

### SE5901 Series

# 1-Port Industrial Secure Serial Device Server



### **FEATURE HIGHLIGHTS**

- Industrial EMC protection, wide temperature operation, -40°C~85°C
- 2-port 10/100Mbps Fast Ethernet, 1-port USB 2.0 high speed OTG
- TCP Server/Client, UDP, Virtual COM and Tunneling modes supported
- Embedded security with IPsec or OpenVPN support
- Remotely monitor, manage, and control industrial field devices
- Optional 802.3af PoE models can be powered through the Ethernet cable
- Configuration via Web Browser/ Telnet/ Windows Utility
- Remote firmware upgrade, link redundancy via RSTP
- Rugged metal case with wall or DIN-Rail mount

### **PRODUCT DESCRIPTION**

#### Make Serial Devices Ready to the Network

The Industrial Serial Device Server SE5901 is a cost effective gateway for Ethernet (TCP/IP) and serial signal communications; allowing almost any serial device to be connected to a new or existing Ethernet network. By encapsulating serial data and transporting it over Ethernet, SE5901 offers full-duplex and bi-directional data seamlessly between the serial port and the Ethernet network.

#### Security and Redundancy

SE5901 embeds OpenVPN and IPsec VPN, that allows you to tunnel your data securely throught the internet and prevent unauthorized control of your Serial Devices by malicious people. The integrated Rapid Spanning Tree Protocol (RSTP), allows you to add a backup Ethernet link in the event the primary one fails.

#### Easy to Use

Flexible configuration options enable this unit to be setup over Ethernet by Telnet, Web Browser, or our Windows Utility. Packed in a rugged metal housing for wall or DIN-Rail mount with 9-48 VDC wide range power input, SE5901 is ideal for almost any industrial and manufacturing automation process. Atop Virtual COM software provides a virtual environment for applications when accessing SE5901 through TCP.

#### Specially Designed for Automation Fields and Harsh Environments

In industrial and manufacturing automation fields, SE5901 is used as a field device to connect the Ethernet through TCP/IP protocol directly. It is also specially designed for conjunction with PLCs, HMIs, Barcode Scanners, Data Terminals, and much more...Its design protects it from very harsh EMC and environmental conditions, making it a cost-effective choice for advanced applications

#### Rugged and flexible for advanced developments

SE5901 embeds *high EMC protection, wide temperature operation*, programming and installation flexibility in one device. PoE versions can be powered through Power-over-Ethernet (PoE 802.3af), without additional cabling and power supply. *SDK versions* allow you to make use of the powerful hardware and develop your own applications on top of Atop's reliable SDK.











# **SPECIFICATIONS**

Technical Specifications	
Model Name	SE5901
Network interface	
Speed	IEEE 802.3 10BaseT IEEE 802.3u 100BaseT(X)
PoE standard supported	IEEE 802.3 af (PoE)
Connector ports	RJ45 x 2
Serial Interface	
Connector	D-Sub9 RS-232/422/485 software selectable (DB models) 5.08mm 5-Pin Terminal block RS-232/422/485 sw selectable (TB models)
Ports	1
Baud Rate	1,200 ~ 921,600 bps software selectable
Data Bits	5, 6, 7, 8 software selectable
Stop Bits	1, 2 software selectable
Flow Control	None, Xon/Xoff, RTS/CTS
USB interface	
Speed	USB 2.0
Connector	USB A Type
Power	
Input Voltage	9 - 48VDC, 24 VAC (non-PoE Models); or Ethernet Cable (PoE versions)
Input Current (@ 9VDC)	0.65 A
Power Consumption	Approximately 6 W (Max)
Connector	3-Pin 5.08mm Lockable Terminal Block
Reverse Polarity Protection	Yes
Physical Characteristics	
Housing Dimension (W x H x D) Weight Installation Reset Button	IP30 SPCC housing 32 x 110 x 90 mm (1.26 x 4.33 x 3.54 in) 400 g DIN-Rail, Wall mount (optional kit) Yes
Environmental Limits	
Operating Temperature Storage Temperature Ambient Relative Humidity	-40°C~85°C (-40°F~185°F) -40°C~85°C (-40°F~185°F) 5%~95%, 55°C (Non-condensing)
Sofware	
Protocols	IPv4, ICMP, TCP, UDP, DHCP Client, SNMPv1,v2c,v3, HTTP, HTTPS, SMTP/Telnet, RFC2217, 802.1D-2004 RSTP, Security through OpenVPN or IPsec (host-to-host or host-to-side) with up to 37.9Mbps VPN throughput, and P
Configuration	Atop Management Utility, Web UI, Telnet
VirtualCOM	Windows/Linux redirection software





