



4 PORT INDUSTRIAL SECURE SERIAL TO ETHERNET CONVERTERS

DDSE SERIES



SYNOPSIS

- THE INDUSTRIAL SERIAL DEVICE SERVER DDSE S 4 SERIES 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, DDSE S 4 SERIES PRODUCTS OFFER FULL-DUPLEX AND BI-DIRECTIONAL DATA SEAMLESSLY BETWEEN THE 4 SERIAL PORTS AND THE ETHERNET NETWORK, THROUGH 2 X 10/100 ETHERNET PORTS OR 2 X 100/1000 SFP FIBER SLOTS.
- DDSE S 4 EMBEDS OPENVPN AND IPSEC VPN ENCRYPTION 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. 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 - 48V DC WIDE RANGE POWER INPUT AND ONE RELAY OUTPUT
- DDSE 4 S SERIES PRODUCTS EMBEDS HIGH EMC PROTECTION, WIDE TEMPERATURE OPERATION, PROGRAMING AND INSTALLATION FLEXIBILITY IN ONE DEVICE.
- POE VERSIONS CAN BE POWERED THROUGH POWER-OVER-ETHERNET (POE 802.3AF), WITHOUT ADDITIONAL CABLING AND POWER SUPPLY.

TECHNICAL SPECIFICATIONS

NETWORK INTERFACE

Speed	IEEE 802.3 10BaseT IEEE 802.3u 100BaseT IEEE 802.3u for 100Base-X (SFP version only) IEEE 802.3z for 1000Base-X (SFP version only)
PoE standard	IEEE 802.3 af (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)

USB INTERFACE

Speed	USB 2.0
Connector	USB A Type x 1

SERIAL INTERFACE

Connector	4 * DSub9 RS232/422/485 software selectable (D models) 4 * 5.08mm 5-Pin Terminal block RS-232/422/485 software selectable (T 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	3 KV Galvanic (I versions only)

SOFTWARE

Protocols	IPv4, ICMP, TCP, UDP, DHCP Client, NTP, SNMPv1,v2c,v3, HTTP, HTTPS, Telnet, SMTP/TLS, RFC2217, 802.1D-2004 RSTP, Security through PPTP, OpenVPN (Client / Server) IPsec host-to-host or host-to-side VPN with up to 37.9Mbps throughput
Configuration	Management Utility, Web UI, Telnet
Virtual COM	Windows/Linux redirection software

LINK MODES

TCP Client	Single destination or Virtual COM
TCP Server	4 Connections; Virtual COM or reverse Telnet
UDP	Up to 4 Ranges IP

POWER

Input Voltage	Dual 12 - 48VDC (non-PoE Models); or through Ethernet Cable (PoE versions)
Input Current @ 12VDC	0.65 A
Power Consumption	Approximately 8W (Max)
Connector	7-Pin 5.08mm Lockable Terminal Block
Power Redundancy	Yes
Protection	Reverse Polarity
Relay Output	1A @ 30V DC (normal open)

PHYSICAL CHARACTERISTICS

Dimension (W x H x D)	55 x 145 x 113 mm
Housing	IP30 SPCC housing
Weight	1000g
Installation	DIN Rail, Wall mount (optional kit)
Reset Button	Yes

ENVIRONMENT

Operating Temperature	-40°C to 85°C (-40°F to 185°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Ambient Relative Humidity	5%~95%, 55°C (Noncondensing)

APPROVALS & STANDARDS TESTED FOR

IEC 61000-4-2	Electrostatic Discharge: ±8kV (contact), ±15kV (air)
IEC 61000-4-3	RF Immunity :10V/m (80 to 1000MHz)
IEC 61000-4-4	Electrical Fast Transient AC Power Port: ±2.0KV Data Port: ±2.0KV
IEC 61000-4-5	Surge Immunity AC Power Port: Line-to Line: ±1.0KV AC Power Port: Line-to Earth±2.0KV Signal Port: Line-to Earth±2.0KV
IEC 61000-4-6	Conducted RF immunity: 10 V rms Continuous Conducted Disturbance
IEC 61000-4-8	PFMF Enclosure :10 A/m
IEC 61000-4-11	DIP Power Port
IEC 60068-2-27	Shock
IEC 60068-2-32	Drop (Freefall)
IEC 60068-2-64	Vibration

OTHERS

EN Standards	EN 55032, EN 55024, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-4
Safety	UL61010-2-201/ EN62368-1
EMC	EMC FCC Part 15, Subpart B, Class A

ORDERING INFORMATION

Model Name	Description
DDSE N I S 4 D A1	Ind. 4-Port Serial Device Server, 10/100BaseT, DB9
DDSE N I S 4 T A1	Ind. 4-Port Serial Device Server, 10/100BaseT, TB5
DDSE I S 4 T A1	Ind. 4-Port Serial Device Server,10/100BaseT, TB5, 3KV Isolated
DDSE N I S 4 D PoE A1	Ind. 4-Port Serial Device Server, 10/100BaseT, PoE, DB9
DDSE N I S 4 T PoE A1	Ind. 4-Port Serial Device Server, 10/100BaseT, PoE, TB5
DDSE I S 4 T PoE A1	Ind. 4-Port Serial Device Server, 10/100BaseT, PoE, 3KV Isolated
DDSE N I S 4 2S D A1	Ind. 4-Port Serial Device Server, 100/1000BaseX SFP, DB9
DDSE N I S 4 2S T A1	Ind. 4-Port Serial Device Server, 100/1000BaseX SFP, TB5
DDSE I S 4 2S T A1	Ind. 4-Port Serial Device Server, 100/1000BaseX SFP, TB5, 3KV Isolated

DATA BRIDGE
D Y N A M I C