



## FEATURE HIGHLIGHTS

- Remotely monitor, manage, and control industrial field devices
- Industrial EMC protection, Opt. Serial port Isolation, -20°C~70°C operation
- 2 Fast-Ethernet ports, dual-subnet or RSTP redundancy
- 8/16 sw-selectable RS-232/485/422 (\*) RJ45 serial ports, up to 921kbps
- 24~48 VDC Power Input or 100~240 VAC Power input (EU or US version)
- TCP Server/Client, UDP, Virtual COM and Tunneling modes supported
- Supports SNMPv1/v2c/v3, Embedded security with IPsec and OpenVPN
- Configuration via Web Browser / Serial Console / Telnet Console / Windows Utility / LCM Matrix
- Integrated RSTP redundancy

## PRODUCT DESCRIPTION

### Make Serial Devices Ready to the Network

The Industrial Serial Device Server SE5908/16 is an advance gateway for Ethernet (TCP/IP) and serial signal communications; allowing any serial device to be connected to a new or existing Ethernet network. By encapsulating serial data and transporting it over Ethernet (both copper and fiber), offers full-duplex and bi-directional data seamlessly between the four available serial ports and the Ethernet network.

### Security and Redundancy

SE5908/SE5916 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, LCM display or our Windows Utility. Packed in a rugged metal housing for 19" Racks, it is ideal for almost any industrial and manufacturing automation process. Atop Virtual COM software provides a virtual environment for applications when accessing the device through TCP.

### Specifically Designed for Automation Fields

In industrial and manufacturing automation fields, SE5908/16 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..

### Rugged and flexible for advanced developments

SE5908/16 embeds *high EMC protection*, programming and installation flexibility in one device. Our *SDK versions* allow you to make use of the powerful hardware and develop your own applications on top of ATOP's reliable SDK. For more information about it, please ask ATOP representative

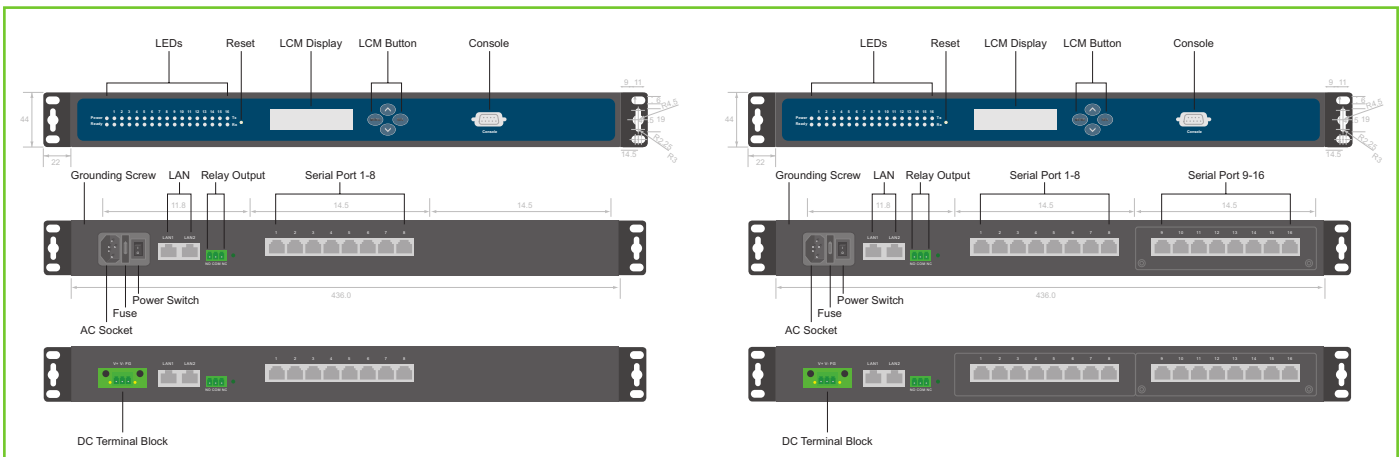
\* : RS-232/RS-485-RS-422 function is available on non-isolated versions. Isolated versions support RS-485 and RS-422 only

