



Data Center-Grade Device Servers

- ▶ Rack-mountable, data center-ready device servers; with 8, 16 and 32 serial ports
- ▶ Put just about any piece of equipment with a serial port on the enterprise network with robust “data center grade” security, including AES, SSH and SSL
- ▶ Offers a fully programmable device computing platform based on corporate IT standards – Cisco®-like CLI, XML, RSS
- ▶ RoHS-compliant
- ▶ Powerful web manager for easy device configuration



Remotely Monitor, Manage and Share Equipment Over a Network or the Internet

The EDS is the first line of rack-mountable device servers capable of delivering an data center-grade, programmable device computing and networking platform for integrating “edge” equipment into the enterprise network.

Available in 8, 16 and 32 port configurations, the Evolution Device Servers (EDS) are ideal for remotely monitoring and managing serial-based equipment in diverse applications such as retail/POS, medical, security telecommunications, industrial and building automation.

Featuring Evolution OS™, our powerful real-time networking operating system, they deliver an unprecedented level of intelligence and security to networked equipment. With these innovative, versatile products, multiple electronic devices can become secure members of the corporate network that can be accessed and managed from virtually anywhere, at any time.

Easy to Set Up

Without requiring any special software, these multi-port device servers can connect up to 8 to 16 or 32 RS-232 serial devices to your network in a matter of minutes. Using a unique method called “serial tunneling,” they encapsulate serial data from the device into packets to transport it over Ethernet.

Setup is a breeze with the included Windows-based DeviceInstaller™. The EDS can also be set up locally via a serial port, or remotely over a network using Telnet, a web browser or SNMP.

Bullet-proof Security

Evolution OS provides a ‘data center-grade’ level of protection so each device on the network carries the same level of security as IT equipment in your corporate data center. The EDS feature robust defenses to hostile Internet attacks such as denial of service (DoS) and port mapping that could be used to take down your network. The hardened OS and mature protocol stack prevent the device servers from being used to bring down other devices on the

network. And with built-in AES, SSH and SSL, they provide robust key management algorithms that:

- Verify that any data received came from the proper source
- Validate that data transferred from the source over the network is unchanged when it arrives at its destination
- Provide the ability to run popular M2M protocols over a secure SSH or AES connection

With SSH and SSL, they support a variety of popular cipher technologies including 128/256/512/1024-bit AES (Rijndael), 3DES and RC4 Encryption Public/Private keys and hashing algorithms such as SHA-1 and MD5. HTTP authentication uses Base-64, Digest Authentication and SSL.

Standards-Based Communications

Cisco-like CLI – The EDS utilizes a Cisco-like command line interface (CLI) with syntax very similar to that used by data center equipment such as routers and hubs. This industry-standard tool simplifies configuration and control, making it easier to integrate edge devices or data center equipment into the enterprise network.

XML-based Architecture – XML is a standard tool for web services, data transfer and rich content management that encapsulates data into a text-based format. XML-based configuration and setup records in the EDS make device configuration transparent and easily modified with a standard text or XML editor.

Powerful and Customizable

Eight MB of Flash memory provides maintenance-free, nonvolatile storage of web pages, and enables future system software upgrades. Featuring a 32-bit XScale processor and 32MB of RAM, these device servers are highly customizable with the Evolution OS Software Developers’ Kit (SDK). A free compiler is available.

Com Port Redirector

Lantronix Com Port Redirector™ software is included. It redirects application data destined for a local serial (COM) port on a PC to a serial port on the EDS. Data sent from the equipment to the device server is transmitted back to the application over the network. Com Port Redirector then presents the data to the application as if it were from a local serial COM port.





Features and Specifications

Serial Interface

Interface: Software selectable RJ45 serial ports with customizable baud rate support for non-standard serial speeds
Data Rates: Software selectable standard baud rates from 300 to 230 Kbaud
Connectors: 8, 16 or 32 RJ45 serial ports depending upon model
Characters: 7 or 8 data bits
Parity: Odd, even, none
Stop Bits: 1 or 2
Modem Control Signals: CTS, RTS, DTR, DCD
Flow Control: XON/XOFF (software), CTS/RTS (hardware), None

Network Interface

Ethernet: 10Base-T or 100Base-TX (auto sensing and hard-coded, auto crossover)
Connector: RJ45
Standards: ARP, UDP/IP, TCP/IP, Telnet, ICMP, SNMP, DHCP, BOOTP, TFTP, Auto IP, SMTP, FTP, DNS, Traceroute and HTTP

Indicators (LED)

10Base-T and 100Base-TX Link
 Ethernet Activity
 Serial Transmit Data
 Serial Receive Data
 Power
 Diagnostics

