

# 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 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
- ▶ 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

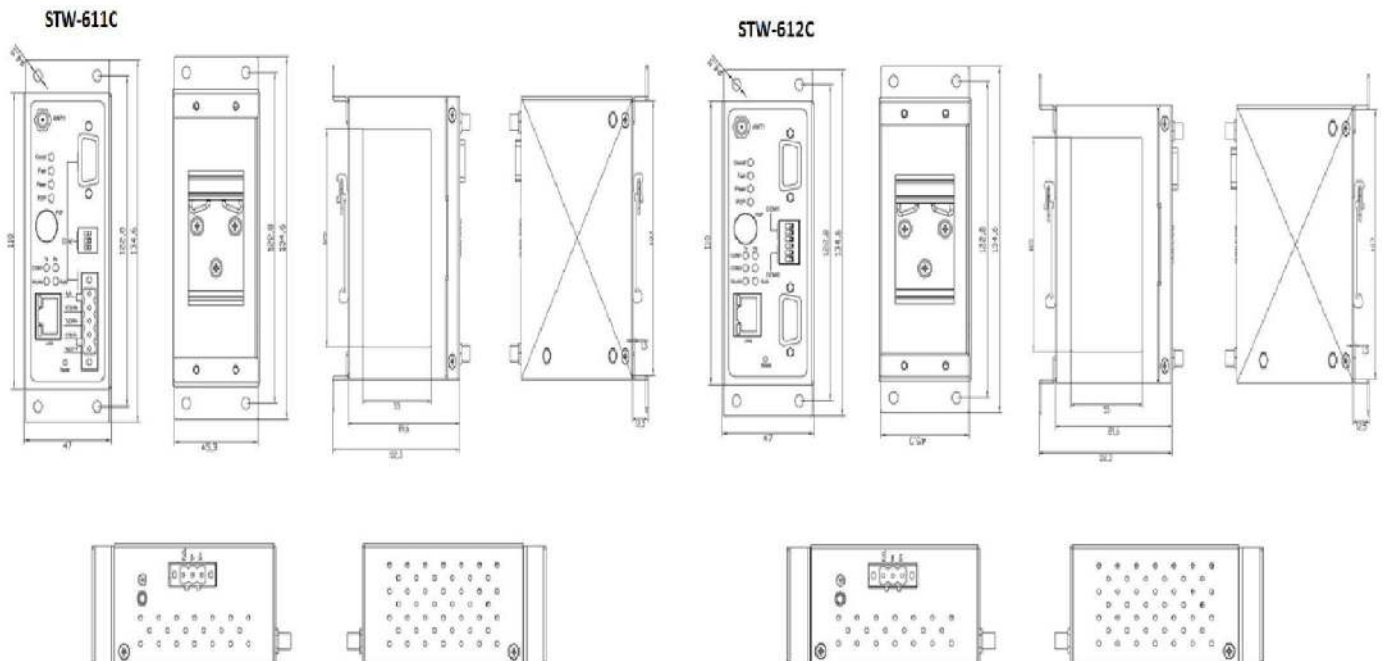
## INTRODUCTION

Antaira's new **STW-61xC series** is an Industrial Wireless Serial Device Server with IEEE802.11b/g/n in 2.4GHz band; it provides connectivity to clients and serial devices creating a complete solution for the wireless networking.

Antaira STW-61xC series built-in with the advanced features "Bridge Mod" to allow any Serial and Ethernet Devices to link with the Wireless Network at the same time, in order to perform a "3-ways communication" solution; plus the hassle free "Wi-Fi Direct" Technology easy setup for "Point-to-Point" Application via "Push Button" method without requiring software configuration.

It is an IP30 rated and Compact Rugged Aluminum Case design with Wide Operating Temperature support -10° to 60°C and High EMC protection to meet Industrial Applications requirement.

