

Member of the FM Global Groun

FM Approvals 1151 Boston Providence Turnpike P.O. Box 9102 Norwood, MA 02062 USA T: **781 762 4300** F: 781-762-9375 www.fmapprovals.com

CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

OPEN PATH GAS MONITORS, FIXED

Stationary Single Channel 4-20 mA Open Path Combustible Gas Detector. Stand alone Transmitter (source) and Receiver (detector). The SafEye Quasar 900 monitors 0-5 LEL.m methane, ethane, propane, butane or ethylene, gas-in-air atmospheres for distances of 7 - 20 meters, 15 - 40 meters, 35 - 100 meters and 80 - 200 meters. The SafEye Quasar 900 provides field selectable factory calibration for methane, propane and ethylene. The SafEye Quasar 900 detectors are explosion proof for installation in Class I, Division 1, Groups B, C and D, suitable for Class II, Division 1, Groups E, F and G; suitable for Class III, Division 1; T6 -50°C ≤ Ta ≤ 65°C hazardous (classified) indoor/outdoor locations IP66/68, NEMA Type 6P, with intrinsically safe output for HART and RS485 Communication in Class I, Division 1, Groups B, C and D locations. The transmitter and receiver are constructed of 316L stainless steel and have an operating temperature range of -50°C to +65°C. The transmitter and receiver each have one tricolor LED for visual status indication; the operating voltage range is 18-32 V dc (24 V dc nominal), 8W maximum; the receiver has a current output range of 0 - 21 mA. Accessories with the following part numbers are Approved to be used with the SafEye Quasar 900: 888270 (Tilt Mount Kit) and 888210 (Telescope Kit); the following accessory is Approved for installation and maintenance and is not FM Approved for hazardous locations: 799810 (Handheld Unit).

QR-F-11a, SafEye Quasar 900 Open Path Gas Receiver

XP-AIS/I/1/BCD/ T6 -50°C ≤ Ta ≤ 65°C; DIP/II,III/1/EFG/T6 -50°C ≤ Ta ≤ 65°C; Type 6P/ IP66, IP68 $U_0 \le 5.0 \text{ Vdc}, I_0 \le 62\text{mA}, P_0 < 105\text{mW}, L_0 = 0\text{mH}, C_0 = 0\text{nF}$ a = Conduit Entry Type: 1 or 2.

QT-F-a1b, SafEye Quasar 900 Open Path Gas Transmitter

XP-AIS/I/1/BCD/ T6 -50°C ≤ Ta ≤ 65°C; DIP/II,III/1/EFG/T6 -50°C ≤ Ta ≤ 65°C; Type 6P/ IP66, IP68 $U_0 \le 5.0 \text{ Vdc}, I_0 \le 62\text{mA}, P_0 < 105\text{mW}, L_0 = 0\text{mH}, C_0 = 0\text{nF}$ a = Range: 1, 2, 3 or 4.b = Conduit Entry Type: 1 or 2.

Specifications – The manufacturer's specifications are as follows:

Range	0 – 5 LEL.m
Operating Temperature	-50°C to +65°C
Storage Temperature	-50°C to +65°C
Supply Voltage	18 – 32 Vdc
Measurement Signal	4 – 20 mA

FM Approved for:

Spectrex Inc. 218 Little Falls Road, Cedar Grove, NJ 07009 USA

To assure that this Approval is still valid, please refer to www.approvalguide.com



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

2011
2010
2006
2011
2005
2005
1991
2004
2004

Original Project ID: 3043518 Approval Granted: January 18, 2013

Subsequent Revision Reports / Date Approval Amended

Report Number Report Number Date Date

130311 May 14, 2013 3049667 October 8, 2013

FM Approvals LLC

Group Manager, Electrical

8 October 2013

Date