



# EXPLOSION PROOF BLUETOOTH SERIAL ADAPTER

The Solexy Bluetooth wireless serial adapter is a cost effective solution for serial data transmission.

The Class 1 Bluetooth radio can reach wireless transmission distance of 100 meters.

Available for RS232 or RS485/422 serial port, making it a flexible solution for M2M applications.

With Solexy's SWA and SWS enclosures and their rugged construction water proof IP66, IP68, Nema 4 and 4X combined with ATEX, IECEx and North America certificates, Solexy offers a wireless device solution for installation in classified Ex areas (gas, dust and mining) and harsh environments, including temporary submersion.



## FEATURES

- ✓ **OPERATING FUNCTIONS**  
RS232 or RS485/RS422 serial cable replacement
- ✓ **BLUETOOTH**  
v2.0 + EDR  
Supports up to 4 multiple simultaneous connections  
Supports Bluetooth profiles SPP (Serial Port Profile)  
Interoperability with PDA, laptops, etc...
- ✓ **CONFIGURATION**  
Easy to use Windows configuration tool available  
(no external drivers required)



## APPROVALS

### ATEX / IECEx CERTIFICATION

Zone 1, 2, 21 & 22

I M2(M1) Ex db mb [ia Ma] I Mb (SWS only)  
II 2(1) G Ex db mb [ia Ga] IIC T5 Gb  
II 2(1) D Ex mb tb [ia Da] IIC T100°C Db

### USA & CANADA CERTIFICATION

Class I, Division 1, Groups B, C and D  
Class II, Division 1, Groups E, F and G  
Class I, Zone 1, Groups IIB+H2 [For U.S. only]  
Zone 21, Groups IIIC [For U.S. only]

## SPECIFICATIONS

| GENERAL  |  |
|--|--|
| Power supply   | 5-12VDC  |
| Power consumption  | min 2 mA - max 80 mA   |
| Ambient temp. range  | USA & CANADA SWA series: -40°C (-40°F) +85°C (+185°F)<br>SWS series: -40°C (-40°F) +85°C (+185°F)<br><br>ATEX & IECEx SWA series: -40°C (-40°F) +83°C (+181°F)<br>SWS series: -40°C (-40°F) +82°C (+179°F) |
| Weight   | SWA: 2.3 kg (without antenna)<br>SWS: 4.9 kg (without antenna)   |
| SERIAL INTERFACE   |  |
| Serial speed   | up to 921.6 kbps   |
| CTR/RTS flow control DTR/DSR for loop-back & full transfer (B10 type only) |  |
| RADIO  |  |
| Max TX power   | +18 dBm  |
| Max EDR Transmit power   | +6 dBm   |
| Receiver sensitivity   | -88 dBm  |
| BLUETOOTH INTERFACE  |  |
| Bluetooth  | v2.0 + EDR   |
| Class  | 1  |
| Profile  | SPP  |

## NOMENCLATURE

**SWA B10 03 - 42 0 X0**  
**a b c d e**

### a - Enclosure

SWA Aluminum polyester powder coated  
SWS Stainless steel AISI 316 (CF8M) electropolish

### b - Device

B10 RS232 Bluetooth serial adapter  
B11 RS485/RS422 Bluetooth serial adapter

### c - Antenna connection <sup>(1)</sup>

03 n° 1 RXN antenna barrier (N Female)  
04 n° 1 RXF antenna barrier (RP-SMA Female)  
05 n° 1 RXS antenna barrier (SMA Female)

### d - Cable entries

42 n° 4 3/4" npt-f (one used for antenna connection)  
44 n° 4 M25x1.5 (one used for antenna connection)

### e - Approvals

X0 Atex/IECEX Gas and Dust certified <sup>(3)</sup>  
M0 Atex/IECEX Gas, Dust and mining certified <sup>(3)</sup>  
N0 QPS CL1 DIV1 and North American Zones listed

Notes:

<sup>(1)</sup> Antenna not included

<sup>(2)</sup> Layout 2 (consult dimensional drawings for specific layout)

<sup>(3)</sup> Zone 1, 2, 21 & 22

## AVAILABLE ACCESSORIES

### ANTENNAS:

ANF72: flexible dipole (2.4GHz/2dBi)  
ANH73: heavy duty J-Pole (2.4GHz/4.35dBi)

