



## EXPLOSION PROOF BLUETOOTH SERIAL ADAPTER

The Solexy SWA/SWS B\*\* is a compact and cost-effective solution for serial data transmission in hazardous location, where plugging or un-plugging to a serial port is usually impossible.

Available with RS232 and RS485/422 serial port, making it a flexible solution for M2M applications, allowing the creation of a virtual cable to connect EX laptop or smartphones to a serial port wirelessly.

With Solexy's SWA and SWS enclosures and their rugged construction 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, as zone 1, class 1, div 1.



## FEATURES



### OPERATING FUNCTIONS

RS232 and RS485/422 serial cable substitution



### 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)



### HEAVY DUTY CONSTRUCTION

Explosion proof enclosure made in aluminum (SWA series) or stainless steel (SWS series) weather proof IP66/68



### COVERAGE

The class 1 Bluetooth radio can reach wireless transmission distances of 100 mt (328 ft).

## 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 T6... T5 Gb

II 2(1) D Ex mb tb [ia Da] IIIC T80°C... 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, G roups IIIC [For U.S. only]

## CONFIGURATION



|            |            |           |             |          |           |
|------------|------------|-----------|-------------|----------|-----------|
| <b>SWA</b> | <b>B13</b> | <b>03</b> | <b>- 42</b> | <b>1</b> | <b>X0</b> |
| <b>a</b>   | <b>b</b>   | <b>c</b>  | <b>d</b>    |          | <b>e</b>  |

### a - Enclosure

SWA Aluminum polyester powder coated

SWS Stainless steel AISI 316 (CF8M) electropolished

### b - Device

B10 RS232 Bluetooth serial adapter

B13 RS232/485/422 Bluetooth serial adapter

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

03 n° 1 UXN antenna coupler (N Female) <sup>(2)</sup>

### d - Cable entries

42 n° 4 3/4" npt-f

44 n° 4 M25x1.5

### e - Approvals

X0 Atex/IECEx Gas and Dust certified <sup>(3)</sup>

M0 Atex/IECEx Gas, Dust and mining certified <sup>(4)</sup>

N0 QPS Cl. I Div. 1 and North American Zones listed

Notes: (1) Antenna not included  
(2) Layout 1  
(3) Zone 1, 2, 21 & 22

## AVAILABLE ACCESSORIES

### MOUNTING BRACKET

KM-01: mounting kit for 2" pipe

KM-02: universal mounting kit

(see dedicated data sheet)



# SPECIFICATIONS

| GENERAL             |                                                                                                                                                                                                                      |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power supply        | 5 - 36 VDC                                                                                                                                                                                                           |
| Power consumption   | min 2 mA - Max 1 W                                                                                                                                                                                                   |
| Ambient temp. range | <b>USA &amp; CANADA ATEX &amp; IECEX</b><br>SWA series -40°C (-40°F) +85°C (+185°F)<br>SWS series -40°C (-40°F) +85°C (+185°F)<br>SWA series -40°C (-40°F) +83°C (+181°F)<br>SWS series -40°C (-40°F) +82°C (+179°F) |
| Weight              | SWABxx03: 2,3 kg (without antenna)<br>SWSBxx03: 4,9 kg (without antenna)                                                                                                                                             |

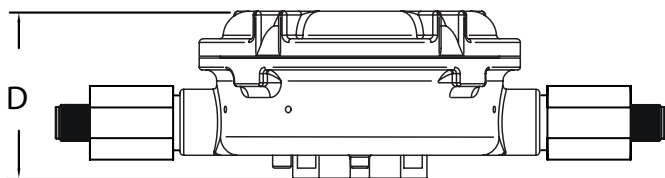
| SERIAL INTERFACE  |                                                                         |
|-------------------|-------------------------------------------------------------------------|
| Serial speed      | Up to 921.6kbps                                                         |
| CTR/RTS & DTR/DSR | CTR/RTS flow control DTR/DSR for loop-back & full transfer (RS232 only) |

| RADIO                  |         |
|------------------------|---------|
| Max TX power           | +18 dBm |
| Max EDR transmit power | +6dBm   |
| Receiver sensitivity   | -88 dBm |

| BLUETOOTH INTERFACE |            |
|---------------------|------------|
| Bluetooth           | v2.0 + EDR |
| Class               | 1          |
| Profile             | SPP        |

