



Industrial Networking Solutions

Serial Device Servers

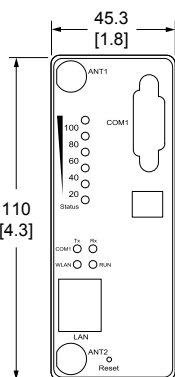
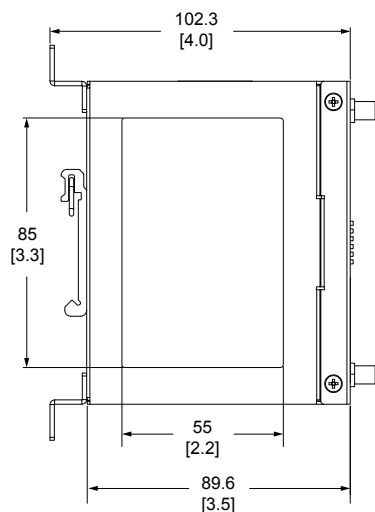


Wireless/Cellular Serial Device Servers | DIN-Rail Mount | Metal Housing | IP30 Rating

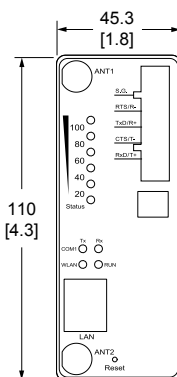


Industrial Wireless IEEE 802.11 a/b/g/n Serial Device Servers

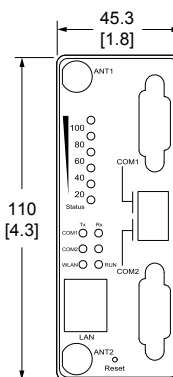
Part Number [MFG #]	RS-232 RS-422 RS-485 TB5	RS-232 RS-422 RS-485 DB9	10/100 /1000 RJ45 Ports	Isolation	Features
E45WSS-DB9 [SW5501]	N/A	1	1	N/A	Industrial EMC Protection Wireless Distribution System (WDS) 2 X 2 Multiple-Input-Multiple-Output (MIMO) Wireless
E45WSS-TB5 [SW5501-TB]	1	N/A	1	N/A	
E45WSS-TB5-IS [SW5501-SIS]	1	N/A	1	2 KV	
E45WSS-2DB9 [SW5502]	N/A	2	1	N/A	
E45WSS-2TB5 [SW5502-TB]	2	N/A	1	N/A	
E45WSS-2TB5-IS [SW5502-SIS]	2	N/A	1	2 KV	



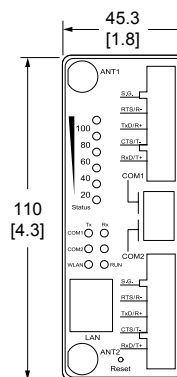
E45WSS-DB9



**E45WSS-TB5
E45WSS-TB5-IS**



E45WSS-2DB9



**E45WSS-2TB5
E45WSS-2TB5-IS**

Feature Highlights:

- Designed for 802.11a/b/g/n networks
- Embedded PCB coating protection
- Web server/Utility configuration (Serial Manager)
- Upgrade via Serial Manager or Web server
- 5 GHz frequency support to reduce interference on 2.4 GHz with other wireless devices
- FCC (United States), ETSI (Europe), and NCC (Taiwan) certified wireless equipment



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Specifications & Approvals



Wireless/Cellular Serial Device Servers | DIN-Rail/Wall Mount | Metal Housing | IP30 Rating

Network Interface	
Connector	RJ-45
Speed	IEEE802.3ab 10/100/1000Mbps
Power Management	
Input Voltage	9VDC - 48VDC
Input Current(9VDC)	0.65A
Power Consumption	Approx. 5.85Watts (max)
Reverse Polarity Protection	Yes
Connector	5.08mm 3-pin Lockable Terminal Block
Environmental Limits	
Operating Temperature	-10°C ~ 60°C (14°F ~ 140°F)
Storage Temperature	-40° ~ 85°C (-40°~ 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
Wireless Security	WEP, WPA, WPA2, TKIP, AES, 802.1x
Configuration	Serial Manager, 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
Wireless Characteristics	
Wireless PCI-e Module	Atheros AR9382
Tx / Rx	2T2R MIMO (2 x 2 with MCS 0-15)
Standard Conformance	802.11a, 802.11b, 802.11g, and 802.11n
Antenna	3/5 dBi antenna design, SMA(R) Female connector
Operating Frequency	2.4Ghz5Ghz
United States (FCC)	2412-2462(20Mhz)/2422-2452(40Mhz)5180-5240, 5745-5825(20Mhz)/5190-5230, 5755-5795(40Mhz)
Europe (ETSI)	2412-2472(20Mhz)/2422-2462(40Mhz)5180-5240(20Mhz)/5190-5230(40Mhz)
Taiwan (NCC)	2412-2462(20Mhz)/2422-2452(40Mhz)5280-5320, 5745-5825(20Mhz)/5310, 5755-5795(40Mhz)

Serial Interface				
Connector	DB9 Models		D-Sub9 RS-232/422/485 software selectable	
	TB Models		5.08mm TB5 RS-232/422/485 software selectable	
	Sis Models		5.08mm TB5 RS-422/485 software selectable	
Ports	E45WSS-DB9 E45WSS-TB5 E45WSS-TB5-IS		1 Port	
	E45WSS-2DB9 E45WSS-2TB5 E45WSS-2TB5-IS		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	
Regulatory Approvals				
Safety	UL60950-1/CB, EN60950-1, CNS 14336			
EMC	EN 301489-1 VV1.9.2, EN301489-17 V2.2.2 (Class A), FCC 15B (Class A), CNS 13438			
Radio	FCC 15C 15.247, FCC 15E 15.407, EN 301893 V1.7.1, EN 300328 VV1.8.1, NCC LP00002			
EMF	EN 62311: 2008, EN 50385: 2002			
EMS Test	Item		Value	Level
IEC 61000-4-2	ESD	Contact Discharge Air Discharge	±8KV ±15KV	4 4
IEC 61000-4-3	RS	Radiated (Enclosure)	10(V/m)	3
IEC 61000-4-4	EFT	AC Power Port LAN Port COM Port	±2.0 KV ±2.0 KV ±2.0 KV	3 4 4
IEC 61000-4-5	Surge	AC Power Port AC Power Port LAN Port COM Port	Line-to-Line±1.0 KV Line-to-Earth±2.0 KV Line-to-Earth±2.0 KV Line-to-Earth±2.0 KV	3 3 3 3
IEC 61000-4-6	CS	Conducted (Enclosure)	10 V rms	3
IEC 61000-4-8	PFMF	Enclosure	10(A/m)	3
IEC 61000-4-11	DIP	AC Power Port	-	-
Shock	IEC 60068-2-27			
Drop	IEC 60068-2-32			
Vibration	IEC 60068-2-6			
MTBF	22 years (MIL-HDBK-217F)			
RoHS	Yes			
Warranty	5 Years			