

STW-611C / STW-612C

1/2-Port (RS232/422/485) Industrial IEEE 802.11b/g/n Wireless Serial Device Server, with Bridge Mode



Features

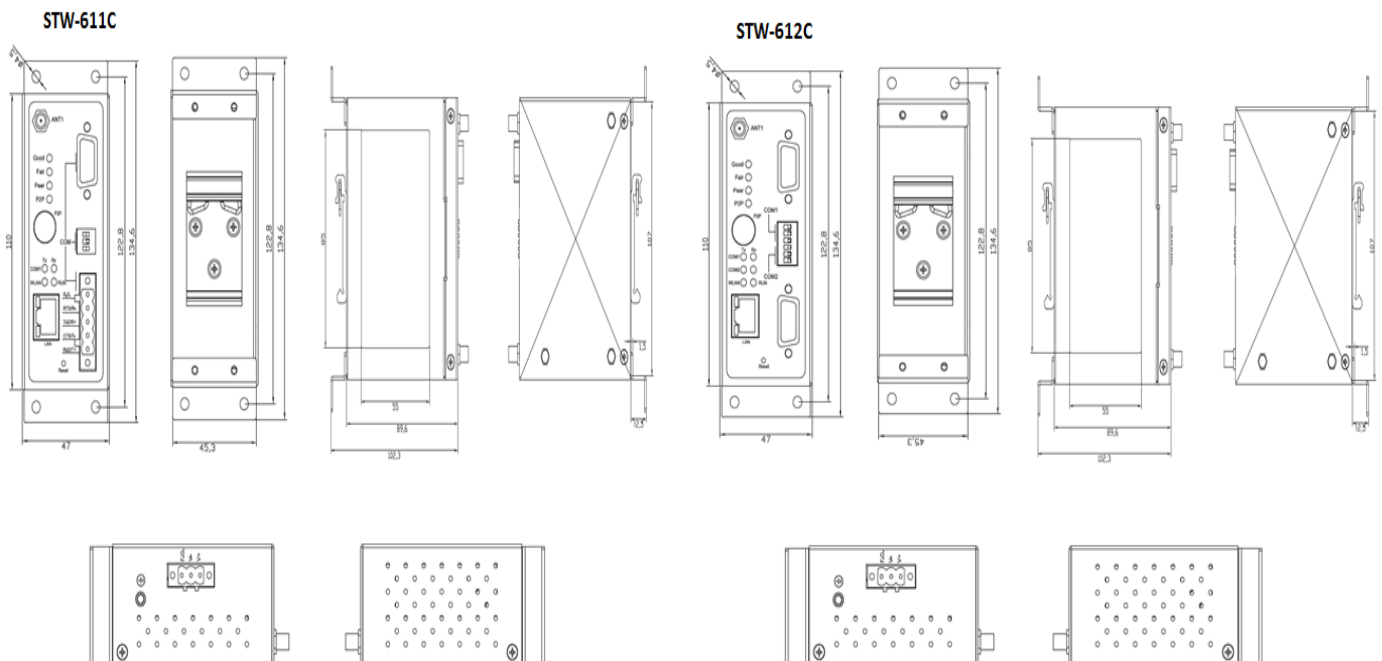
- ▶ 3-Way Communication with Any Serial or Ethernet Device to a Wireless Network
- ▶ Supports Wi-Fi Direct Technology (Point-to-Point) for Easy Setup
- ▶ IEEE 802.11b/g/n Compliant w/WPA, WPA2, 802.1x Security
- ▶ 1 or 2 RS232/422/485 Software Selectable Serial Ports
- ▶ Supports 1-Port 10/100Tx RJ45 Ethernet Port
- ▶ Serial Data Throughput Rate: 110~921.6Kbps
- ▶ Supports Virtual COM, TCP/UDP Server/Client, and Tunneling Mode
- ▶ Configuration via Built-in Web Console, and Windows Utilities
- ▶ Compact IP50 Rugged Aluminum Case Design
- ▶ Power Input Design: 9-48VDC
- ▶ Reverse Polarity Protection
- ▶ DIN-Rail and Wall Mount (optional) Support
- ▶ Wide Temperature Range Support: -10° to 60° C
- ▶ 5-Year Warranty

INTRODUCTION

Antaira Technologies' STW-61xC series is an industrial wireless serial device server having IEEE802.11b/g/n with 2.4GHz bandwidth. It provides connectivity to clients and serial devices creating a complete solution for wireless networking.

Antaira Technologies' STW-61xC series has built-in advanced features, such as, "bridge mode" to allow any serial and Ethernet device to link with the wireless network at the same time, in order to perform a "3-way communication" solution. Plus, it comes with hassle free "Wi-Fi direct" technology allowing for an easy setup for "point-to-point" applications using a "push button" method that does not require any software configurations. It also is IP50 rated and has a compact rugged aluminum case design that supports wide operating temperatures (-10° to 60° C). The unit has a high EMC protection that meets industrial application requirements.

