Antenna barriers

# M SERIES

Solexy's M series is a multichannel intrinsically safe barrier for RF signals (Pat. Pending).

The M series is designed for installation in safe, not classified, area in combination with antennas installed in hazardous location.

An integrated blocking circuit prevents hazardous energy reaching the antenna if a radio, modem or access point failure occures. It also allows for antenna removal in hazardous areas and the use of standard coax cable to remote mount them.

The antenna barrier's c ompact design reduce the space required inside the enclosure and can be matched with practically any radio and antenna. It is a highly flexible and cost effective solution for hazardous area radio system deployment.

















### **FEATURES**

- SHORT CIRCUIT PROTECTION Includes integrated blocking ci rcuitry.
- MULTIPLE CHANNELS, ONE DEVICE Standard layout with 4 barriers, available on request for up to 7 different antenna connections into one single compact device.
- CERTIFICATION

The M Series is certified Atex, IECEX, INMETRO, Japan and forUSA&Canada as an apparatus, and can be installed per the conditions of acceptability, without further assessment.

North America approval (USA&Canada) includes class & divisions and zones.

**IECEx certification is issued from an Australian notified** body therefore M series can be installed in Queensland mines.

FLEXIBILITY

Permits a wide variety of passive antennas to be installed in hazardous area. Antennas may be removed and/or installed with power on.

EXTENDED FREQUENCY RANGE

The M series covers a wide range of frequencies with only one version, starting from 300 MHz going up to 9 GHz with nearly a flat loss curve.

MOUNTING

Device available with wall mount design as standard and DIN rail mount on request.

#### NOMENCLATURE

- а Antenna Side Connector
  - **RP-SMA Female**
  - S **SMA Female**
  - N **N Female**
- **Enclosure** b
  - **Wall mounting layout**
  - **Din Rail mounting**
- **Radio Side Connector** CC
  - **RP-SMA Female (M4F only)**
  - N4 **SMA Female (M4S only)**

- M 02 00 XN 0 b CC d ee
- Version (frequency range) d
  - optimized from 300 MHz to 9 GHz H
  - For specific range for particular applications contact us
- ee **Approval** 
  - **USA&Canada apparatus** NO

(Class&Divisions and Zones)

- XO **IECEx and ATEX apparatus**
- IECEx, ATEX, USA&Canada apparatus XN
- RΩ INMETRO
- X.I **IECEx and Japan**

## **SPECIFICATIONS**

**ATEX** certification

nr. TÜV CY 18 ATEX

0206158 X

I (M1) [Ex ia Ma] I

II (1) G [Ex ia Ga] IIA/IIB/IIC II (1) D [Ex ia Da] IIIC

Standard Ref. EN 60079-0, EN 60079-11

**IECEx** certification [Ex ia Ma] I

nr. IECEx MSC 19.0001X

[Ex ia Ga] IIA/IIB/IIC

[Ex ia Da] IIIC

Standard Ref. IEC 60079-0, IEC 60079-11

**USA & Canada** Associated Apparatus for installation in non-hazardous locations

certification Class I, Zone 1, [AEx ia Ga] IIA/IIB/IIC

cQPSus LR1504-3 Zone 21, [AEx ia Da] IIIC [Ex ia Ga] IIA/IIB/IIC

[Ex ia Da] IIIC

Ex ia Ga CII, Div 1, Groups ABCD [Ex ia Da] CI II, Div 1, Groups EFG

Standard Ref. CAN/CSA C22.2 No. 60079-0 UL 60079-0

> CAN/CSA C22.2 No. 60079-11 UL 60079-11 CAN/CSA C22.2 No. 60950-1 UL 60950-1

**UL 508** 

**Maximum Fault Voltage** 250VDC, 250VAC 50-60Hz

Typical Insertion Loss @

20°C (dB)

Frequency	<b>433</b> MHz	<b>900</b> MHz	<b>1.9</b> GHz	<b>2.4</b> GHz	<b>3</b> GHz	<b>3.5</b> GHz	<b>4.6</b> GHz	<b>5.8</b> GHz	<b>6</b> GHz	<b>7</b> GHz	8 GHz	<b>9</b> GHz
H version	-1.2	-0.8	-0.5	-0.4	-0.9	-1	-0.5	-1.1	-0.9	-1.1	-1.7	-2.8

**Approximate Weight** 0.25kg (55.2 lb)

**Impedance**  $50 \Omega$ 

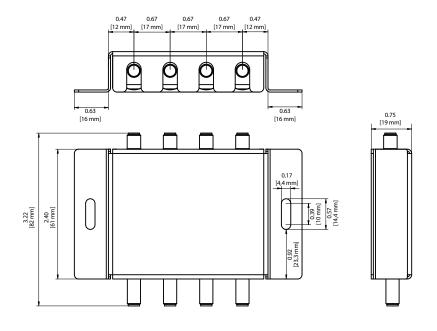
Max RF Input 7W (38.4 dBm)

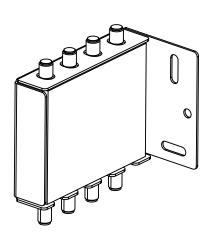
**Ambient Temperature** 

Range

-40°C (-40°F) to +85°C (+185°F)

#### **DIMENSIONAL DRAWINGS** [inches]





Execution for DIN rail available on request

in