## SPECIFICATIONS

Technical Specifications	
Model Name	SE5908 SE5916
Network interface	
Speed	IEEE 802.3 10BaseT IEEE 802.3u 100BaseT(X)
LAN Mode	Dual Subnets or Network Redundancy
Connector ports	2x 10/100BASE-T(X) RJ-45
Serial Interface	
Connector	RJ45 RS-232/422/485 software selectable (-N models) or RJ45 Isolated RS-422/485 software selectable (-SiS models)
Ports	8 (SE5908) or 16 (SE5916)
Baud Rate	1,200 ~ 921,600 bps software selectable
Data Bits	5, 6, 7, 8 software selectable
Stop Bits	1, 2 software selectable
Parity	None, Odd, Even, Space, Mark
Flow Control	None, Xon/Xoff, RTS/CTS (RS-232 only)
Isolation	2.5 kV (-SiS models only)
Power	
Input Voltage Input Current Power Consumption	DC version: 24 - 48VDC; US-EU version: 100~240 VAC (EU or US Plug) DC version: 0.54 A @24VDC; US-EU version: 0.21A@100VAC Approximately 21 W (Max)
Connector	DC version: 5.08mm 3-pin Lockable Terminal Block EU-US version: IEC 60320-1 C14 AC Power Inlet
Power Redundancy	No
Reverse Polarity Protection	Yes (DC version only)
Relay Output	Yes (1)
Physical Characteristics	
Housing Dimension (W x H x D) Weight Installation Reset Button	IP30 SPCC housing 436 mm x 43.5 mm x 200 mm 3,000g (8-port version); 3,200 g (16-port version) 19" Rack-Mount (Kit included) Yes
Environmental Limits	
Operating Temperature Storage Temperature Ambient Relative Humidity	-20°C~70°C (-4°F~158°F) -40°C~85°C (-40°F~185°F) 5%~95% (Non-condensing)
Software	
Protocols	IPv4, ICMP, TCP, UDP, DHCP Client, SNMPv1,v2c,v3, HTTP, HTTPS, SMP/TLS, Telnet, RFC2217, RSTP, Security through OpenVPN and IPsec (host-to-host or host-to-side) with up to 37.9Mbps VPN throughput, and PPTP

Configuration	Atop Management Utility, Web UI, Telnet, Serial Console
VirtualCOM	Windows/Linux redirection software
<b>Link Modes</b>	
TCP Client	Dual destination supports raw-data or VirtualCOM
TCP Server	4 Connections mode supports raw-data; VirtualCOM or reverse Telnet
UDP	Up to 4 Ranges IP

## DIMENSIONS & LAYOUT



## REGULATORY APPROVALS

Regulatory Approvals				
Safety	EN60950-1:2006/ IEC60950-1 LVD			
EMC	FCC Part 15, Subpart B, Class B EN 55022, Class B, EN 61000-3-2, EN 61000-3-3, EN 55024			
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	±4.0KV	4
		DC Power Port	±4.0KV	4
		Signal Port	±2.0KV	3
IEC 61000-4-5	Surge	AC Power Port	Line-to Line±2.0KV	4
		AC Power Port	Line-to Earth±4.0KV	4
		DC Power Port	Line-to Line±1.0KV	3
		DC Power Port	Line-to Earth±2.0KV	3
		Signal Port	Line-to Earth±2.0KV	4
IEC 61000-4-6	CS	AC Power Port	10 V rms	3
		DC Power Port	10 V rms	3
		Signal Port	10 V rms	3

