Antenna couplers

# **UX SERIES**

Solexy's patented (7,057,577) Explosion-Proof Antenna Coupler permits the installation of non-Ex certified antennas in hazardous areas.

This coupler is designed to be used directly with listed explosion proof housings or counduit fittings.

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.

The coupler's robust design allows for connection to practically any radio and antenna. It is a highly flexible and cost effective solution to hazardous area radio system deployment. The coupler can also be used as a cable bulkhead.

Fitting is approved for hazardous locations and can be installed with a simple wrench.











# **FEATURES**

#### SHORT CIRCUIT PROTECTION

Includes integrated blocking circuitry.

#### ENVIRONMENTAL PROTECTION

All required circuitry is recessed into fitting and encapsulated against harsh environments.

#### CERTIFICATION

The UX 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 UX can be installed in Queensland mines

#### NO SEALING FITTING REQUIRED

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

Perfect for a cable bulkhead connection.

#### EXTENDED FREQUENCY RANGE

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

### NOMENCLATURE

а **Antenna Side Connector** 

> **RP-SMA Female** Ν N Female SMA Female S

**Thread Connection** b

3/4" NPT Μ M25x1.5

**Housing Material** C

AISI 303 (standard)

AISI 316L

**Radio Side Connector** dd

> RP-SMA Female (UXF and UXN only) 02

04 SMA Female (UXS only)

Coax cable length radio side (optional on request) ee

no cable (with connector on body)

UX 3 S 02 00 Н XN dd ee gg

f Version (frequency range)

optimized from 300 MHz to 9 GHz Н

For specific range for particular applications contact us

gg **Approval** 

> USA&Canada apparatus N0 (Class&Divisions and Zones) X0 IECEx and ATEX apparatus

XN IECEx, ATEX, USA&Canada apparatus

in

## **SPECIFICATIONS**

ATEX certification

nr. TÜV CY 18 ATEX 0206158 X  $\langle \mathcal{E}_{x} \rangle$  Ex I M2 (M1) Ex db mb [ia Ma] I Mb

II 2 (1) G Ex db mb [ia Ga] IIA/IIB/IIC T6...T5 Gb II 2 (1) D Ex mb tb [ia Da] IIIC T80°C...T100°C Db

Standard Ref. EN 60079-0, EN 60079-1, EN 60079-11, EN 60079-18, EN 60079-31

IECEx certification Ex db mb [ia Ma] I Mb

nr. IECEx MSC 19.0001X Ex db mb [ia Ga] IIA/IIB/IIC T6....T5 Gb

Ex mb tb [ia Da] IIIC T80°....T100°C Db

Standard Ref. IEC 60079-0, IEC 60079-1, IEC 60079-11, IEC 60079-18, IEC 60079-31

USA & Canada Class I, Division 1, GROUP ABCD; Class II, Division 1, GROUP EFG

certification [Ex ia Ga] IIC; [Ex ia Da] IIIC

cQPSus LR-1504-3 Class I, Zone 1, AEx db mb [ia Ga] IIA/IIB/IIC T6...T5 Gb

Zone 21, AEx mb tb [ia Da] IIIC T80°C...100°C Db

Ex db mb [ia Ga] IIA/IIB/IIC T6...T5 Gb Ex mb tb [ia Da] IIIC T80°C...T100°C Db

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

CAN/CSA C22.2 No. 60079-1 UL 60079-1 CAN/CSA C22.2 No. 60079-11 UL 60079-11 CAN/CSA C22.2 No. 60079-18 UL 60079-18 CAN/CSA C22.2 No. 60079-31 UL 60079-31 CAN/CSA C22.2 No. 60950-1 UL 60950-1 CAN/CSA C22.2 No. 25-17 UL 1203

CAN/CSA C22.2 No. 30-M1986

CAN/CSA C22.2 No. 157 UL 913 UL 508

 $-40^{\circ}$ C ( $-40^{\circ}$ F) to  $+85^{\circ}$ C ( $+185^{\circ}$ F) when max RF input = 7W (T5)

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	<b>8</b> 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 0.32 kg (70.6 lb)

NEMA rating Provides a NEMA 4X connection when connected to a NEMA 4X rated enclosure

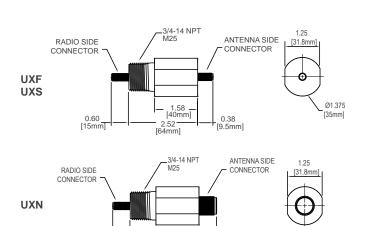
 ${\bf Impedance} \hspace{1.5cm} {\bf 50} \ \Omega$ 

**Ambient Temperature** 

Range  $-40^{\circ}\text{C} (-40^{\circ}\text{F}) \text{ to } +75^{\circ}\text{C} (+167^{\circ}\text{F}) \text{ when max RF input} = 7W (T6)$ 

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

0.60 [15mm]



2.52 [64mm] 0.60 [15mm]

