

## FEATURE HIGHLIGHTS



- Designed for 802.11 b/g/n networks
- Web server/Utility configuration
- Upgrade via Serial Manager or Web server
- FCC (United States), ETSI (Europe) certified wireless equipment
- RS232/422/485 software selectable
- D-sub9 or TB5 combo serial port (SW5501C)
- Support Wi-Fi Direct (Peer-to-Peer)

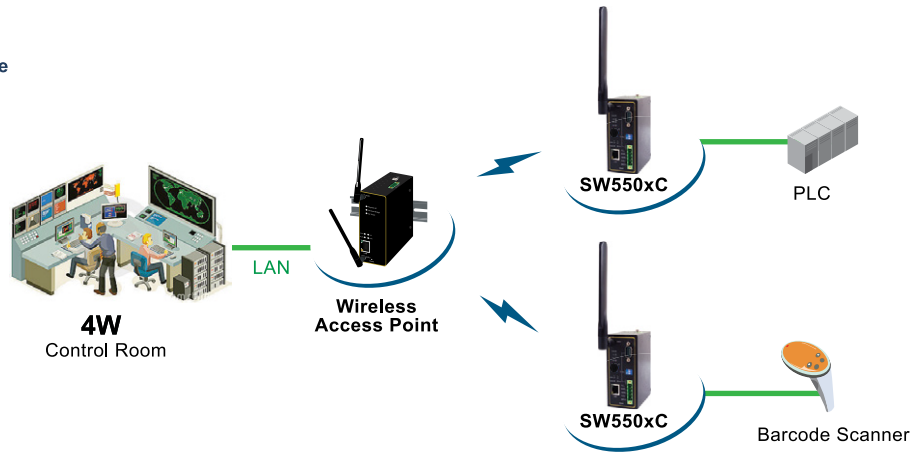
## PRODUCT DESCRIPTION

The SW550xC Series is our latest addition to our Industrial Wireless products; its small size but powerful architecture makes it a perfect choice for industrial/manufacturing needs in which size is a decisive factor. It rewards our customers with superb connectivity withstanding all the harshness in your environment of choice.

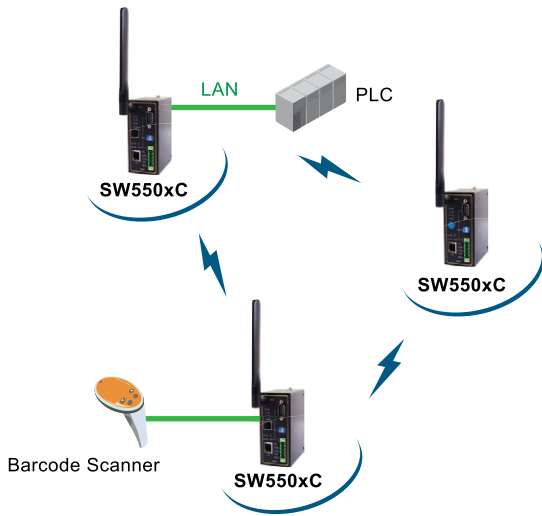
The SW550xC Series supports "Wi-Fi Direct" technology that makes Wi-Fi usage to be an ease-to-use connectivity, and delivers an industry-wide peer-to-peer solution based on broadly deployed Wi-Fi technologies.