DIMENSIONS



SPECIFICATIONS

Technology	
Radio Frequency	United States (FCC) - 2.4GHz Europe (ESTI) 2412-2462(20Mhz)/2422-2452(40Mhz) 2412-2472(20Mhz)/2422-2462(40Mhz)
Data Rate	IEEE 802.11b 1,2,5.5 and 11Mbps IEEE 802.11g 6,9,12,18,24,36,48,54Mbps IEEE 802.11n 20MHz bandwidth: 1Nss: 65Mbps @ 800GI, 72.2Mbps @ 400GI (Max.) 40MHz bandwidth: 1Nss: 135Mbps @ 800GI, 150Mbps @ 400GI (Max.)
Output Power	IEEE 802.11b +14dBm IEEE 802.11g +17dBm @ 6, 9, 12,18,24Mbps, +17dBm @ 36Mbps, +16dBm @ 48Mbps, +16dBm @ 54Mbps. IEEE 802.11n – 2.4GHz/HT20 +16dBm @ MCS 0 +16dBm @ MCS 4 +16dBm @ MCS 1 +16dBm @ MCS 5 +16dBm @ MCS 2 +16dBm @ MCS 6 +16dBm @ MCS 3 +15dBm @ MCS 7 IEEE 802.11n – 2.4GHz/HT40 +15dBm @ MCS 0 +15dBm @ MCS 4 +15dBm @ MCS 1 +15dBm @ MCS 5 +15dBm @ MCS 2 +15dBm @ MCS 6 +15dBm @ MCS 3 +14dBm @ MCS 7
Ethernet Interface	
Technology	IEEE 802.3, 802.3u
Port	1*RJ45
Speed	10/100Tx
Wireless Interface	
Wireless Module	Atheros AR9382
Standard Compliance	IEEE 802.11b/g/n
Tx / Rx	1T1R MIMO (1 x 1 with MCS 0-7)
Antenna	2 dBi antenna design, SMA(R) Female connector
Serial Interface	
Connector	1-Port RS-232/422/485 with DB9 or TB5 - software selectable (STW-611C) 2-Ports RS-232/422/485 with DB9 - software selectable (STW-612C)
Baud Rate	110~921.6Kbps
Parity	None, Odd, Even, Space, Mark
Data / Stop Bits	5,6,7,8, / 1,2
Flow Control	None, Xon / Xoff, RTS/CTS

Software	
Protocol	IPv4, ICMP, TCP, UDP, DHCP Client, SNMP, SMTP, HTTP, DNS, NTP, RADIUS, RFC2217, WPS, Syslog
Wireless Security	WEP, WPA, WPA2, TKIP, AES, 802.1x
Configuration	Web Console, Serial Manager Utility
Operation Mode	Virtual COM, TCP/UDP Server/Client, Tunneling.
OS Support	Windows / Linux redirection software
Mechanical Characteristics	
Housing	Metal IP50 rated
Dimension	47 x 110 x 90 mm (W x H x D)
Weight	1.1 lbs. (500g)
Wi-Fi Direct Button	Yes
Mounting	DIN-Rail; Wall-mount (optional)
Power Requirement	
Input Voltage	9~48VDC w/ Reverse Polarity Protection
Power Connection	5.08mm 3-pin Lockable Terminal Block
Power Consumption	5.85 Watts (9VDC @ 0.65A)
Environmental Limits	
Operating Temperature	-10°C ~ 60°C (14°F ~ 140°F)
Storage Temperature	-40°C ~ 85°C
Ambient Relative Humidity	5 to 95%, (non-condensing)
Regulatory Approvals	
EMC	CE EN 301489-1 V1.8.1, EN301489-17 V2.1.1 (Class A), FCC 15B (Class A)
Radio	FCC 15C 15.247, FCC 15E 15.407, EN 301893 V1.5.1, EN 300328 V1.7.1
EMF	EN 62311: 2008, EN 50385: 2002, IEC-61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11.
Shock / Free Fall / Vibration	IEC 60068-2-27 / IEC 60068-2-32 / IEC 60068-2-64
RoHS II	Yes
MTBF	STW-611C: 205,510 Hours STW-612C: 194,910 Hours
Certifications	FCC, CE, UL-60950-1
Warranty	5 Years

RECEIVER SENSITIVITY

Receiver Sensitivity					
	Data Rate	IEEE Spec(1 Rx dBm)		Data Rate	IEEE Spec(1 Rx dBm)
802.11b	1M	not specified	802.11n HT40	MCS0	-79
	5.5M	not specified		MCS1	-76
	11M	not specified		MCS2	-74
802.11g	6M	-82		MCS3	-71
	9M	-81		MCS4	-67
	12M	-79		MCS5	-63
	18M	-77		MCS6	-62
	24M	-74		MCS7	-61
	36M	-70	802.11b/g/n HT20	MCS0	-82
	48M	-66		MCS1	-79
	54M	-65		MCS2	-77
802.11n HT20	MCS0	-82		MCS3	-74
	MCS1	-79		MCS4	-70
	MCS2	-77		MCS5	-66
	MCS3	-74		MCS6	-65
	MCS4	-70	802.11b/g/n HT40	MCS7	-64
	MCS5	-66		MCS0	-79
	MCS6	-65		MCS1	-76
	MCS7	-64		MCS2	-74
				MCS3	-71
				MCS4	-67
				MCS5	-63
				MCS6	-62
				MCS7	-61

ORDERING INFO

STW-611C 1-Port (RS232/422/485) Industrial IEEE802.11b/g/n Wireless Serial Device Server, w/Bridge Mode

STW-612C 2-Port (RS232/422/485) Industrial IEEE802.11b/g/n Wireless Serial Device Server, w/Bridge Mode

Optional Accessories

PARANI-DAT5R Dipole Antenna, SMA Female-Right Hand Thread, 5dBi

PA-STX-US Power Adapter (US Plug) – Input: 100~240VAC 50/60Hz 0.4A; Output: 12VDC 1.25A

PA-STX-EU Power Adapter (EU Plug) – Input: 100~240VAC 50/60Hz 0.4A; Output: 12VDC 1.25A

MDR-10-24 10W Industrial Single Output Miniature DIN Rail Power Supply (12VDC)