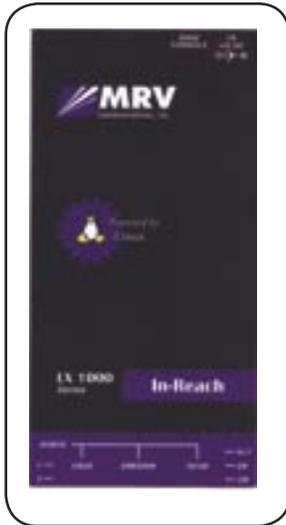


In-Reach LX-1000 Series



TOP VIEW

LX-1000S Series- Secure Device Server

MRV Communications introduces the LX-1000S device server series – a compact 1, 2, or 4-port version of the LX-4000S Series of Remote Management products. Both LX series are powered by our LINUX-based operating system (IROS) and are based on the same RISC processor architecture. The LX-1000S offers all the powerful security and ease of use features found in the LX-4000S series and introduces top of the line console server power management and remote access server features in a compact design.

The LX-1000S models are used to connect serial devices to a TCP/IP network. Typical applications include: console port management, retail Point of Sale (PoS) connectivity, industrial automation, power management and Remote Access Server (RAS) functions. Six LX-1000S models are now available. AC-powered models include a 1-port with v. 90 modem; a 2-port, and a 4-port with optional v.90 modem. PoE (Power over Ethernet) models include a 4-port with optional v.90 modem.

Security

The IROS Linux-based operating system is tuned for optimal performance, security and reliability. Access to the system is achieved via an industry-familiar Command Line Interface (CLI) or via a user-friendly browser based Graphical User Interface (GUI), making it simple and cost-effective to deploy. Easily editable ASCII configuration files and administrative logging capabilities further enhance the product's ease of use and management. Configuration file and IROS updates are accomplished through remote downloads via FTP or TFTP protocols.

The LX Series supports SNMPv3, is SNMP MIB II compatible and can be configured to send SNMP traps to any Fault Management System (FMS) in response to alarm events.

In addition to SNMP, enhanced messaging includes E-mail, text messaging, paging and logging. The LX-1000S's unique flexibility enables it to meet today's console, alarm, sensor and power management needs with the capacity and scalability to

Features

- **Serial to IP Conversion:** Access and acquire data from virtually anywhere
- **Power Management:** Remotely turn on, off and reboot equipment
- **Industry-leading Security:** Grant flexible access without compromising security
- **Ease of Use:** Non-disruptive to install, simple to manage and maintain
- **Scripting & Menus:** Automated and guided processes save time and money
- **IROS, Linux-based OS:** Reliable and easily extensible software foundation
- **Sun Break Compatible:** Prevents inadvertent shutdowns of Sun Servers
- **Virtual Management Ports:** Simultaneous multiple user access with individual rights
- **Console, Alarm, Sensor & Power (CASP):** A single solution for all remote management needs
- **Instant Event Messaging:** Instant event notification anywhere
- **Automated response to alarm conditions**
- **Corrective responses without human intervention:** Saves time and money
- **Software Upgradeable:** Investment protection with cost-effective migration path



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address even the most demanding future needs.

The LX-1000S models are designed for applications requiring secure console or serial port management, sensor management and power control. Because you can't grant remote access unless you know it is secured, the LX-1000S includes the most comprehensive security features. These security features include per port password protection, RADIUS, Secure Shell v2.0, SecurID, TACACS+, PPP PAP/CHAP, PPP dial-back, on-board database and others. With the LX-1000S you can feel as confident in your ability to monitor and manage remote equipment, network devices and servers as if you were physically there. The LX-1000S supports integrated management of the IR-5150 series power management products to enable remote power control for hundreds of power outlets per unit.

Power over Ethernet (PoE)

Think of opportunities to expand your network without having power availability restrictions. Power over network wiring is now a reality with your existing network cabling through the IEEE standard 802.3af, also known as Power over Ethernet (PoE). The LX-1004 PoE models are the first in the LX series to offer this feature.

PoE provides approximately 13 watts of power (at 48 volts) over the same Category 5 cable that already delivers your 10/100/1000Mb Ethernet network connectivity. There are two components in the PoE system — the Power Sourcing Equipment (PSE) that provides power to the second component, the Powered Device (PD). The current to supply the PD is transmitted on two unused wire pairs found in a Category 5 cable.

