



### SE5901 Series

### **1-Port Industrial Secure Serial Device Server**

### FEATURE

- 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-Railmount

### **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.

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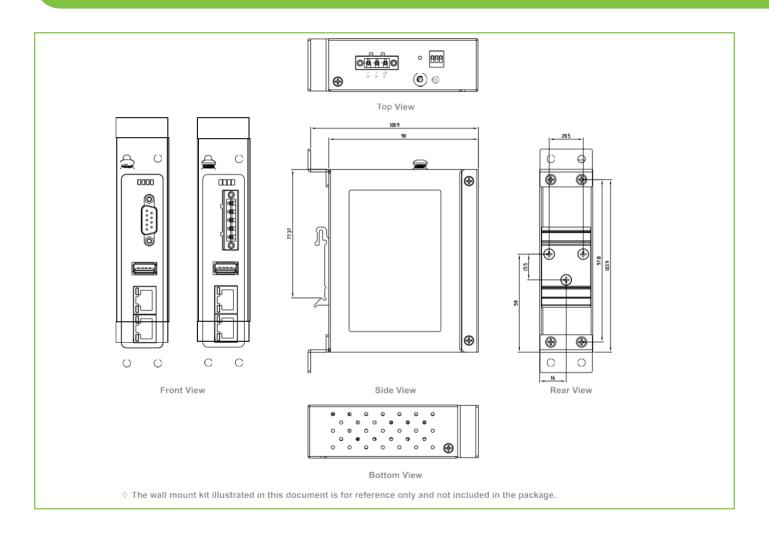
## **SPECIFICATIONS**

| Model Name   | SE5901  |
|--|---|
|  | SES901  |
| Networkinterface   |   |
| Speed  | IEEE 802.3 10BaseT<br>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)<br>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<br>Dimension (W x H x D)<br>Weight<br>Installation<br>Reset Button | IP30 SPCC housing<br>32 x 110 x 90 mm (1.26 x 4.33 x 3.54 in)<br>400 g<br>DIN-Rail, Wall mount (optional kit)<br>Yes  |
| Environmental Limits   |   |
| Operating Temperature<br>Storage Temperature<br>Ambient Relative Humidity  | -40°C~85°C (-40°F~185°F)<br>-40°C~85°C (-40°F~185°F)<br>5%~95%, 55°C (Non-condensing)   |
| Sofware  |   |
| Protocols  | IPv4, ICMP, TCP, UDP, DHCP Client, SNMPv1,v2c,v3, HTTP, HTTPS,<br>SMTP/TLS<br>Telnet, RFC2217, 802.1D-2004 RSTP, Security through OpenVPN or IP<br>(host-to-host or host-to-side) with up to 37.9Mbps VPN throughput, and PPT |
| 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**

| Safety | EN60950-1:2006   |  |
|--------|--|--|
| EMC    | FCC Part 15, Subpart B, Class A<br>EN 55032, EN 55024, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-4, |  |

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ROHS



| Test                                  |   | Item  | Value  | Level       |
|---------------------------------------|---|---|--|-------------|
| IEC 61000-4-2                         | ESD   | Contact Discharge<br>Air Discharge            | ±8kV<br>±15kV  | 4           |
| IEC 61000-4-3                         | RS  | Radiated (enclosure)                          | 10 V/m   | 3           |
| IEC 61000-4-4                         | EFT   | DC Power Port<br>Signal Port                  | ±2.0KV<br>±2.0KV   | 3           |
| IEC 61000-4-5                         | Surge   | DC Power Port<br>DC Power Port<br>Signal Port | Line-to Line±1.0KV<br>Line-to Earth±2.0KV<br>Line-to Earth±2.0KV | 3<br>3<br>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   | Power Port                                    |  | A           |
| Shock<br>Drop (Freefall)<br>Vibration | IEC 60068-2-27<br>IEC 60068-2-32<br>IEC 60068-2-6 |   |  |             |
| RoHS II                               | Yes   |   |  |             |
| MTBF                                  |   | 21.16 years (MIL-HDBK-217F-based prediction)  |  |             |
| Warranty                              |   | 5 years                                       |  |             |

## ORDERING INFORMATION

| Ordering inform | Ordering information |  |              |         |  |
|-----------------|----------------------|--|--------------|---------|--|
| Model name      | Part Number          | Description  | Etherne<br>t | 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   | Contact Headquarter  | 1-port RS-232/422/485 Ind. Serial Server, DB9,PoE Pwrd | 2            | 1 (DB9) |  |
| SE5901-PoE-TB   | Contact Headquarter  | 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     | Descriptio<br>n  |  |
| 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        | 7010000000050G  | Black Aluminum Wall Mount Kit  |  |

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