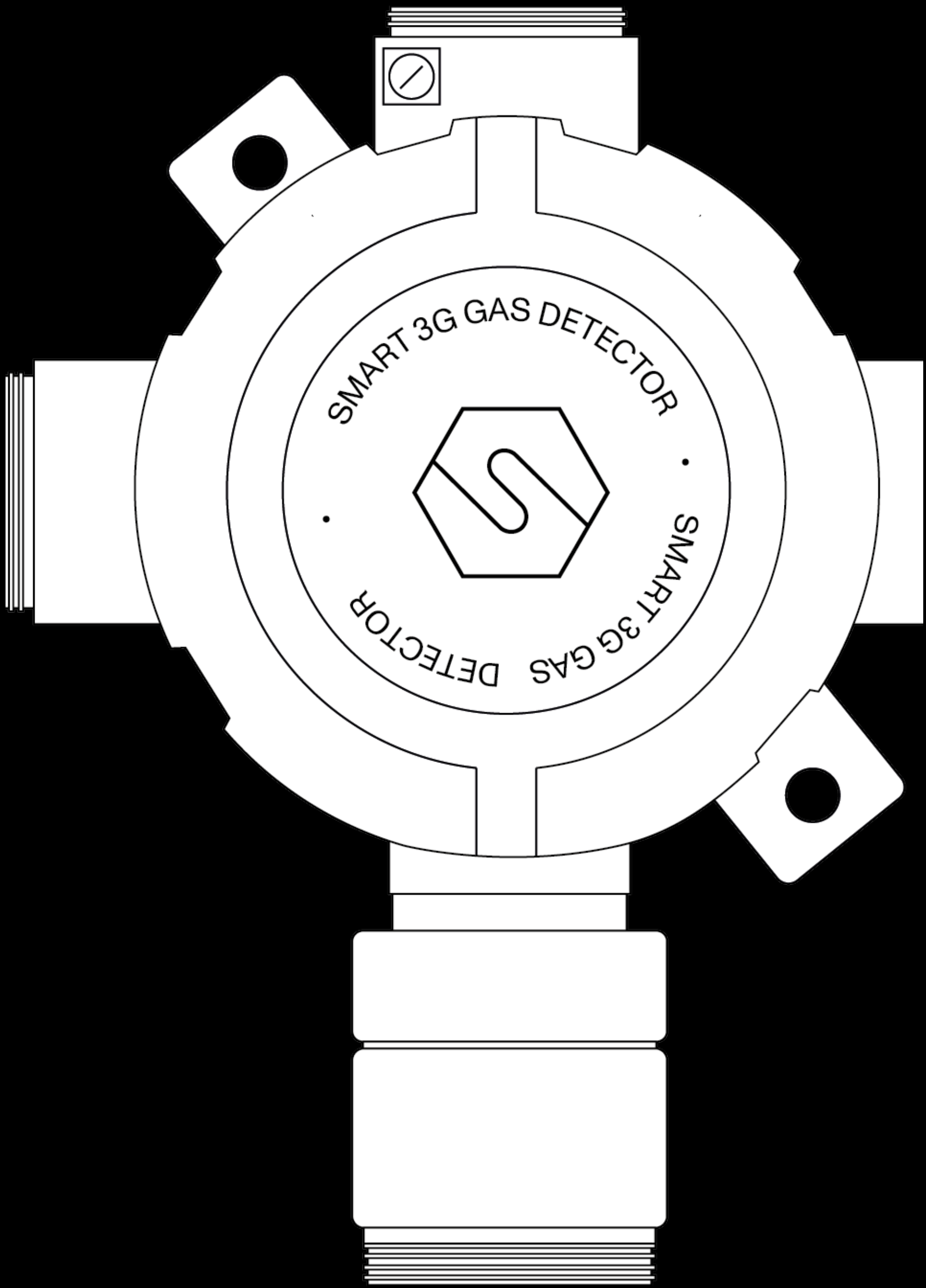


SMART3G-C2

With photoionizator sensor



Datasheet





SMART3G-C2 gas detector is designed to meet industrial requirements; the enclosure is explosion proof and can be installed in ATEX Zone 1 and, when equipped with dust adapter, in Zone 21.

The sensing element is placed in the stainless steel head. 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-C2 can be equipped with serial RS485 communication and a 1 or 3 relays board. The aluminium enclosure has dimensions 120 x 184 x 90 mm, with 3 cable entries 3/4” NPT threaded.

