



EXPLOSION PROOF CELLULAR ROUTER AND ACCESS POINT

The Solexy SWA/SWS R0* is a compact, cost-effective and secure industrial 4G/LTE Wi-Fi router for installation in harsh environments and hazardous locations. It is used to create a WiFi Hotspot based on a cellular connectivity. External N or SMA/RP-SMA antenna connectors make it possible to attach desired antennas and easily find the best signal location.

SWA/SWSR0* Industrial LTE router have industry leading security features and widely used for 4G backup, Remote Connection, Out-of-Band Management, Advanced VPN and tunneling services in IoT networking solutions.

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.



FEATURES

- ✓ **OPERATING FUNCTIONS**
WiFi access point (WiFi to LAN or WiFi to 2G/3G/4G)
WiFi client (LAN to WiFi)
- ✓ **DATA RATE**
4G (LTE) Cat 4 up to 150 Mbps
3G up to 42 Mbps and 2G up to 236.8 kbps
- ✓ **WIRELESS**
IEEE 802.11 b/g/n Access Point (AP) and Station (STA)
- ✓ **SMS TOOLS**
SMS status, SMS configuration, send/read SMS via HTTP POST/GET
- ✓ **HEAVY DUTY CONSTRUCTION**
Explosion proof enclosure made in aluminum (SWA series) or stainless steel (SWS series) weather proof IP66/68

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, Groups IIIC [For U.S. only]



SPECIFICATIONS

GENERAL

Power supply	9 - 30 VDC, Passive PoE
Power consumption	5W
Ambient temp. range	USA & CANADA SWA series -40°C (-40°F) +75°C (+167°F) SWS series -40°C (-40°F) +75°C (+167°F) ATEX & IECEX SWA series -40°C (-40°F) +71°C (+159°F) SWS series -40°C (-40°F) +66°C (+150°F)
Weight	SWARxx33 & SWARxx45: 2,6 kg - SWARxx30 & SWARxx54: 2,9 kg (without antenna) SWSRxx33 & SWSRxx45: 5,3 kg - SWSRxx30 & SWSRxx54: 5,6 kg (without antenna)

HARDWARE

CPU	Atheros Hornet, MIPS 24Kc, 580 MHz
Memory	RAM 128MB, DDR2, Flash 16MB SPI
I/O	1 x Digital Input, 1 x Digital Output
Ethernet	2 x RJ45 ports, 10/100 Mbps
Network connection	4G Cat 4 up to 150 Mbps 3G Up to 42 Mbps 2G Up to 236.8 kbps
Supported bands* <i>* in function of device installed</i>	4G (LTE-FDD) B1, B2, B3, B4, B5, B7, B8, B12, B13, B18, B19, B20, B26, B28 4G (LTE-TDD) B38, B39, B40, B41 3G B1, B2, B4, B5, B6, B8, B19 2G B2, B3, B5, B8
WiFi	802.11 b/g/n - Up to 50 simultaneous connections

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Auto APN, Band lock
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Security	DDOS prevention (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention), Port scan prevention (SYN-FIN, SYN-RST, X-mas, NULL flags, FIN scan attacks)
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP
Monitoring and management	WEB UI, CLI, SSH, SMS, TR-069, SNMP, JSON-RPC, MQTT, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solution	RMS, FOTA, Telenor, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
SMS features	SMS status, SMS configuration, Send/Read SMS via HTTP POST/GET, EMAIL to SMS, SMS to Email, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply, SMPP
Services	DDNS, VRRP, Wake On Lan (WOL), WEB filter, UPNP, Traffic Logging



NOMENCLATURE

a - Enclosure

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

b - Device

R13 Global
R19 North America (AT&T, Verizon, T-Mobile)

c - Antenna connection ⁽¹⁾

30 n° 3 UXN antenna coupler (N Female) ⁽²⁾
33 n° 2 UXN antenna coupler (N Female) ⁽³⁾
(*) Available antenna couplers with SMA, RP-SMA, isolated ground and surge protection. Contact Solexy to obtain the right code

d - Cable entries

42 n° 4 3/4" npt-f
44 n° 4 M25x1.5

e - Approvals

X0 Atex/IECEX Gas and Dust certified ⁽⁴⁾
M0 Atex/IECEX Gas, Dust and mining certified ⁽⁴⁾
N0 QPS CL1 DIV1 and North American Zones listed

SWA	R13	33	- 42	1	X0
a	b	c	d		e

Notes:

