# Industrial Ethernet Real-time Device Servers™ red

Sixnet Device Servers™



## Ethernet Real-Time Device Servers

The Sixnet serial to Ethernet device servers are ideal for connecting your serial-based software applications over Ethernet to your remote serial devices.

These high performance devices deliver a truly rugged solution in a very compact size. The DS device servers are easy to use and at the same time extremely flexible, offering the latest in advanced IP technology. Use the supplied Quick Configurator for fast setup or the powerful Device Manager for more advanced configurations.

# Reset Ethernet ON=Console, OFF=Serial Power / Ready Link (10=Green, 100=Yellow) Activity Industrial Ethernet Device Server TXD RXD DS Series

### **PRODUCT HIGHLIGHTS**

- > Auto-detecting 10/100 RJ45 Ethernet port
- > Universal EIA-RS232/422/485 interface is software selectable which prevents field tampering
- > Serial data tunneling across an IP network with full support for back to back (paired mode) operation
- Advanced security through AES / 3DES encryption over SSH or SSL sessions (SDS model)
- > Next Generation IP support (IPV6) for investment protection and network compatibility

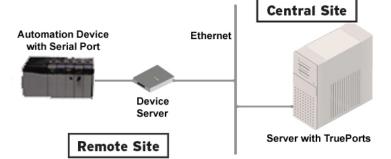
- > Port buffering for data capture and analysis
- > For console management applications, powerful authentication schemes prevent unauthorized access
- > Device Management software for centralized management and control
- > COM or TTY port control and management for serial-based applications

### **FEATURES & BENEFITS**

- Space saving compact package
- > Rugged and protective metal enclosure
- > Wide temperature range meets NEMA TS-2
- > 15Kv ESD protection for continuous and reliable long-term operation
- > Indicators for network and serial interfaces for easy troubleshooting

- > Direct 9-30 VDC power range No adapter needed in systems with 12 or 24 VDC available
- Power over serial cable eliminates cost of a separate power wiring – Supports both power from serial or power to serial device
- > DIN Rail mounting standard for Industrial Automation applications
- > Direct panel mountable for convenient installation on any flat surface

### **APPLICATION SCENARIO**















# ▶▶▶ Industrial Ethernet Real-Time Device Servers™ Specifications

### **CELLULAR RADIO OPTIONS:**

CDMA: 2G 1xRTT 3G EVDO Rev. A

GSM: 3G HSPA

USB Aircard support available

### **SERIAL PORT**

Serial or console (management) modes EIA-RS232/422/485 software selectable

Full hardware flow control

EIA-RS232 speeds 50 bps to 230 Kbps

EIA-RS422/485 speeds up to 230 Kbps

TX and RX LEDs

Interface modes: 2 & 4 wire, half & full duplex

### **ETHERNET PORT**

10 Mbps or 100 Mbps

10/100BaseTx Auto-detecting speed & duplex

Isolation 1500 VRMS 1 minute

Protocols (all models): IPv6, IPv4, TCP/IP, UDP, CIDR, Multicast, ARP, RARP, ICMP, BootP, DHCP, TFTP, Telnet, Raw, Reverse Telnet, RCP, HTTP Additional protocols (SDS model): SSH & Reverse, SSL, RIPv2/MD5, SNTP, LPD, DNS, WINS, HTTPS, SMTP, SNMPv3, PPP, PAP/CHAP, SLIP, CSLIP

SECURITY & AUTHENTICATION SDS model only unless otherwise noted

Local database - both SDS and DS models

Secure shell SSHv1 and SSHv2

Secure Socket Layer SSL v2.0 and v3.0; server and client

Transport Layer Security TLS v1.0

Encryption protocols: AES, 3DES, DES, Blowfish, CAT128, ARCFOUR

(RC4), ARCTWO (RC2)

Hashing algorithms: MD5, SHA-1, RIPEMD160, SHA1-96, MD5-96

Key exchange: RSA, EDH-RSA, EDH-DSS, ADH X.509 certificate verification RSA, DSA

Authentication and accounting RADIUS

SecureID-agent RSA or via RADIUS

Other: Certificate authority (CA) list; TACACS+, LDAP, NIS, Kerberos; IP address filtering; Disable unused daemons

### **MANAGEMENT**

Powerful and easy to use

Web browser HTTP or secure HTTPS (SSL/TSL)

Device Manager software Microsoft Windows utility

Quick Configurator for fast and easy setup

CLI (Command Line Interface), Telnet, SSH, console port

Other: SNMP, MIB II; read & write; SYSLOG; Port Buffering

### **TTY / COM EMULATION**

OS support: Microsoft Windows (Server 2003, XP, 2000 and NT), Linux, Solaris, AIX, SCO UnixWare/OpenServer, NCR, HP UX

### ELECTRICAL

Input voltage 9-30 VDC thru power jack or RJ45 Input power (typical) 4.8 Watts

ESD protection on all signals 15Kv

### **ENVIRONMENTAL**

Operating temperature range -34\* to +74 °C (meets NEMA TS-2) Storage temperature range -40 to +85 °C Humidity (non-condensing) 5 to 95% RH

Vibration, shock, freefall IEC68-2-6, -27, -32

\* Real-time clock power back-up in SDS model is limited when unit is shut down at very low temperatures

### STANDARDS COMPLIANCE

Hazardous Locations: UL1604 (CSA C222/213) Class I, Div 2 (Zone 2)

Electrical safety: UL/CSA60950 & 508, EN60950 EMI emissions: FCC part 15, ICES-003, EN55022 EMC immunity: IEC61326-1

### **PHYSICAL**

DIN rail or direct to panel mount

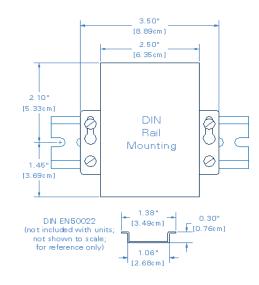
Packaging (powder-coated steel) IP30 protection

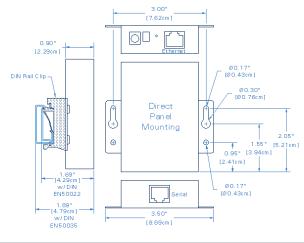
Dimensions - see mechanical drawing

Weight 0.35 kg (0.8 lb)

All specifications are subject to change. Consult factory for latest info.

### **MECHANICAL DRAWING**





### **ORDERING GUIDE**

PART NUMBER	DESCRIPTION
ET-DS-1	EtherTRAK Device Server



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Connect. Monitor. Control.

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As the global experts in communication, monitoring and control for industrial automation and networking, Red Lion has been delivering innovative solutions for over forty years. Our award-winning technology enables companies worldwide to gain real-time data visibility that drives productivity. Product brands include Red Lion, N-Tron and Sixnet. With headquarters in York, Pennsylvania, the company has offices across the Americas, Asia-Pacific and Europe. For more information, please visit www.redlion.net. Red Lion is a Spectris company.