The gas detector 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

The gas detector is IECEx compliant and can be marked as follows:
Ex db IIC T5 Gb

Or, when equipped with dust adapter:
Ex db IIC T5 Gb
Ex tb IIIC T100°C Db
IP65

Sensor	
Application	Industrial area, ATEX Zone 1 e Zone 21 (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 (optional board)	1.0 A at 24 Vdc
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
Response Time	t ₉₀ < 40 s ; t ₅₀ < 15 s

External case

Material	Enclosure: aluminium pressure die-casting with epoxy paint chromating and chemically resistant Sensor head: stainless steel
Protection mode	Ex d : Explosion proof enclosure Ex t : Equipment dust ignition protection by enclosure (when equipped with dust adapter, optional)
Dimensions	120 x 184 x 90 mm
Weight	1250 g
Cable entries	3 x 3/4" NPT
IP grade	IP65

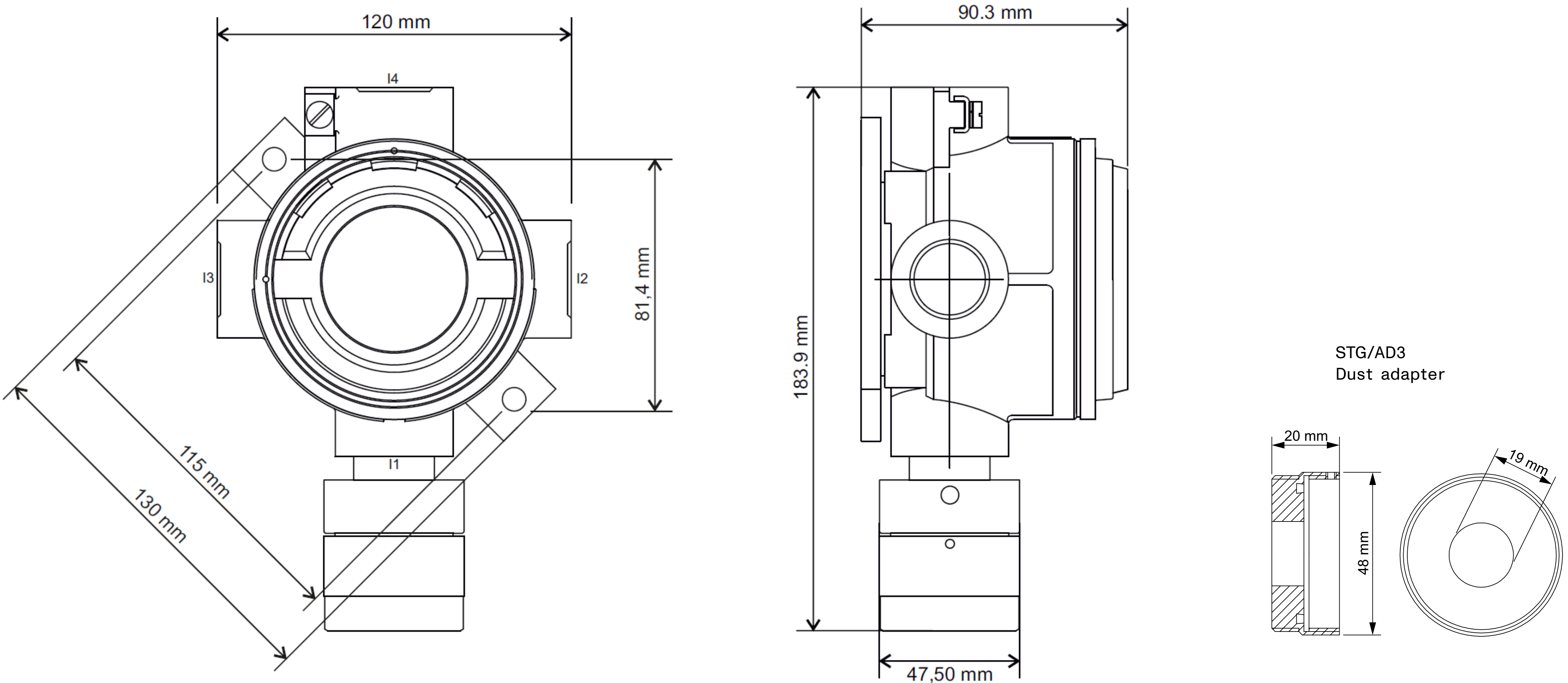
Compliance

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 60079-31:2014
IECEX	IEC 60079-0:2011 IEC 60079-1:2014 IEC 60079-31:2013



Product codes		ATEX code
Volatile Organic Compounds detectors, 12-24 Vdc		
S3541IL	Isobutylene (0-20 ppm) gas detector	ST / L / E3 / S3
S3545IL	Isobutylene (0-200 ppm) gas detector	ST / L / E3 / S3
S5122IL	Isobutylene (0-2000 ppm) gas detector	ST / L / E3 / S3
S5021TO	Toluene (0-10 ppm) gas detector	ST / L / E3 / S3
S5025TO	Toluene (0-100 ppm) gas detector	ST / L / E3 / S3
S5029TO	Toluene (0-1000 ppm) gas detector	ST / L / E3 / S3
S5021BZ	Benzene (0-10 ppm) gas detector	ST / L / E3 / S3
S5025BZ	Benzene (0-100 ppm) gas detector	ST / L / E3 / S3
S5029BZ	Benzene (0-1000 ppm) gas detector	ST / L / E3 / S3

Mechanical drawings



Contatti/Contacts

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

+39 0293548155
sales@sensitron.it
sensitron.it

Sensitron S.r.l.