Processor

CPU: Intel XScale IXP420 Network Processor running at 266 MHz
 32k Instruction Cache
 32k Data Cache
Memory: 32 MB SDRAM
 8 MB Flash
 2 KB EEPROM

Management

Internal web server, SNMP v2 (MIBII, RS232MIB), Serial login, Telnet login, XML
Firmware: Upgradeable via the Web Manager, TFTP or FTP
Internal Web Server: Serves static and dynamic CGI-based pages and applets
Storage capacity: 6 MB using industry-standard file system

Power Input

100-240VAC, 50 to 60 Hz IEC-type cord
 20 Watts

Environmental

Operating: 0° to +50°C (32° to 122°F)
Storage: -40° to 70°C (-40 to 151°F)
Relative Humidity: 5 to 95%, non-condensing

Packaging

Case: Metal enclosure with removable wall mounts
Dimensions (L x W x H): 30.5 x 43.8 x 43.4 cm (12 x 17.25 x 1.75 in)
Weight: 4.54 Kg (10 lb)

Compliance

Ethernet: Version 2.0/IEEE 802.3 (electrical)
Ethernet II frame type

Safety Standards

UL 60950-1, CSA-22.2 No. 60950-1-03, EN60950-1, CB Report - IEC 60950-1

Security

SSL v3, SSH v2
 MD5, SHA-1
 Rijndael/AES 128-bit encryption
 3DES encryption
 ARC4 128-bit encryption
 Password protection
 IP address filtering
 Hardened OS and stack

EMC Standards:

FCC CFR 47 Part 15 Subpart B, ICES-003 Issue 4, AS/NZS CISPR 22, VCCI V-3, EN55022, EN61000-3-2, EN61000-3-3, EN55024, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11

Agency Approvals

UL/CUL, FCC, CE, TUV, C-Tick, GS, CB scheme, VCCI

Warranty

2-year limited warranty

Shipping Dimensions

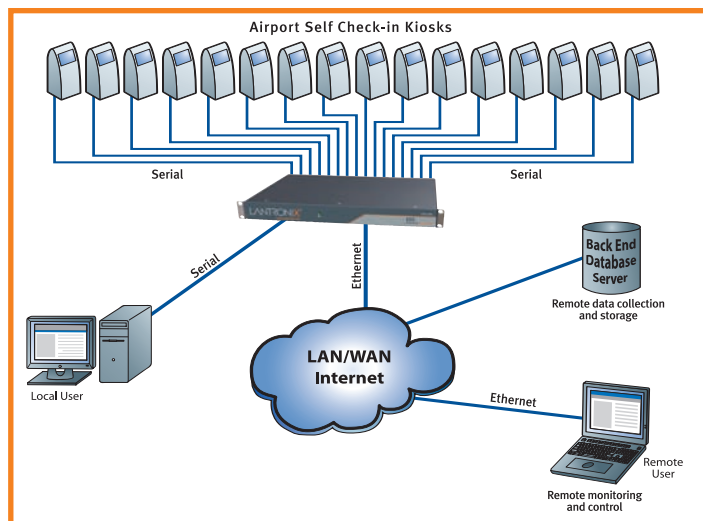
Dimensions (LxWxH): 56x48x20 cm (22x19x8 in)
Weight: 4.5 kg (10 lbs) maximum, depending on options

Included Software

Windows® 98/ME/NT/2000/XP-based DeviceInstaller™ configuration software,
 Com Port Redirector™ software and related utilities

Product Label Markings

FCC Part 15 Statement Class A Device, ICES-003 Class A Device, C-Tick, VCCI, CE Marking, UL-CUL Mark, TUV-GS Mark, RoHS



Ordering Information

Part Number	Description
EDS00812N-01	EDS8PR multi-port, secure device server; 1U, 8-port, 100-240 VAC
EDS01612N-02	EDS16PR multi-port, secure device server; 1U, 16-port, 100-240 VAC
EDS03212N-02	EDS32PR multi-port, secure device server; 1U, 32-port, 100-240 VAC
200.2066A	RJ45 to DB25M cable adapter
200.2067A	RJ45 to DB25F cable adapter
200.2069A	RJ45 to DB9M cable adapter
200.2070A	RJ45 to DB9F cable adapter
200.2225	RJ45 to RJ45 rolled cable adapter, Sun Netra and Cisco equipment
200.0062	Cable; RJ45, 2 m (6.6 ft)
200.0063	Cable; RJ45, 5 m (16.4 ft)
200.0064	Cable; RJ45, 10 m (32.8 ft)
200.0065	Cable; RJ45, 15 m (49.2 ft)

LANTRONIX®

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