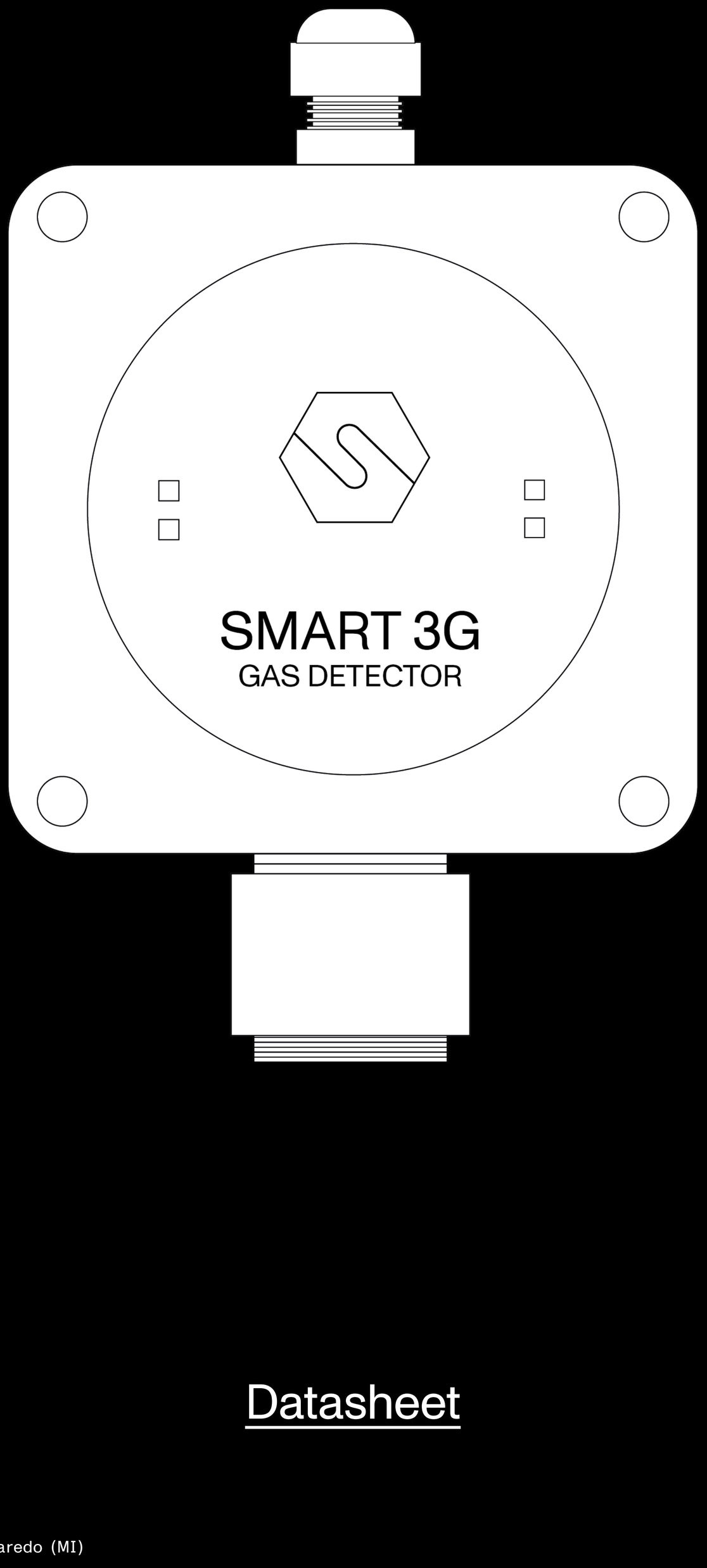
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SMART 3G-C3

with electrochemical cell



Datasheet

DS4748 Rev.7 07/08/2026
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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 40 mm diameter. The electrochemical cell is used to detect toxic gas, due to the optimal performance in these applications.

