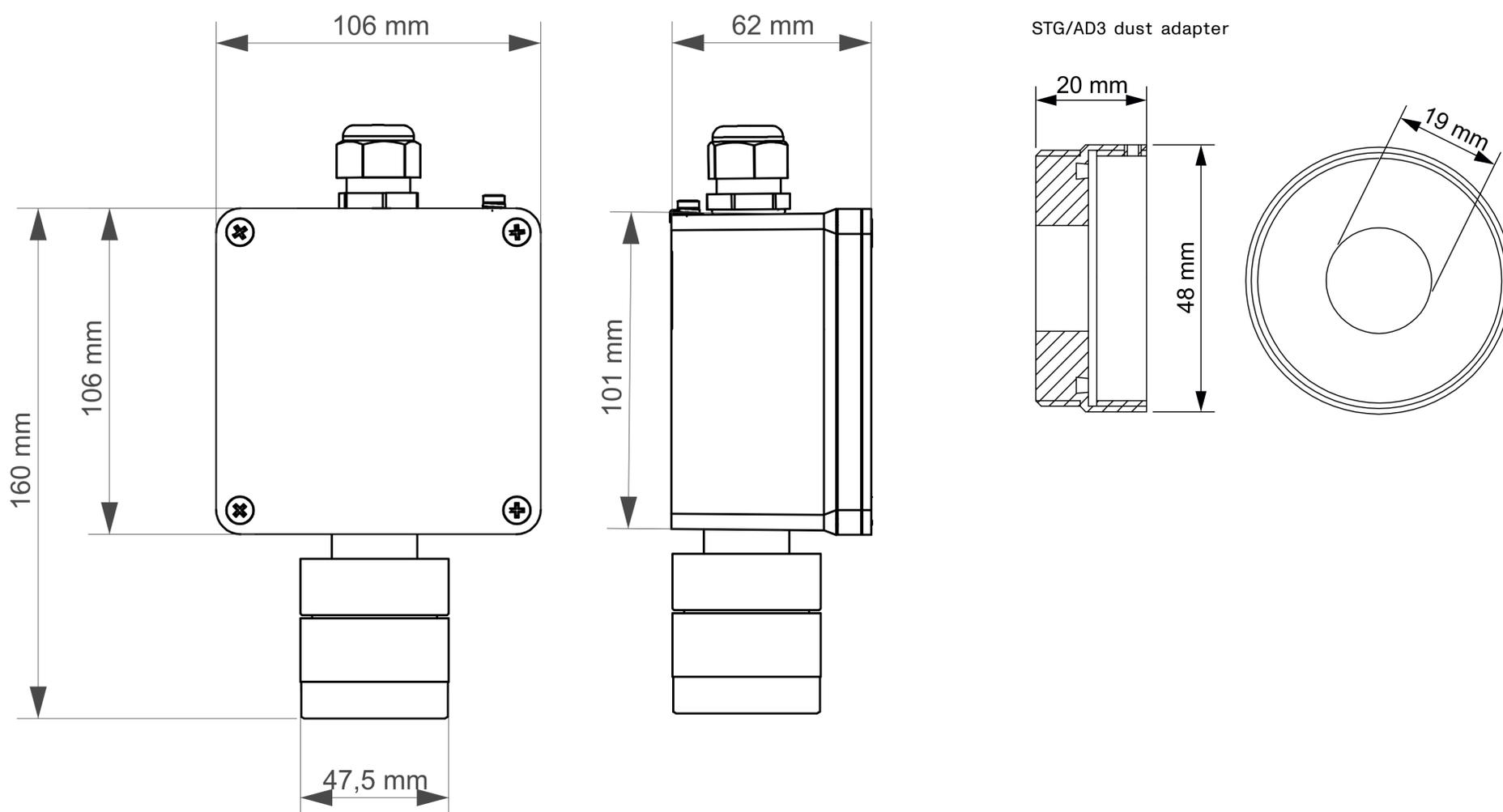


## Product codes

Volatile Organic Compounds detectors, 12-24 Vdc

S3540IL	Isobutylene (0-20 ppm) gas detector
S3544IL	Isobutylene (0-200 ppm) gas detector
S5121IL	Isobutylene (0-2000 ppm) gas detector
S5020TO	Toluene (0-10 ppm) gas detector
S5024TO	Toluene (0-100 ppm) gas detector
S5028TO	Toluene (0-1000 ppm) gas detector
S5020BZ	Benzene (0-10 ppm) gas detector
S5024BZ	Benzene (0-100 ppm) gas detector
S5028BZ	Benzene (0-1000 ppm) gas detector

## Mechanical drawings



## Contatti/Contacts

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

+39 0293548155  
[sales@sensitron.it](mailto:sales@sensitron.it)  
[sensitron.it](http://sensitron.it)

Sensitron S.r.l.