⁽¹⁾ Antenna not included

⁽²⁾ Layout 4

⁽³⁾ Layout 3 (consult dimensional drawings for specific layout)

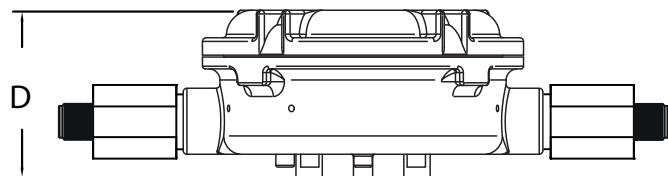
⁽⁴⁾ Zone 1, 2, 21 & 22

AVAILABLE ACCESSORIES

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



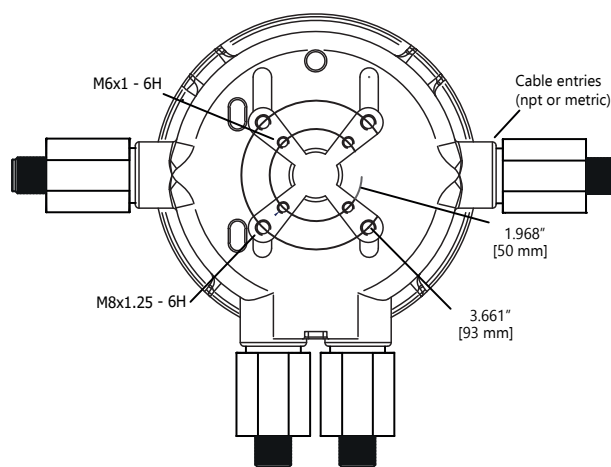
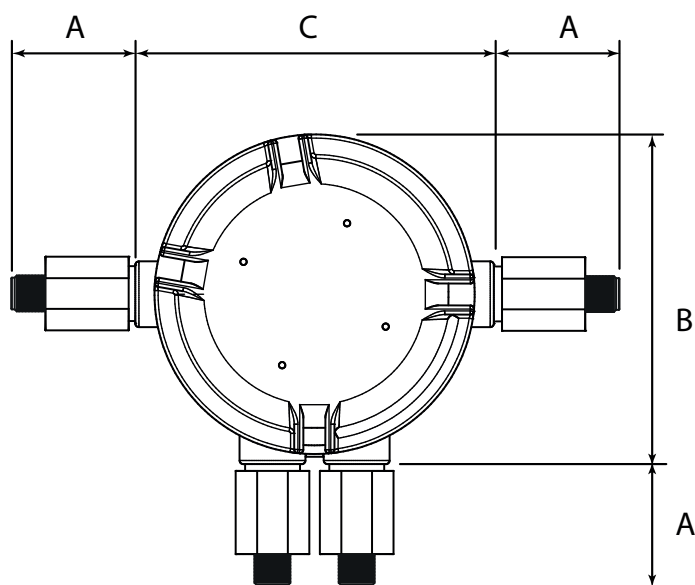
DIMENSIONAL DRAWINGS



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

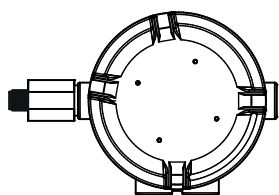


Model	A (*)	B	C	D
SWA HWA	58,5 mm [2.30"] metric coupler 70 mm [2.76"] npt coupler	179,8 mm [7.08"]	180 mm [7.09"]	89,5 mm [3.52"]
SWS HWS	58,5 mm [2.30"] metric coupler 70 mm [2.76"] npt coupler	180,5 mm [7.11"]	196 mm [7.72"]	90 mm [3.54"]

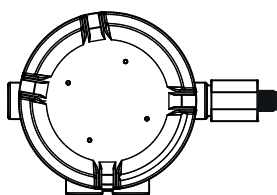
(*) max dimension related to RX or SX coupler with N female antenna connector

TYPICAL LAYOUTS **

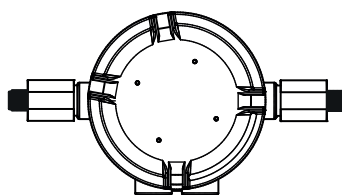
Layout 1



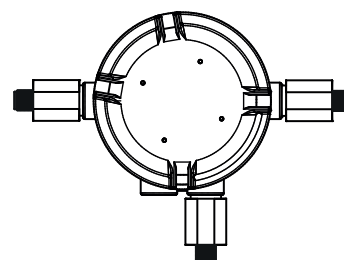
Layout 2



Layout 3



Layout 4



(**) layout type specified in device datasheet