## DIMENSIONS



## SPECIFICATION

Technology	
<b>Radio Frequency</b>	<b>United States (FCC) - 2.4GHz</b> <b>Europe (ESTI)</b> 2412-2462(20Mhz)/2422-2452(40Mhz) 2412-2472(20Mhz)/2422-2462(40Mhz)
<b>Data Rate</b>	<b>IEEE 802.11b</b> 1,2,5.5 and 11Mbps <b>IEEE 802.11g</b> 6,9,12,18,24,36,48,54Mbps <b>IEEE 802.11n</b> 20MHz bandwidth: 1Nss: 65Mbps @ 800GI, 72.2Mbps @ 400GI (Max.) 40MHz bandwidth: 1Nss: 135Mbps @ 800GI, 150Mbps @ 400GI (Max.)
<b>Output Power</b>	<b>IEEE 802.11b</b> +14dBm <b>IEEE 802.11g</b> +17dBm @ 6, 9, 12,18,24Mbps, +17dBm @ 36Mbps, +16dBm @ 48Mbps, +16dBm @ 54Mbps. <b>IEEE 802.11n – 2.4GHz/HT20</b> +16dBm @ MCS 0 +16dBm @ MCS 4 +16dBm @ MCS 1 +16dBm @ MCS 5 +16dBm @ MCS 2 +16dBm @ MCS 6 +16dBm @ MCS 3 +15dBm @ MCS 7 <b>IEEE 802.11n – 2.4GHz/HT40</b> +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	
<b>Technology</b>	IEEE 802.3, 802.3u
<b>Port</b>	1*RJ45
<b>Speed</b>	10/100Tx
Wireless Interface	
<b>Wireless Module</b>	Atheros AR9382
<b>Standard Compliance</b>	IEEE 802.11b/g/n
<b>Tx / Rx</b>	1T1R MIMO (1 x 1 with MCS 0-7)
<b>Antenna</b>	2 dBi antenna design, SMA(R) Female connector
Serial Interface	
<b>Connector</b>	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)
<b>Baud Rate</b>	110~921.6Kbps
<b>Parity</b>	None, Odd, Even, Space, Mark
<b>Data / Stop Bits</b>	5,6,7,8, / 1,2
<b>Flow Control</b>	None, Xon / Xoff, RTS/CTS
Software	
<b>Protocol</b>	IPv4,ICMP,TCP,UDP,DHCP Client, SNMP, SMTP, HTTP, DNS, NTP, RADIUS, RFC2217, WPS, Syslog
<b>Wireless Security Configuration</b>	WEP, WPA, WPA2, TKIP, AES, 802.1x Web Console, Serial Manager Utility
<b>Operation Mode</b>	Virtual COM, TCP/UDP Server/Client, Tunneling.
<b>OS Support</b>	Windows / Linux redirection software
Mechanical Characteristics	
<b>Housing</b>	Metal IP30 rated
<b>Dimension</b>	47 x 110 x 90 mm (W x H x D)
<b>Weight</b>	1.1 lbs. (500g)
<b>Wi-Fi Direct Button</b>	Yes
<b>Mounting</b>	DIN-Rail; Wall-mount (optional)
Power Requirement	
<b>Input Voltage</b>	9~48VDC w/ Reverse Polarity Protection
<b>Power Connection</b>	5.08mm 3-pin Lockable Terminal Block
<b>Power Consumption</b>	5.85 Watts (9VDC@0.65A)
Environmental Limits	
<b>Operating Temperature</b>	-10°C ~ 60°C (14°F ~ 140°F)
<b>Storage Temperature</b>	-40°C ~ 85°C
<b>Ambient Relative Humidity</b>	5 to 95%, (non-condensing)
Regulatory Approvals	
<b>EMC</b>	CE EN 301489-1 V1.8.1, EN301489-17 V2.1.1 (Class A), FCC 15B (Class A)
<b>Radio</b>	FCC 15C 15.247, FCC 15E 15.407, EN 301893 V1.5.1, EN 300328 V1.7.1
<b>EMF</b>	EN 62311: 2008, EN 50385: 2002, IEC-61000-4-2,4-3,4-4,4-5,4-6,4-8,4-11.
<b>Shock / Free Fall / Vibration</b>	IEC 60068-2-27 / IEC 60068-2-32 / IEC 60068-2-64
<b>RoHS II</b>	Yes
<b>MTBF</b>	STW-611C: 205,510 Hours STW-612C: 194,910 Hours
<b>Certifications</b>	FCC, CE, UL-60950-1
<b>Warranty</b>	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	802.11b/g/n HT20	MCS3	-71
	9M	-81		MCS4	-67
	12M	-79		MCS5	-63
	18M	-77		MCS6	-62
	24M	-74		MCS7	-61
	36M	-70		MCS0	-82
	48M	-66		MCS1	-79
54M	-65	MCS2	-77		
802.11n HT20	MCS0	-82	802.11b/g/n HT40	MCS3	-74
	MCS1	-79		MCS4	-70
	MCS2	-77		MCS5	-66
	MCS3	-74		MCS6	-65
	MCS4	-70		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)