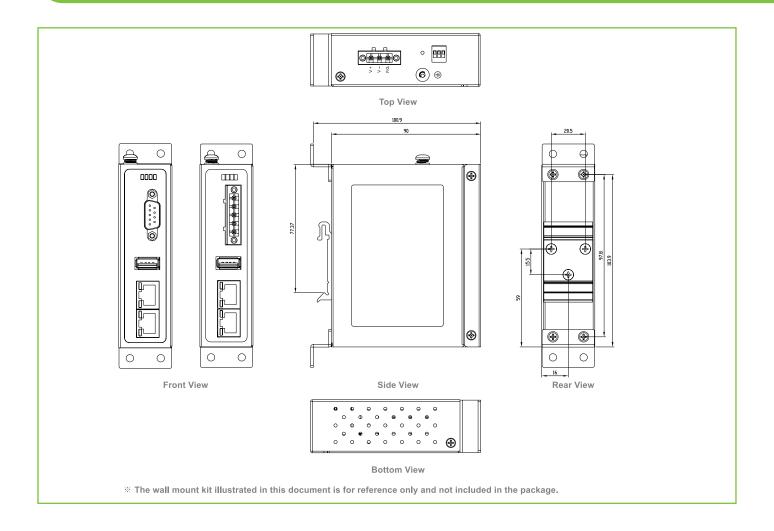






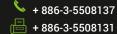
Link Modes	
TCP Client	Single destination or VirtualCOM
TCP Server	4 Connections; VirtualCOM or reverse Telnet
UDP	Up to 4 Ranges IP

# **DIMENSIONS & LAYOUT**



# **REGULATORY APPROVALS**

Regulatory Approvals	
Safety	EN60950-1:2006; EN62368-1
EMC	FCC Part 15, Subpart B, Class A EN 55032, EN 55024, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-4,













Test		ltem	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 DC Power Port Signal Port	±2.0KV ±2.0KV ±2.0KV	3 3 3
IEC 61000-4-5	Surge	AC Power Port AC Power Port DC Power Port DC Power Port Signal Port	Line-to Line±1.0KV Line-to Earth±2.0KV Line-to Line±1.0KV Line-to Earth±2.0KV Line-to Earth±2.0KV	3 3 3 3 3
IEC 61000-4-6	CS	Conducted (enclosure)	10 V rms	3
IEC 61000-4-8	PFMF	Enclosure	30 A/m	3
IEC 61000-4-11	DIP	Power Port	-	А
Shock Drop (Freefall) Vibration	IEC 60068-2-3 IEC 60068-2-3 IEC 60068-2-6	32		
RoHS II	Yes			
MTBF	21.16 years (MIL-HDBK-217F-based prediction)			
Warranty	5 years			

### **ORDERING INFORMATION**

Ordering information				
Model name	Part Number	Description	Ethernet	Serial
SE5901-DB	1P1SE5901DB001G	1-port RS-232/422/485 Ind. Serial Device Server, DB9	2	1 (DB9)
SE5901-TB	1P1SE5901TB001G	1-port RS-232/422/485 Ind. Serial Device Server, TB5	2	1 (TB)
SE5901-PoE-DB	1P1SE5901P0E03G	1-port RS-232/422/485 Ind. Serial Server, DB9,PoE Pwrd	2	1 (DB9)
SE5901-PoE-TB	1P1SE5901P0E04G	1-port RS-232/422/485 Ind. Serial Server, TB,PoE Pwrd	2	1 (TB)
SDK version	Contact Headquarter	SDK programmable version available upon request	2	1

Optional Accessories			
Model name	Part Number	Description	
UN315-1212 (US-Y)	50500151120003G	Y-Type power adaptor, 100~240VAC input, 1.25A @ 12VDC output, US plug, LV6	
UNE315-1212 (EU-Y)	50500151120013G	Y-Type power adaptor, 100~240VAC input, 1.25A @ 12VDC output, EU plug, LV6	
ADP-DB9(F)-TB5	59906231G	Female DB9 to Female 3.81 TB5 Converter	
WMK-315-Black	70100000000050G	Black Aluminum Wall Mount Kit	







