

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 conduit fittings.

An integrated blocking circuit prevents hazardous energy reaching the antenna if a radio, modem or access point failure occurs. 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 frequencies with only one version, starting from 300 MHz going up to 9 GHz with nearly a flat curve loss

NOMENCLATURE

a Antenna Side Connector

F	RP-SMA Female
N	N Female
S	SMA Female

b Thread Connection

3	3/4" NPT
M	M25x1.5

c Housing Material

S	AISI 303 (standard)
L	AISI 316L

dd Radio Side Connector

02	RP-SMA Female (UXF and UXN only)
04	SMA Female (UXS only)

ee Coax cable length radio side (optional on request)

00	no cable (with connector on body)
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UX	N	3	S	02	00	H	XN
	a	b	c	dd	ee	f	gg

f Version (frequency range)

H	optimized from 300 MHz to 9 GHz
*	For specific range for particular applications contact us

gg Approval

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

SPECIFICATIONS

ATEX certification
nr. TÜV CY 18 ATEX
0206158 X

Ex Ex I M2 (M1) Ex db mb [ia Ma] I Mb
II 2 (1) G Ex db mb [ia Ga] IIA/IIB/IC 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
nr. IECEx MSC 19.0001X

Ex db mb [ia Ma] I Mb
Ex db mb [ia Ga] IIA/IIB/IC 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 certification
cQPSus LR-1504-3

Class I, Division 1, GROUP ABCD; Class II, Division 1, GROUP EFG
[Ex ia Ga] IIC; [Ex ia Da] IIIC
Class I, Zone 1, AEx db mb [ia Ga] IIA/IIB/IC T6...T5 Gb
Zone 21, AEx mb tb [ia Da] IIIC T80°C...100°C Db
Ex db mb [ia Ga] IIA/IIB/IC 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
CAN/CSA C22.2 No. 94.2-15 UL 50E NEMA 250-2014

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

Typical Insertion Loss @ 20°C (dB)

Frequency	433 MHz	900 MHz	1.9 GHz	2.4 GHz	3 GHz	3.5 GHz	4.6 GHz	5.8 GHz	6 GHz	7 GHz	8 GHz	9 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

Impedance 50 Ω

Ambient Temperature Range -40°C (-40°F) to +85°C (+185°F) when max RF input = 7W (T5)
-40°C (-40°F) to +75°C (+167°F) when max RF input = 7W (T6)

DIMENSIONAL DRAWINGS [inches]

