



FEATURE HIGHLIGHTS

- Remotely monitor, manage, and control industrial field devices
- Industrial EMC protection, wide temperature operation, -40°C to +85°C
- 2 Fast-Ethernet ports or 2x 100/1000 SFP slots with RSTP Redundancy
- 4 Software-selectable RS-232/RS-485/RS-422 serial ports, up to 921kbps
- TCP Server/Client, UDP, Virtual COM and Tunneling modes supported
- Embedded security with PPTP, IPsec or OpenVPN client/server
- Isolated Redundant 12~48 VDC Power Inputs or powered (PoE models) through through the Ethernet cable (802.3af)
- Configuration via Web Browser/ Serial Console/ Telnet/ Windows Utility
- Rugged metal case with wall or DIN-Rail mount

PRODUCT DESCRIPTION

Make Serial Devices Ready to the Network

The Industrial Serial Device Server SE5904D 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, SE5904D offers full-duplex and bi-directional data seamlessly between the four serial ports and the Ethernet network, through 2x 10/100 Ethernet ports or 2x 100/1000 SFP Fiber slots.

Embedded Security and advanced features

SE5904D embeds OpenVPN and IPsec VPN, that allows you to tunnel your data securely through 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, Serial Console, or our Windows Utility. Packed in a rugged metal housing for wall or DIN-Rail mount with redundant 12-48 VDC wide range power input and one relay output, SE5904D is ideal for almost any industrial and manufacturing automation process. ATOP Virtual COM software provides a virtual environment for applications when accessing SE5904D through TCP.

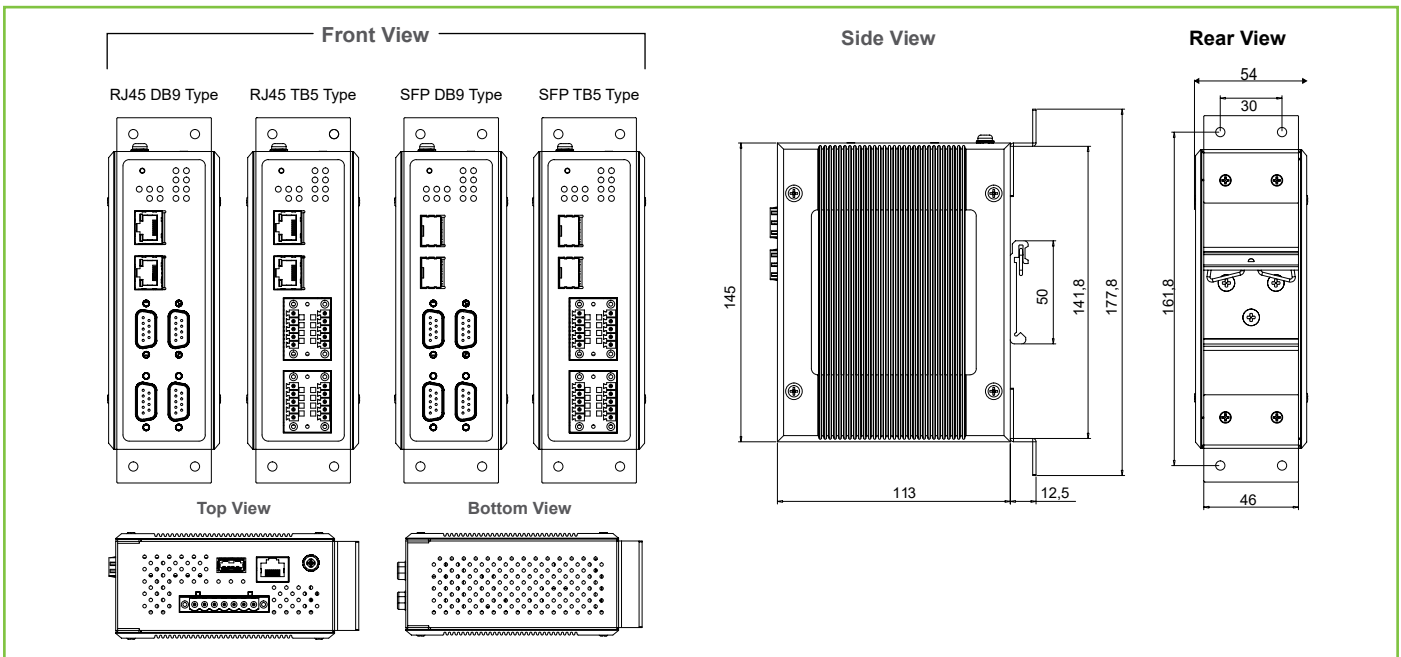
Specially Designed for Automation Fields and Harsh Environments