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 160 x 62 mm, on the upper side there's a M20 cable gland.
The gas detector can be ATEX marked as follows:

CE Ex II 3G
Ex db ec IIC T5 Gc

Or, when equipped with dust adapter:

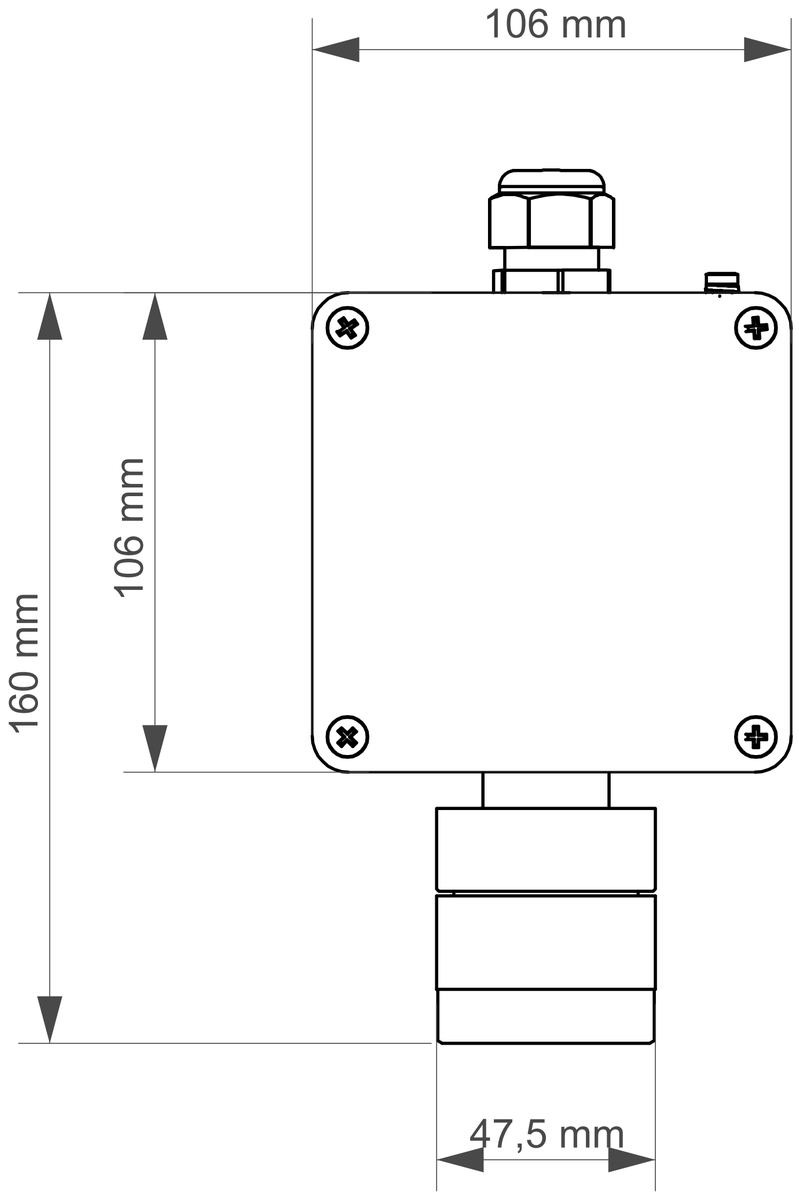
CE Ex II 3D
II 3G
Ex db ec IIC T5 Gc
Ex tc IIIC T100°C Dc IP65