**MOUNTING BRACKET:** KM-01: mounting kit for 2" pipe  
(see dedicated data sheet) KM-02: universal mounting kit

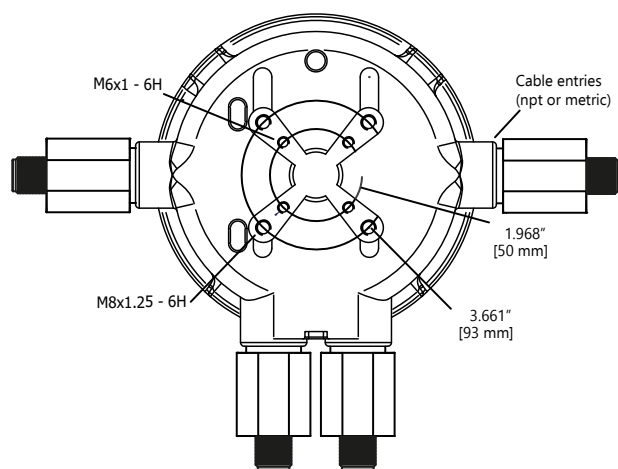
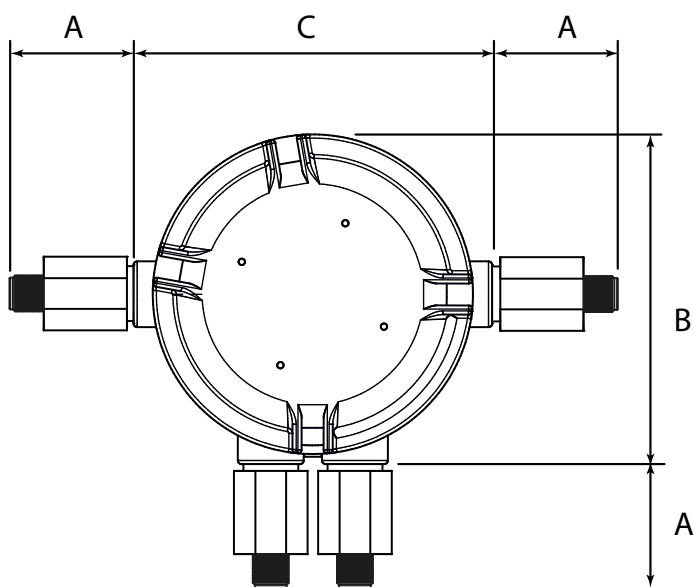
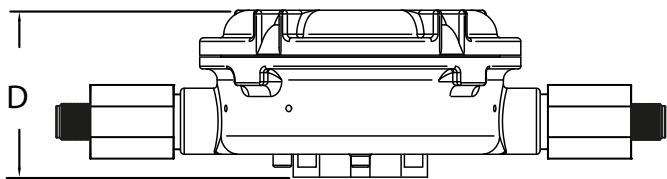




# DIMENSIONAL DRAWINGS

In order to determine overall dimension of a specific unit pls follow instructions:

- 1) Select the specific layout (you can find it in the product nomenclature)
- 2) Consider only the antenna coupler dimension (A) that you find in the layout

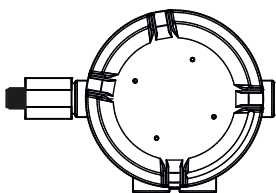


| Model      | A (*)   | B                | C              | D               |
|------------|---|------------------|----------------|-----------------|
| SWA<br>HWA | 58,5 mm [2.30"] metric coupler<br>70 mm [2.76"] npt coupler | 179,8 mm [7.08"] | 180 mm [7.09"] | 89,5 mm [3.52"] |
| SWS<br>HWS | 58,5 mm [2.30"] metric coupler<br>70 mm [2.76"] npt coupler | 180,5 mm [7.11"] | 196 mm [7.72"] | 90 mm [3.54"]   |

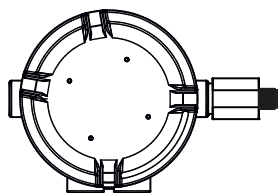
(\*) max dimension related to RX or SX coupler with N female antenna connector

## TYPICAL LAYOUTS \*\*

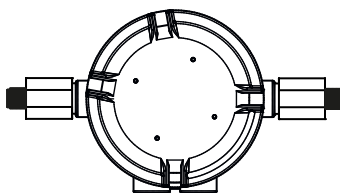
Layout 1



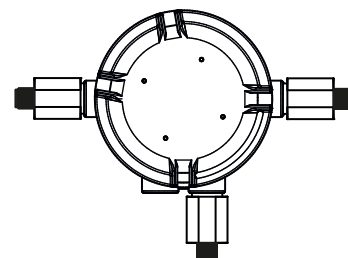
Layout 2



Layout 3



Layout 4



(\*\*) layout type specified in device datasheet