In industrial and manufacturing automation fields, SE5904D 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

SE5904D 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.

DIMENSIONS & LAYOUT



SPECIFICATIONS

| Technical Specifications | |
|--------------------------|--|
| Model Name | SE5904D |
| Network interface | |
| Supported Standards | IEEE 802.3 10BaseT IEEE 802.3u 100BaseT(X) IEEE 802.3u for 100Base-X IEEE 802.3z for 1000Base-X (SFP version only) |
| Power over Ethernet | IEEE 802.3af for Power over Ethernet (PD) - PoE version only |
| LAN Mode | Dual Subnets or RSTP Redundancy |
| Connector ports | 2x 10/100BASE-T(X) RJ-45 or 2x 100/1000 Base-X SFP Slots (SFP version) |
| Serial Interface | |
| Connector | 4x D-Sub9 RS-232/422/485 software selectable (DB models) or 4x 5.08mm 5-Pin Terminal block RS-232/422/485 sw selectable (TB models) |
| Baud Rate | 1,200 ~ 921,600 bps software selectable |
| Data Bits | 7, 8 software selectable |
| Stop Bits | 1, 2 software selectable |
| Flow Control | None, Xon/Xoff, RTS/CTS |
| Isolation | 2kV (Sis versions only) |

| USB interface | |
|--|---|
| Universal Serial Bus | 1x USB A Type connector (USB 2.0) |
| Power | |
| Input Voltage Input Current (@ 12VDC) Power Consumption Power Redundancy Reverse Polarity Protection | Dual 12 - 48VDC (non-PoE Models); or through Ethernet Cable (PoE versions) 0.65 A Approximately 8 W (Max) Yes Yes |
| Connector | 7-Pin 5.08mm Lockable Terminal Block |
| Relay Output | 1A @ 30 VDC (normal open) |
| Physical Characteristics | |
| Housing Dimension (W x H x D) Weight Installation Reset Button | IP30 SPCC housing 55 x 145 x 113 mm 1000 g DIN-Rail, Wall mount (optional kit) Yes |
| Environmental Limits | |
| Operating Temperature Storage Temperature Ambient Relative Humidity | -40°C to +85°C (-40°F to +185°F) -40°C to +85°C (-40°F to +185°F) 5% to 95%, 55°C (Non-condensing) |
| Software | |
| Protocols | IPv4, ICMP, TCP, UDP, DHCP Client, SNMPv1,v2c,v3, HTTP, HTTPS, Telnet, SMTP/TLS, RFC2217, 802.1D-2004 RSTP, Security through PPTP, OpenVPN (client/server), IPsec (host-to-host/host-to-side), up to 37.9Mbps throughput. |
| 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 |

REGULATORY APPROVALS

| Regulatory Approvals | | | | |
|-------------------------------------|---|-----------------------|---------------------|-------|
| Safety | UL61010-2-201/ 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 | Item | | Value | Level |
| IEC 61000-4-2 | ESD | Contact Discharge | ±8kV | 4 |
| | | Air Discharge | ±15kV | 4 |
| IEC 61000-4-3 | RS | Radiated (enclosure) | 10 V/m | 3 |
| IEC 61000-4-4 | EFT | AC Power Port | ±2.0KV | 3 |
| | | Signal Port | ±2.0KV | 4 |
| IEC 61000-4-5 | Surge | AC Power Port | Line-to Line±1.0KV | 3 |
| | | AC Power Port | Line-to Earth±2.0KV | 3 |
| | | Signal Port | Line-to Earth±2.0KV | 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 | - | - |
| Shock Drop (Freefall) /Vibration | IEC 60068-2-27 IEC 60068-2-32 /IEC 60068-2-64 | | | |
| RoHS II | Yes | | | |
| MTBF | 14.56 Years (according to MIL-HDBK-217F) | | | |
| Warranty | 5 years | | | |

