

PS8000/ PS16000 Series

## 8 or 16-Port Rack-Mount Industrial Secure Serial Device Server



## 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 921kbp
- 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 PS8000/PS16000 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

PS8000/PS16000 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, 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. TCPlink 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, PS8000/PS16000 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

PS8000/PS16000 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 TCPlink's reliable SDK. For more information about it, please ask TCPlink representative

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











## **SPECIFICATIONS**

Technical Specifications			
Model Name	PS8000 PS16000		
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 (PS8000) or 16 (PS16000)		
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)		
Sofware			
Protocols	IPv4, ICMP, TCP, UDP, DHCP Client, SNMPv1,v2c,v3, HTTP, HTTPS, SMP/ Telnet, RFC2217, RSTP, Security through OpenVPN and IPsec (host-to-ho		





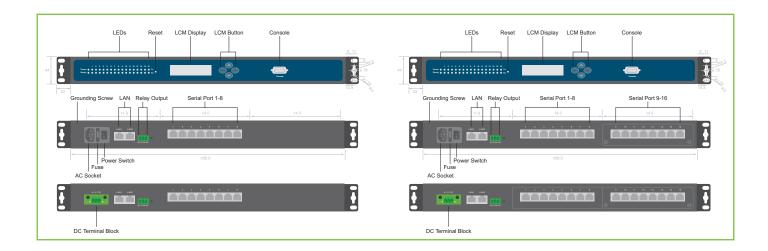






Configuration	TCPlink Management Utility, Web UI, Telnet, Serial Console		
VirtualCOM	Windows/Linux redirection software		
Link Modes			
TCP Client	Dual destination supports raw-data or VirtualCOM		
TCP Server	4 Connections mode supports raw-data; VirtualCOM or reverse Telnet		
UDP	Up to 4 Ranges IP		

## **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		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	±4.0KV ±4.0KV ±2.0KV	4 4 3	
IEC 61000-4-5	Surge	AC Power Port AC Power Port DC Power Port DC Power Port Signal Port	Line-to Line±2.0KV Line-to Earth±4.0KV Line-to Line±1.0KV Line-to Earth±2.0KV Line-to Earth±2.0KV	4 4 3 3 4	
IEC 61000-4-6	CS	AC Power Port DC Power Port Signal Port	10 V rms 10 V rms 10 V rms	3 3 3	







# **TCPlink**

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)	PS8000-DC: 22.74 years; PS16000-US/EU: 13.95 years; PS8000-SiS-DC: 19.00 years; PS16000-SiS-US/EU: 19.03 years; PS8000-SiS-DC: 13.38 years; PS16000-SiS-US/EU: 13.38 years					
Warranty	5 years					



