



Member of the FM Global Group

FM Approvals  
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# CERTIFICATE OF COMPLIANCE

## HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS

This certificate is issued for the following equipment:

### IR5500

#### Open Path Gas Monitors

The IR5500; part numbers, 329000-a, 329001-a are fixed open path gas detectors, comprising of a Source and Receiver module operating over a distance of 5-150 meters. The IR5500 is Explosionproof for Class I, Division 1, Groups B, C, and D, T4 Ta = -55°C to +65°C; Dust-ignitionproof for Class II/III, Division 1, applicable Groups E, F and G, T4 Ta = -55°C to +65°C; Suitable for Class I/II/III, Division 2, applicable Groups B, C, D, E, F, G, T4 Ta = -55°C to +65°C; Hazardous Locations, indoor/outdoor locations Type 4X and IP66/67. The operating temperature range is -55°C to +65°C and the power consumption is: for the Source = 12W and for the Receiver = 10W. The enclosures are manufactured from 316L stainless steel. Field accessories comprise Attenuation plate P/N 329113-1, Pan-Tilt Base assembly P/N 329071-1, Pan-Tilt Arm assembly P/N 329073-1, Pan-Tilt Basic Arm assembly P/N 329123-1, Long Range Alignment Kit P/N 329082 and gas filter kits P/N 329083 & 329084. Depending on the model selected, the system communications are Dual Modbus or Single Modbus with HART. Each variation comes complete with (2) 4-20mA outputs for detection of Propane with measurement ranges of 0-1 LEL•m or 0-2000ppm•m and Methane with measurement ranges of 0-5 LEL•m or 0-5000ppm•m, with minimum alarm set point of 10% FSD and repeatability of ±6% FSD.

#### IR5500 Receiver:

329000-a

a: Output & Terminals - 1, 2, 3, 4, 9, 10, 11,12, 25, 26, 27, 28, 29, 30, 31, 32

#### IR5500 Source:

329001-a

a: Range & Terminals – 1, 2, 5, 6, 9, 10, 13, 14, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 and 29 - 34

Specifications - The manufacturer's specifications are as follows:

Operating Temperature:	-55°C to +65°C
Relative Humidity:	10 to 95% (Non- condensing)
Supply Parameters:	+24 V nominal, 20-36 VDC
Measurement Signal:	4-20mA
Calibration:	Units are supplied factory calibrated for the specified target gas or gases. Units should not require recalibration in service.

XP / I / 1 / BCD / T4 Ta = -55°C to +65°C  
DIP / II,III / 1 / EFG / T4 Ta = -55°C to +65°C  
NE / I/II/III / 2 / BCDEFG / T4 Ta = -55°C to +65°C  
Type 4X, IP66/67

#### Specific Conditions of Safe Use:

1. For Source supply wires, use wires suitable for 32°C above surrounding ambient.
2. For Receiver supply wires, use wires suitable for 16°C above surrounding ambient.
3. At temperatures below -35°C propane cannot be detected due to the boiling point of propane being at -44°C.

To verify the availability of the Approved product, please refer to [www.approvalguide.com](http://www.approvalguide.com)

FM Approved for:

General Monitors Inc  
26776 Simpatica Circle  
Lake Forest, California 92630  
USA

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

CSA-C22.2 No. 0.4	1999
CSA-C22.2 No. 0.5	2003
CSA-C22.2 No.142-M1987	2004
CSA-C22.2 No. 25	2004
CSA-C22.2 No. 94-M91	2001
CSA-C22.2 No. 30	2003
CSA-C22.2 No. 213	2008
CSA-C22.2 No. 60529	2005

Original Project ID: 3036609C

Approval Granted: September 21, 2010

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
3041466C	February 16, 2011		
110404	June 2, 2011		
3046962	October 12, 2012		
141021	November 6, 2014		
3052867	January 29, 2015		

FM Approvals LLC



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29 January 2015  
 Date