ORDERING INFORMATION

| Ordering information | | | | |
|----------------------|---------------------|--|----------|---------|
| Model name | Part Number | Description | | |
| 2kV Isolated | 1P1SE5904D0004G | Ind. 4-Port Serial Device Server, 10/100BASET(X), DB9 | 2 (RJ45) | 4 (DB9) |
| SE5904D-4P-TB | 1P1SE5904D0005G | Ind. 4-Port Serial Device Server, 10/100BASET(X), TB5 | 2 (RJ45) | 4 (TB) |
| SE5904D-4P-Sis | 1P1SE5904D0006G | Ind. 4-Port Ser. Dev. Serv, 10/100BASET(X), 2kV Isolated | 2 (RJ45) | 4 (TB) |
| SE5904D-4P-PoE-DB | Contact Headquarter | Ind. 4-Port Ser. Dev. Serv, 10/100BASET(X)with PoE, DB9 | 2 (RJ45) | 4 (DB9) |
| SE5904D-4P-PoE-TB | Contact Headquarter | Ind. 4-Port Ser. Dev. Serv, 10/100BASET(X)with PoE, TB5 | 2 (RJ45) | 4 (TB) |
| SE5904D-4P-PoE-Sis | Contact Headquarter | Ind. 4-Port Ser. Dev. Serv, RJ45, PoE, 2kV Isolated | 2 (RJ45) | 4 (TB) |
| SE5904D-4P-G-DB-SFP | 1P1SE5904DG001G | Ind. 4-Port Ser. Device Server, 100/1000BASEX SFP, DB9 | 2 (SFP) | 4 (DB9) |
| SE5904D-4P-G-TB-SFP | 1P1SE5904DG002G | Ind. 4-Port Serial Device Server, 100/1000BASEX SFP, TB5 | 2 (SFP) | 4 (TB) |
| SE5904D-4P-G-Sis-SFP | 1P1SE5904DG003G | Ind. 4-Port Serial Serv, 100/1000BASEX SFP, 2kV Isolated | 2 (SFP) | 4 (TB) |
| wSDK version | Contact Headquarter | SDK programmable version available upon request | 2 | 4 |

Optional Accessories

| Model name | Part Number | Description |
|--------------------------|-----------------|--|
| SDR-75-24 | 50500752240001G | 75W/3.2A DIN-Rail 24VDC power supply with 88~264VAC / 124~370VDC input |
| CBL-RJ45(8P)-DB9(F)-90-C | 50891971G | 8-pin RJ45-DB9 debug cable, 90cm |
| GDC-120 | 59906861G | 120mm copper woven grounding cable |
| ADP-DB9(F)-TB5 | 59906231G | Female DB9 to Female 3.81mm TB5 Converter |
| WMK-450-Black | 70100000000052G | Aluminum wall mount kit |
| AXGD-5854-0513 | 522AXGD5854001G | SFP Transceiver, 1250Mbps, 850nm, Multi-mode, 550m, 3.3V, -40°C to +85°C, DDMI |
| AXGD-1354-0523 | 522AXGD1354001G | SFP Transceiver, 1250Mbps, 1310nm, Multi-mode, 2km, 3.3V, -40°C to +85°C, DDMI |
| AXGD-1354-0533 | 522AXGD1354011G | SFP Transceiver, 1250Mbps, 1310nm, Single-mode, 10km, 3.3V, -40°C to +85°C, DDMI |
| AXGD-3354-0593 | 522AXGD3354001G | SFP Transceiver, 1250Mbps, 1310nm, Single-mode, 40km, 3.3V, -40°C to +85°C, DDMI |