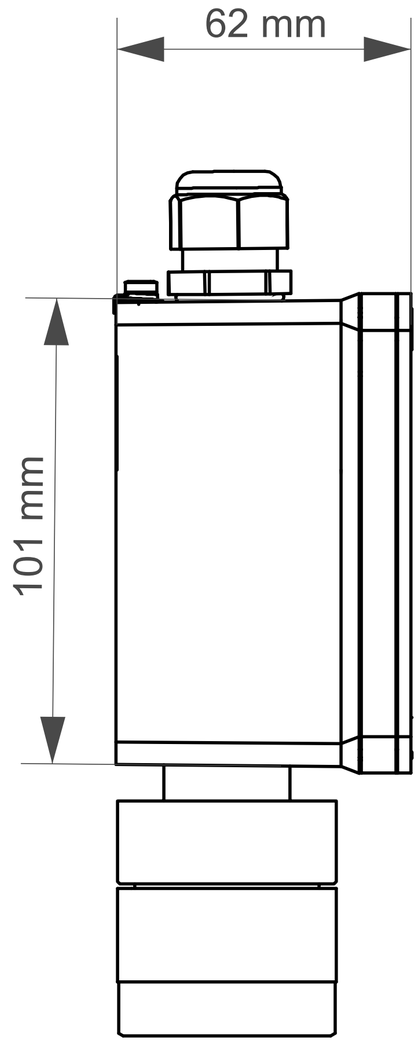
SMART3G-C3 is SIL2 hardware and SIL3 software; with a redundant system also the hardware is SIL3.

Sensor	
Application	Industrial area, ATEX Zone 2 and Zone 22 (when equipped with dust adapter, optional)
Sensing element	Electrochemical cell
Predicted sensor lifetime	2 / 3 years
Gas detected	O_2 [0-25% Vol], CO [0-500/1000 ppm], NH_3 [0-100/200/1000/5000 ppm], H_2S [0-50/100 ppm], NO [0 - 100 ppm]; H_2 [0 - 2000/3000 ppm]
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	
Storage temperature	0 / +20°C up to six months
Operating temperature	-30 / +50°C
Operating humidity	15 / 90% RH non condensing

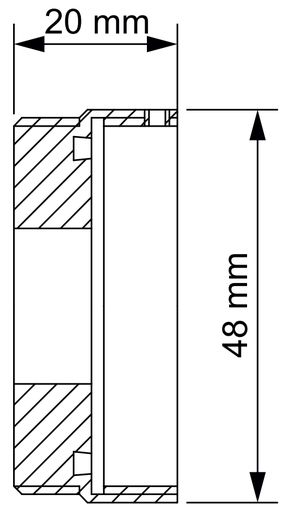
External case	
Material	Enclosure: Aluminium Sensor head: stainless steel
Protection mode	Ex e: Increased safety protection mode Ex nC: Enclosed equipment protection mode Ex d : Explosion proof enclosure Ex t : Equipment dust ignition protection by enclosure (when equipped with dust adapter, optional)
Dimensions	106 x 160 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
SIL	EN 61508:2010 Parts 1, 2, 3, 4, 5, 6, 7 EN50402:2017
Product codes	
S2640O2	Oxygen 0 - 25% Vol gas detector
S2130CO	CO 0-500 ppm gas detector
S2180EL	C_2H_4 0-200 ppm gas detector
S3224AM	NH_3 0-100 ppm gas detector
S2132AM	NH_3 0-200 ppm gas detector
S2134AM	NH_3 0-1000 ppm gas detector
S3228AM	RNH_3 0-5000 ppm gas detector
S2136HS	H_2S 0-50 ppm gas detector
S2144NO	NO 0-100 ppm gas detector
S3592H2	H_2 0-2000 ppm gas detector
S4546H2	H_2 0-3000 ppm gas detector

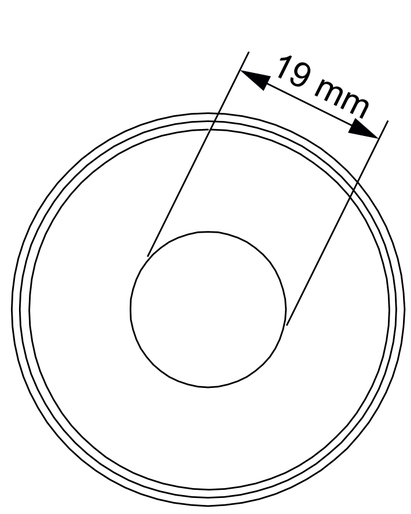
Mechanical drawings





STG/AD3 dust adapter





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