IEC 61000-4-8	PFMF	Enclosure	1 A/m	3
IEC 61000-4-11	DIP	AC Power Port	-	-
Shock Drop (Freefall) /Vibration	IEC 60068-2-27 ISTA Test Procedure 2A /IEC 60068-2-64			
RoHS II	Yes			
MTBF (MIL-HDBK-217F)	SE5908-DC: 22.74 years; SE5916-US/EU: 13.95 years; SE5908-SiS-DC: 19.00 years; SE5908-SiS-US/EU: 19.03 years; SE5916-SiS-DC: 13.38 years; SE5916-SiS-US/EU: 13.38 years			
Warranty	5 years			

## ORDERING INFORMATION

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Model name	Part Number	Description	Ethernet	Serial
SE5908-DC	1P1SE590800001G	8-Port Serial Device Server, RJ45, RS232/422/485 DC	2 (RJ45)	8 (RJ45)
SE5908-SiS-DC	1P1SE590800002G	8-Port Serial Device Server, RJ45, Isolated RS422/485 DC	2 (RJ45)	8 (RJ45)
SE5916-DC	1P1SE591600001G	16-Port Serial Device Server, RJ45, RS232/422/485 DC	2 (RJ45)	16 RJ45
SE5916-SiS-DC	1P1SE591600002G	16-Port Serial Device Server, RJ45, Isolated RS422/485 DC	2 (RJ45)	16 RJ45
SE5908-EU	1P1SE590800013G	8-Port Serial Device Server, RJ45, RS232/422/485 EU Plug	2 (RJ45)	8 (RJ45)
SE5908-US	1P1SE590800003G	8-Port Serial Device Server, RJ45, RS232/422/485 US Plug	2 (RJ45)	8 (RJ45)
SE5916-EU	1P1SE591600013G	16-Port Serial Device Server,RJ45,RS232/422/485 EU Plug	2 (RJ45)	16 RJ45
SE5916-US	1P1SE591600003G	16-Port Serial Device Server,RJ45,RS232/422/485 US Plug	2 (RJ45)	16 RJ45
SE5908-SiS-EU	1P1SE590800014G	8-Port Serial Device Server, RJ45, Isol. RS422/485 EU Plug	2 (RJ45)	8 (RJ45)
SE5908-SiS-US	1P1SE590800004G	8-Port Serial Device Server, RJ45, Isol. RS422/485 US Plug	2 (RJ45)	8 (RJ45)
SE5916-SiS-EU	1P1SE591600014G	16-Port Serial Device Server,RJ45,Isol. RS422/485 EU Plug	2 (RJ45)	16 RJ45
SE5916-SiS-US	1P1SE591600004G	16-Port Serial Device Server,RJ45,Isol. RS422/485 US Plug	2 (RJ45)	16 RJ45

### 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
AD17-24C (US-Y)	50500151240002G	Y-Type power adaptor,100-240VAC input, 0.6A @ 24VDC output, US plug
AD17-24D (EU-Y)	50500151240012G	Y-Type power adaptor,100-240VAC input, 0.6A @ 24VDC output, EU plug
GDC-120	59906861G	120mm copper woven grounding cable
CBL-RJ45(8P)-DB9(M)-90	50891781G	RJ45 to DB9 Male Cable, 90cm
CBL-RJ45(8P)-DB9(M)-200	50891951G	RJ45 to DB9 Male Cable, 200cm
CBL-RJ45(8P)-DB9(F)-90	50891791G	RJ45 to DB9 Female Cable, 90cm
CBL-RJ45(8P)-DB9(F)-90-C	50891971G	RJ45 to DB9 Female Cross Over Cable, 90cm
CBL-RJ45(8)-DB9(F)-200-C	50891961G	RJ45 to DB9 Female Cross Over Cable, 200cm
RMK-718-Black	70100000000040G	Rack Mount Mounting-Kit, Black
Power Cable (US)	50801041G	6 feet Power Cable, US
Power Cable (EU)	50801051G	6 feet Power Cable, EU
Fuse	50709441G	SFP Transceiver, 1250Mbps, 1310nmDFB, Single-mode, 30km, 3.3V, -40~85°C