

EXPLOSION PROOF CELLULAR GATEWAY WITH WIFI



The Solexy SWA/SWS D0* is a compact, cost-effective and high-performance Cellular Dual Ethernet Gateway with WiFi for installation in harsh environments and hazardous locations. It utilizes the cellular infrastructure to provide network access to wired or wireless devices anywhere cellular coverage is supported by a cellular carrier. SWA/SWS D0* supports 4G/LTE connections with blazing fast speeds.

External N or SMA/RP-SMA antenna connectors make it possible to attach desired antennas and easily find the best signal location. 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**
Cellular Ethernet bridge
Gateway service for equipment with RJ45 or WiFi interface
WiFi access point to LAN or to 3G/4G
- ✓ **DATA RATE**
4G (LTE) Cat 4 up to 150 Mbps
3G up to 42 Mbps
- ✓ **WIRELESS**
IEEE 802.11 b/g/n up to 150 Mbps
- ✓ **VPN AND FIREWALL**
VPN tunneling and customizable Firewall rules with ACL
- ✓ **DATA USAGES ALERTS**
via e-mail and SMS
- ✓ **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



II 2 G Ex db IIC T5-T4 Gb
II 2 D Ex tb IIIC T110°C/T140°C Db
I M2 Ex db I Mb (SWS only)

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	7 - 30VDC or Passive PoE Reverse polarity protection																																									
Current Consumption (@12VDC)	Idle (LTE Connected): 93~120 mA	WiFi (AP mode+LTE): 170 mA			Max Peak: 320 mA																																					
Approvals	FCC / IC PTCRB AT&T, Verizon (D01 only)																																									
Humidity	5-95%, non-condensing																																									
Ambient temp. range	USA & CANADA SWA series -40°C (-40°F) +85°C (+185°F) SWS series -40°C (-40°F) +85°C (+185°F)				ATEX & IECEx SWA series -40°C (-40°F) +74°C (+165°F) SWS series -40°C (-40°F) +69°C (+156°F)																																					
HARDWARE																																										
	D01	D02			D03																																					
Cellular Supported Bands	North America LTE FDD (Bands 2,4,5,12/17,13) UMTS HSPA+ (Bands 2,5) 3GPP Protocol Stack Release 9	China LTE FDD: B1,3,8 LTE TDD: B38,39,40,41 DC-HSPA+/HSPA+/HSPA/UMTS: B1,5,8,9 TD-SCDMA: B34,39 GSM/GPRS/EDGE: 900/1800 MHz			LTE FDD: B1,B2,B3,B4,B5,B7,B8,B12,B13, B18,B19,B20,B26,B28 TDD: B38,B39,B40,B41 WCDMA: B1,B2,B4,B5,B8,B6,B19 GSM: B2/B3/B5/B8																																					
Cellular Data Features <i>(Module Standalone Laboratory Performance)</i>	North America LTE: DL 150 Mbps, UL 50 Mbps DC-HSPA+: DL 42 Mbps, UL 5.7 Mbps	China LTE FDD: UL 50Mbit/s, DL 150Mbit/s @20M BW LTE TDD: UL 10Mbit/s; DL 112Mbit/s @20M BW DC-HSPA+: UL 5.76 Mbit/s; DL 42 Mbit/s			LTE FDD: Up to 150 Mbps DL, 50 Mbps UL LTE TDD: Up to 130 Mbps DL, 35 Mbps UL DC-HSPA+: Up to 42 Mbps DL, 5.7 Mbps UL WCDMA: Up to 384 Kbps DL, 384 Kbps UL EDGE: Up to 296 Kbps DL, 236.8 Kbps UL GSM: Up to 107 Kbps DL, 85.6 Kbps UL																																					
WiFi Features	802.11b/g/n (2.4GHz)																																									
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Ethernet	2x 10/100, Auto - MDI/X IEEE 802.3																																									
USB	USB 2.0 Direct Connect																																									
Connectors	Data: 2x RJ-45 (Ethernet) 4 PIN Interlock (Vin)	USB: Micro-AB			SIM: 1.8 / 3.0V (Micro - 3FF)																																					
SOFTWARE																																										
SMS	SMS to/from Ethernet via Telnet SMS Alerts SMS Remote Control																																									
Carrier Connection	PAP, CHAP, ICMP Keep Alive, Traffic Watchdog, DDNS, IP pass-through																																									
Network Protocols	TCP, UDP, TCP/IP, ARP, ICMP, DHCP, HTTP, SNMP, FTP, DNS, Serial over IP, Modbus Slave (TCP/Serial)																																									
Security	VPN, IPSec with IKE/ISAKMP; Multiple tunnel support (16); 3DES and up to 256-bit AES Encryption, VPN Tunneling L2TP, GRE, HTTPS, RADIUS																																									
Firewall	NAT, NAT-T VPN tunneling, Port forwarding, VPN/GRE pass-through; Access control lists, DMZ																																									
Management	Telnet, WebUI, SNMP V1/2/3, Wireless Upgrade (HTTP/FTP), AT Command Interface (Serial/Telnet), Microhard NMS Support, Data Usage Alerts, SSH																																									
Diagnostics	RSSI, Ec/No, Voltage, Temperature, Remote diagnostics, UDP Event Reporting, SMS Alerts, Netflow																																									

NOMENCLATURE

SWA	D01	33	- 42	0	X0
a	b	c	d	e	f

a - Enclosure

- SWA WA series made in aluminum
- SWS WS series made in stainless steel

b - Device

- D01 North America ⁽¹⁾
- D02 China
- D03 Global

c - Antenna connection ⁽²⁾

- 30 n° 3 RXN antenna coupler (N Female) ⁽³⁾
- 33 n° 2 RXN antenna coupler (N Female) ⁽⁴⁾
- 54 n° 2 RXS antenna coupler (SMA Female) for Mobile ⁽⁴⁾
n° 1 RXF antenna coupler (RP-SMA Female) for WiFi ⁽⁴⁾
- 45 n° 1 RXS antenna coupler (SMA Female) for Mobile ⁽³⁾
n° 1 RXF antenna coupler (RP-SMA Female) for Wifi ⁽³⁾

d - Cable entries

- 42 n° 4 3/4" npt-f
- 44 n° 4 M25x1.5

e - Colour - Brand

- 0 black polyester powder coating (WA series only)
- E electropolished (WS housings only)

f - Approvals

- X0 Atex/IECEzx Gas and Dust certified ⁽⁵⁾
- M0 Atex/IECEx Gas, Dust and mining certified ⁽⁵⁾
- N0 QPS CL1 DIV1 and North American Zones listed

Notes:

⁽¹⁾ AT&T and Verizon approved

⁽²⁾ Antenna not included

⁽³⁾ Layout 4

⁽⁴⁾ Layout 3 (consult dimensional drawings for specific layout)

⁽⁵⁾ 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