# Application

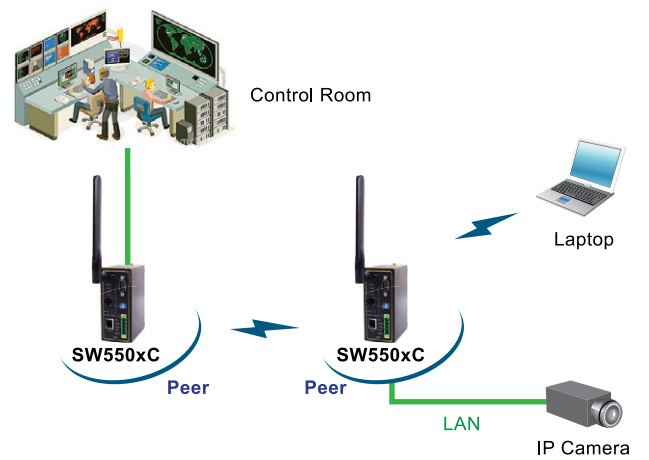
## Client Mode



## Adhoc Mode



## Wi-Fi Direct Mode



## SPECIFICATIONS

Technical Specifications	
Model Name	SW550XC
Network Interface	
Connector	RJ-45
Speed	IEEE802.3u, 100Base-T(X)
Serial Interface	
Connector	D-Sub9 or TB5 combo RS-232/422/485 software selectable (SW5501C) D-Sub9 RS-232/422/485 software selectable (SW5502C) 5.08mm TB5 RS-232/422/485 software selectable (SW5502C-TB)
Ports	SW5501C: 1 Port / SW5502C: 2 Ports
Baud Rate	110 ~ 921600Kbps
Parity	None, Odd, Even, Space, Mark
Data Bits	5,6,7,8
Stop Bits	1,2
Flow Control	None, Xon / Xoff, RTS/CTS
Power Characteristics	
Input Voltage	9VDC - 48VDC
Input Current(9VDC)	0.65A
Power Consumption	Approx. 5.85Watts
Reverse Polarity Protection	Yes
Connection	5.08mm 3-pin Lockable Terminal Block
Mechanicals	
Protection Rating	IP30
Dimensions(W x H x D)	47x110x90 mm
Installation	DIN Rail, Wall Mount (optional)
Reset Button	Yes
Wi-Fi Direct(P2P) Button	Yes
Weight	500g
Environmental Limits	
Operating Temperature	-10°C ~ 60°C (14°F ~ 140°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Ambient Relative Humidity	5 ~ 95% RH, (non-condensing)
Software	
Protocols	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	Atop Device Management Utility, Web UI
Virtual COM	Windows / Linux redirection software
Link Modes	
TCP Server	4 connections, Virtual COM, or Reverse Telnet
TCP Client	Dual destinations or Virtual COM
UDP	Up to 4 ranges of IPs
MTBF	14 years (MIL-HDBK-217F)

Regulatory Requirements				
EMC	EN55032, EN55024, EN 301489-1 V2.2.0; EN301489-17 V3.2.0; FCC 15B (Class A)			
Radio	FCC 15C 15.247, FCC 15E 15.407, EN 301893 V2.1.1, EN 300328 V2.1.1			
EMF	EN 62311: 2008, EN 50385: 2002			
Test	Description		Test Levels	Levels
EN61000-4-2	ESD	Contact Discharge	±8KV	4
		Air Discharge	±15KV	4
EN61000-4-3	RS	Radiated (Enclosure)	10(V/m)	3
EN61000-4-4	EFT	AC Power Port	±2.0 KV	3
		LAN Port	±2.0 KV	4
EN61000-4-5	Surge	AC Power Port	Line-to-Line±1.0 KV	3
		AC Power Port	Line-to-Earth±2.0 KV	3
		LAN Port	Line-to-Earth±2.0 KV	3
EN61000-4-6	CS	Conducted (Enclosure)	10 V rms	3
EN61000-4-8	PFMF	(Enclosure)	AC 50/60 Hz 10 A/m	3
Safety	UL60950-1 , CB IEC/EN60950-1, IEC/EN 62368-1			
Shock	IEC 60068-2-27			
Freefall	IEC 60068-2-32			
Vibration	IEC 60068-2-64			
MTBF	22 years (MIL-HDBK-217F)			
Warranty	5 years			
RoHS	Yes			
Wireless Characteristics				
Wireless PCI-e Module	Atheros AR9382			
Tx / Rx	1T1R MIMO (1 x 1 with MCS 0-7)			
Standard Conformance	802.11b, 802.11g, and 802.11n			
Operating Frequency				
	2.4Ghz			
United States (FCC)	2412-2462(20Mhz)/2422-2452(40Mhz)			
Europe (ETSI)	2412-2472(20Mhz)/2422-2462(40Mhz)			
Data Rate				
802.11b	1, 2, 5.5 and 11Mbps			
802.11g	6, 9, 12, 18, 24, 36, 48, 54Mbps			
802.11n	20MHz bandwidth: 1Nss: 65Mbps @ 800GI, 72.2Mbps @ 400GI (Max.)			
	40MHz bandwidth: 1Nss: 135Mbps @ 800GI, 150Mbps @ 400GI (Max.)			
Antenna (2.4GHz)				
Gain	3dBi			
Connector	SMA(R) Female			
Output Power				
802.11b	+14dBm			
802.11g	+17dBm @ 6, 9, 12,18,24Mbps / +17dBm @ 36Mbps / +16dBm @ 48Mbps / +16dBm @ 54Mbps			
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			
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			

## 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	MCS7	-64	
	MCS5	-66	802.11b/g/n HT40	MCS0	-79
	MCS6	-65		MCS1	-76
MCS7	-64	MCS2		-74	
		MCS3		-71	
		MCS4		-67	
		MCS5		-63	
		MCS6		-62	
		MCS7	-61		

## ORDERING INFORMATION

### Ordering Information

Model name	Part Number	Description
SW5501C	1P1SW5501C0001G	1-port Industrial Wireless Serial Device Server, DB9 or TB5 combo
SW5502C	1P1SW5502C0001G	2-port Industrial Wireless Serial Device Server, DB9
SW5502C-TB	1P1SW5502CTB01G	2-port Industrial Wireless Serial Device Server, TB5

### Optional Accessories

Model name	Part Number	Description
UN315-2465 (US)	50500161240002G	Y-Type power adapter, 100~240VAC input, 0.65A @ 24VDC output, US plug, LV6
UNE315-2465 (EU)	50500161240012G	Y-Type power adapter, 100~240VAC input, 0.65A @ 24VDC output, EU plug, LV6
ADP-DB9(F)-TB5	59906231G	Female DB9 to Female 3.81 TB5 Converter
WMK-454-Black	70100000000043G	Black Aluminum Wall Mount Kit

## DIMENSIONS & LAYOUT

