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 compact 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 circuitry.

# 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 and for USA&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 areas. 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**

F **RP-SMA Female** S SMA Female

hh **Radio Side Connector** 

> RP-SMA Female (M4F only) SMA Female (M4S only)

С Version (frequency range)

optimized from 300 MHz to 9 GHz

For specific range for particular applications contact us

dd **Approval** 

> N0 USA&Canada apparatus (Class&Divisions and Zones)

IECEx and ATEX apparatus X0

ΧN IECEx, ATEX, USA&Canada apparatus

### **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           | -0.4           | -0.3           | -0.6         | -0.7           | -0.3           | -0.5           | -0.5         | -0.5         | -1    | -2.5         |

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

**Impedance**  $50 \Omega$ 

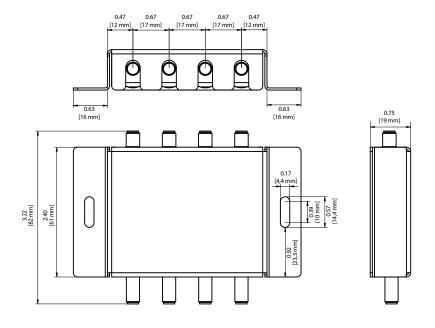
Max RF Input 7W (38.4 dBm)

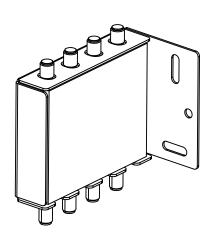
**Ambient Temperature** 

Range

-40°C (-40°F) to +85°C (+185°F)

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





Execution for DIN rail available on request

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