The LX-1004 PoE models are Powered Devices and can only accept power from an IEEE 802.3af compliant PSE device. The LX provides a PD Load Classification of Class 3 to any connected PSE device that is requesting power classification info.

Typical PoE applications;

1. Voice over IP (VoIP) phone systems
2. Out of the way wireless access points
3. Security cameras and business access systems

Summary

Although small in size, the LX-1000S has all the power and functionality of its LX-4000S series parent. Console management capabilities, combined with powerful alarm and power control capabilities, make the LX-1000S the ideal solution for converging serial data acquisition or console management and your alarm, sensor, and control output requirements over a single IP infrastructure. With the LX-1000S you can feel secure in your ability to gain remote visibility and control.

Service and Support

Delivering value added service and support for nearly 20 years, MRV Communications provides worldwide technical assistance through a highly trained team of dedicated corporate and field based engineers as well as through certified channel partners. Whether your needs are for 24x7 dedicated support, same day replacement parts shipment, on-site support or network design and installation related professional services, you'll gain the opportunity to build a responsive and accountable partnership with the MRV service and support experts.

Applications:

- Data center console
- Power management
- Secure Remote Access
- Out-of-band IT infrastructure management
- Telecom and utility remote site console and alarm management
- Point-of-sale and SCADA data acquisition
- Unmanned equipment configuration, provisioning and management



Ordering Information

LX-1001S-101AC	LX-1000S with (1) RS232 RJ45 port, integrated V.90 modem and AC power
LX-1002S-001AC	LX-1000S with (2) RS232 RJ45 ports and AC power
LX-1004S-101AC	LX-1000S with (4) RS232 RJ45 ports, integrated V.90 modem and AC power.
LX-1004S-001AC	LX-1000S with (4) RS232 RJ45 ports and AC power.
LX-1004S-001POE	LX-1000S with (4) RS232 RJ45 ports and Power over Ethernet (PoE 802.3.af).
LX-1004S-101POE	LX-1000S with (4) RS232 RJ45 ports, integrated v.90 modem and Power over Ethernet (PoE 802.3.af).

Datasheet

Technical Specifications

Model Name	LX-1001S	LX-1002S	LX-1004S	LX-1004S - PoE
No. of Console Ports (Max)	1*	2*	4	4
Internal Modem	Yes	No	(optional)	(optional)
No. of Pairs of Discrete Alarms	2	4	8	8
No. of Sensor Ports (Max)	1	2	4	4
Port Speeds	300 bps to 230 kbps	300 bps to 230 kbps	300 bps to 230 kbps	300 bps to 230 kbps
Power Requirements (External Power Supply)				
100-120VAC, 60Hz (US)	1.0 Amp	1.0 Amp	1.2 Amp	
100-240VAC, 50Hz (Int'l)	1.0 Amp	1.0 Amp	1.2 Amp	
Power over Ethernet (802.af)				0.15 Amps (48V)
Physical Dimensions				
Height	2.5 cm,1.0 in	2.5 cm,1.0 in	2.8cm, 1.1 in	2.8cm, 1.1 in
Width	8.9 cm,3.5 in	8.9 cm,3.5 in	15.0cm, 5.9 in	15.0cm, 5.9 in
Depth	15.9cm, 6.25 in	15.95cm, 6.25 in	15.95cm, 6.25 in	15.95cm, 6.25 in
Physical Weight (with supply)	.6 kg/1.25 lbs	.6 kg/1.25 lbs	.9kg/1.9 lbs	.9kg/1.9 lbs
Shipping Weight	1.2 kg/2.5 lbs	1.2 kg/2.5 lbs	1.5kg/3.2 lbs	1.5kg/3.2 lbs
General				
Network Interface	One Ethernet/IEEE 802.3 RJ-45 (10/100Base-T) port			
Serial Interface	RS-232, Modular RJ-45 connectors			
Base Memory	8 MB Flash, 64MB DRAM			
Network Protocols	TCP/IP, PPP, Telnet, BOOTP/TFTP, FTP, SNMP, DHCP			

*Hardware flow control support for Port 2 only

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