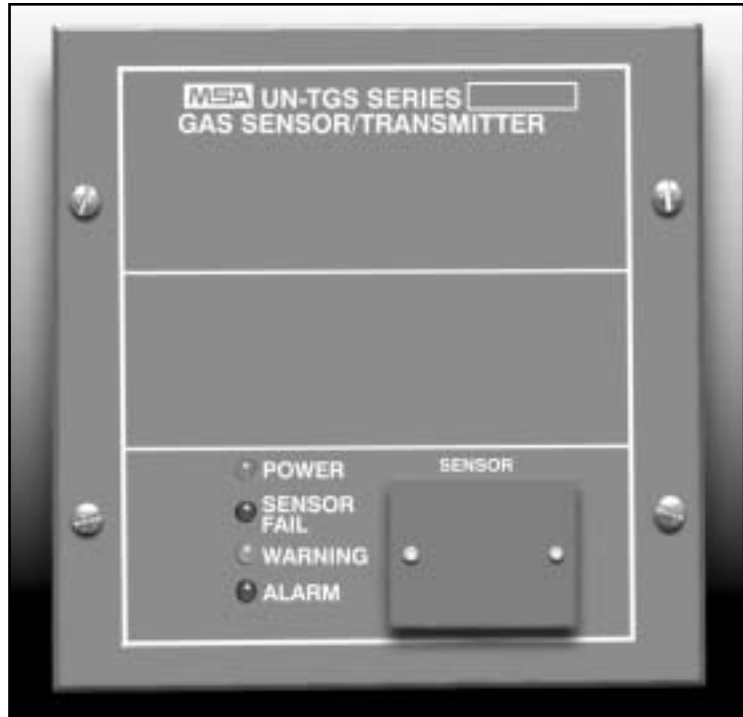


Gas Sensor/ Transmitter

For TGM® Series
Gas Monitors

The MSA UN-TGS Series Gas Sensors/Transmitters are the lowest cost units available which maintain consistently high performance. Although they are primarily used to protect against unsafe or toxic gas conditions that may exist in parking garages, tunnels, furnace rooms, and maintenance garages, they can be used to monitor any area where gas buildup may occur.



These gas sensors/transmitters are designed for easy installation, start-up and operation. They connect to all types of programmable logic controllers (PLCs), distributed control systems (DCSs) and energy management systems, or directly to MSA TGM monitoring equipment.

Installation savings are obtained by using the RS-485 output. This permits up to 16 sensors to be operated over a single, four-conductor cable.

False alarms, a common problem, are reduced because the MSA TGM sensors/transmitters are characterized with temperature and humidity compensation. In fact, it is not necessary to calibrate the sensor. All sensors are factory-calibrated so that a simple response check is all that is required in the field.

To ensure sensors are ready to go to work for you immediately after installation, they are 100% functionally tested before leaving

the factory. While in operation, the sensor constantly monitors itself, and if there is a problem, it is indicated by the sensor-fail LED.

Features

- Carbon monoxide and/or nitrogen dioxide detection,
- Very low cost
- Easy to install, operate and maintain
- Long-life, reliable solid-state sensors
- Easy-to-perform sensitivity checks
- Sensors are 100% functionality tested
- Connects to PLC, DCS and energy management systems or MSA TGM monitoring equipment
- Local readout available
- CSA certified
- NRTL/C approval
- Dual outputs, both 4 to 20 mA and/or RS-485

Gas Sensor/ Transmitter

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Gas Monitors

Specifications

Performance:

Stability: $\pm 1\%$
Repeatability: Less than $\pm 2\%$ full scale
Error per degree C: 0.3 ppm
Error from 10% to 99% RH: 0.2 ppm
Response time: 60 seconds for 90%
of step change
Noise: $\pm 1\%$ of full scale
Linearity: linearized output

Operating:

Indication: green LED (power)
red LED (sensor malfunction)
amber LED (warning)
red LED (alarm)
Sensor life: typically three years
Power input: 24VDC $\pm 20\%$ @ 200 mA
Range: 100 ppm, 200 ppm, 250
ppm or 500 ppm carbon monoxide
Temperature range: -22°F (-30°C)
 104°F (40°C)

Physical:

Carbon monoxide or nitrogen dioxide
gas monitor.

Weight: 3 lb. (1.4 Kg)
Dimensions: 6" x 6" x 3"
(152 x 152 x 76 mm)

Carbon monoxide/nitrogen dioxide dual
gas monitor.

Weight: 5 lb. (2.3 Kg)
Dimensions: 9.5" x 14.75" x 4.75"
(242 x 375 x 122 mm)



Ordering Information

215068 0-100 ppm carbon monoxide,
4 to 20 mA/RS-485 output
215069 0-200 ppm carbon monoxide,
4 to 20 mA/RS-485 output
215062 0-250 ppm carbon monoxide,
4 to 20 mA/RS-485 output
215063 0-500 ppm carbon monoxide,
4 to 20 mA/RS-485 output
10021763 0-10 ppm nitrogen dioxide
in a general-purpose enclosure
4 to 20 mA/RS-485 output
10021764 0-10 ppm nitrogen dioxide
in a NEMA 4X enclosure
4 to 20 mA/RS-485 output
10020112 0-10 ppm nitrogen dioxide &
0-100 ppm carbon monoxide
in a NEMA 4X enclosure
4 to 20 mA/RS-485 output

Represented by:



Note: This Data Sheet contains only a general description of the MSA TGM Gas Sensors/Transmitters. While uses and performance capabilities are described, under no circumstances should the product be used except by qualified, trained personnel, and not until the instructions, labels or other literature accompanying the product have been carefully read and understood and the precautions therein set forth followed. Only they contain the complete and detailed information concerning this product.

MSA

In U.S., 1-800-MSA-INST or FAX (724) 776-3280
In Canada, 1-800-MSA-INST or FAX (905) 238-4151
Elsewhere, MSA International, (412) 967-3228
or FAX (412) 967-3373

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