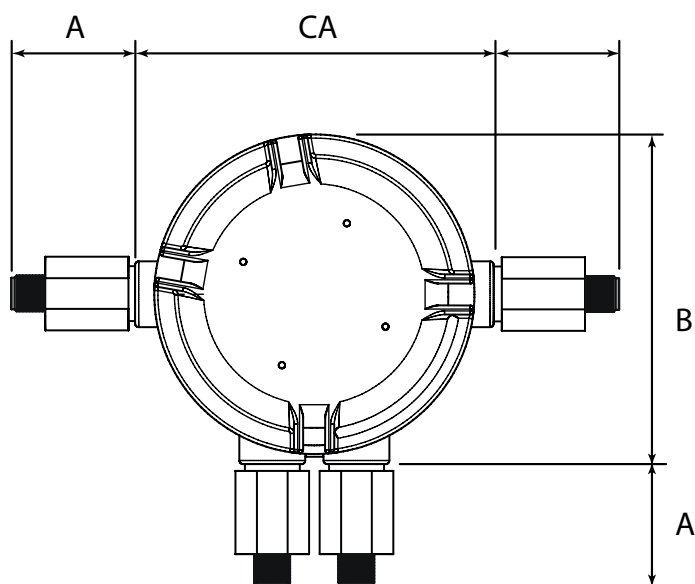
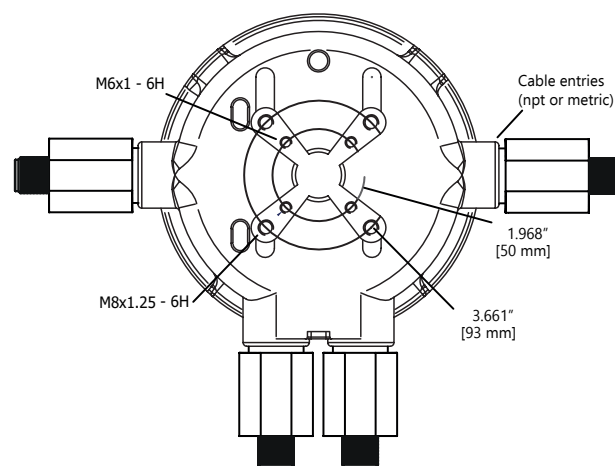
Data contained in this specification are subject to change without notice





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

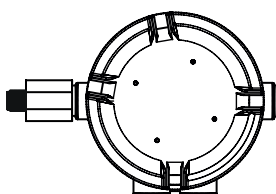


| MODEL      | A (*)                                                       | B                | C              | D               |
|------------|-------------------------------------------------------------|------------------|----------------|-----------------|
| SWA<br>HWA | 58,5 mm [2.30"] metric coupler<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"]   |

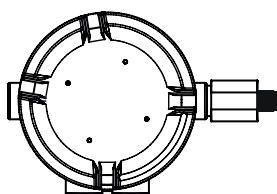
(\*) max dimension related to RX or SX coupler with N female antenna connector

## TYPICAL LAYOUTS \*\*

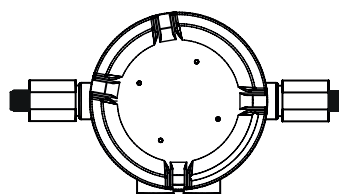
Layout 1



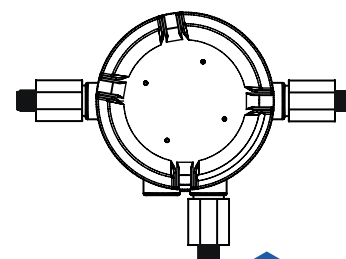
Layout 2



Layout 3



Layout 4



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





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