

EX-5165

Remote Gas Monitoring Sensor Transmitter with Infrared Sensor for Carbon Dioxide, CO₂



PRODUCT HIGHLIGHTS

- Infrared sensor
- Three alarm LEDs
- 24 VDC, 4-20 mA
- NEMA 4X, NEMA 7 and IP66 rated enclosure
- Immune to poisoning
- Non-intrusive calibration
- Approved for Class I, Division 1, Groups B, C & D

EX-5165 remote gas monitoring sensor transmitter incorporates a miniature NDIR type sensor for the measurement of carbon dioxide concentrations ranging from 500 ppm to 100% by volume. The sensor is comprised of dual pyroelectric detectors, one active and one reference unit, with individual optical filters for specific radiation bands. Features of the sensor include a temperature monitor and a durable tungsten filament as the IR light source. This sensor transmitter can operate in

anaerobic atmospheres, provides long-term stability and requires minimal maintenance.

The EX-5165 sensor transmitter operates on 24 VDC power and features three LED alarm point indicators and 4-20 mA output. This sensor transmitter can be connected to various single and multi-channel ENMET controllers or computer-based instrumentation, such as PLCs, SCADAs, BMSs, etc.

EX-5165

GENERAL SPECIFICATIONS

Sensor Type:	Infrared (NDIR)
Display:	Backlit LCD
Alarm Indicators:	3 LEDs at programmable set points
Menu/Calibration:	Magnet-actuated switches
Voltage:	24 VDC powered
Output:	4-20 mA
Installation:	3-wire
Connection:	1/2 inch NPT, conduit
Humidity Range:	0-95% rH, non-condensing
Temperature Range:	-4 to +122°F (-20 to +50°C)
Weight:	5.5 lbs (2.5 Kg)

Approvals:

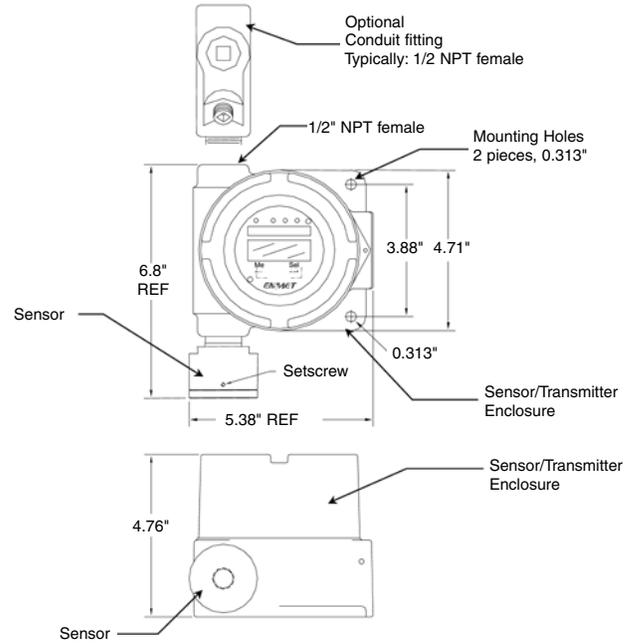
Class I, Division 1, Group B, C, D

Classified to:

UL 916 and UL 1203

CSA C22.2, No. 0-10, 30-M1986 and 142-M1987

DIMENSIONS



CARBON DIOXIDE, CO₂ CALIBRATIONS AVAILABLE

Resolution to: Range	Mid-Scale 0-50%	Full-Scale 50-100%
0-500 ppm	10 ppm	20 ppm
0-1,000 ppm	20 ppm	40 ppm
0-2,000 ppm	50 ppm	100 ppm
0-5,000 ppm	50 ppm	100 ppm
0-10,000 ppm	100 ppm	200 ppm
0-5% by vol.	0.5% of range	1% of range
0-100% by vol.	0.5% of range	1% of range

Contact ENMET regarding ranges and custom calibration requirements.

ORDERING INFORMATION

Description	Part No.
EX-5165 Sensor Transmitter, factory calibrated, supplied with calibration magnet and manual	10014-024
Sampling/Calibration Adapter for EX-5165 Sensor/Transmitters	03700-034
Gas Regulator Assembly for 58, 103 & 105 liter steel gas cylinders	02506-002
Gas Regulator Assembly for 34 liter steel gas cylinders (Also order Calibration Adapter P/N 03700-034)	02506-004
Calibration Gas, 103 liters, 1000 ppm carbon dioxide	03223-1000
Calibration Gas, 103 liters, 2000 ppm carbon dioxide	03223-2000
Optional Splash Guard for EX-5165	04546-004
Optional Sealing Fitting	73152-000
Replacement Magnet	50030-001
Replacement Sensor (concentration dependent)	From 03053-021 to 03053-059

WARNING: Loss of primary power renders continuous gas monitors inoperative. Contact factory for specifications and pricing for backup battery systems compatible with ENMET monitors.