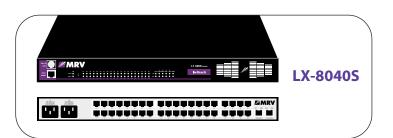# NEBS Console Server

LX-8040S

Overview

The Boston Product Division of MRV Communications, Inc., is pleased to announce the addition of its LX-8000S NEBS Series of 20 and 40 port consoles servers to the LX Family. The new LX-8020S and LX-8040S models further extend the industry-leading MRV product line of console management solutions.

Product Details

The LX-8000S 20 and 40 port AC and DC units (single or dual power supplies) with an optional internal modem add high-end NEBS console management to the MRV's LX Series. All models are powered by 32-Bit RISC embedded processors with embedded co-processors that enable the execution of an extensive software feature set with processing power to spare. Like the LX-4000S series, the LX-8000S series is driven by the In-Reach Operating System (IROS); a Linux based operating system tuned for optimal performance, security and reliability.

The LX-8000S models are designed for telco applications that demand high quality and reliability standards, dual power and NEBS Level-3 Certification. The rack requirements for the telco environment were a design factor for the LX-8000S and resulted in a unit that has all its primary connectors and power on the rear of the unit and the LEDs, modem (telco) and diag ports on the front. There are two status LEDs for the A and B feeds of each power unit in a dual powered system, as well as LEDs indicating System, Voltage Regulator and Temperature status.

Software wise, it offers secure console or serial port management, sensor management and power control. It offers the industry's most comprehensive security features, including per port password protection, RADIUS, Secure Shell v2.0, SecurID, LDAP, TACACS+, PPP PAP/ CHAP, PPP dial-back, on-board database and others. The LX software offers its Cluster Control and Configuration (C3) features for LX deployments in large networks. It supports the configuration and control of clusters of sizes up to 1000 LX units without a single point of failure and is an invaluable tool for managing software updates in a large network.

MRV has designed the LX-8000S to be software upgradeable, offering investment protection with the ability to meet future console management needs. Future software releases will incorporate all of the software features available in the LX-8000S today along with IROS's complete set of In-Reach alarm management capabilities. The LX-8000S's software configurable ports provide the total flexibility required to control a variety of core network, discrete alarm and environmental sensor devices, all with a single box. The LX-8000S meets today's console, sensor and power management needs with the capacity and scalability to address even the most demanding future needs.

Ordering Information

AC Power - Single Supply

LX-8020S-001AC	LX-8000S with (20) RS232 RJ45 ports, power control & AC power
LX-8020S-101AC	LX-8000S with (20) RS232 RJ45 ports, power control, AC power & internal V.90 modem
LX-8040S-001AC	LX-8000S with (40) RS232 RJ45 ports, power control & AC power
LX-8040S-101AC	LX-8000S with (40) RS232 RJ45 ports, power control, AC power & internal V.90 modem

AC Power - Dual Supply

LX-8020S-002AC	LX-8000S with (20) RS232 RJ45 ports, power control & dual AC power
LX-8020S-102AC	LX-8000S with (20) RS232 RJ45 ports, power control, dual AC power & internal V.90 modem
LX-8040S-002AC	LX-8000S with (40) RS232 RJ45 ports, power control & dual AC power
LX-8040S-102AC	LX-8000S with (40) RS232 RJ45 ports, power control, dual AC power & internal V.90 modem

DC Power (18-36V) - Dual Supply

LX-8020S-002DC	LX-8000S with (20) RS232 RJ45 ports, power control & dual DC (18-36V) power
LX-8020S-102DC	LX-8000S with (20) RS232 RJ45 ports, power control, dual DC (18-36V) power & internal V.90 modem
LX-8040S-002DC	LX-8000S with (40) RS232 RJ45 ports, power control & dual DC (18-36V) power
LX-8040S-102DC	LX-8000S with (40) RS232 RJ45 ports, power control, dual DC (18-36V) power & internal V.90 modem

DC Power (36-72V) - Dual Supply

LX-8020S-012DC	LX-8000S with (20) RS232 RJ45 ports, power control & dual DC (36-72V) power
LX-8020S-112DC	LX-8000S with (20) RS232 RJ45 ports, power control, dual DC (36-72V) power & internal V.90 modem
LX-8040S-012DC	LX-8000S with (40) RS232 RJ45 ports, power control & dual DC (36-72V) power
LX-8040S-112DC	LX-8000S with (40) RS232 RJ45 ports, power control, dual DC (36-72V) power & internal V.90 modem

Technical Specifications

Model Name	LX-8020S	LX-8040S
No. of Console Ports (Max)	20	40
Internal Modem Option	Yes	Yes
No. of Pairs of Discrete Alarms	40	80
No. of Sensor Ports (Max)	20	40
Rack Mount Form Factor	19 or 23"	19 or 23"
	1U rack unit	1U rack unit
Port Speeds	134-230.4 kbps	134-230.4 kbps
Power Requirements (AC) 120-240VAC, 50/60Hz	0.5 Amp	0.5 Amps
Power Requirements (DC) 18 – 36V dual feed	1 Amp	1 Amp
Power Requirements (DC) 36 – 72V dual feed	0.75 Amp	0.75 Amps
Physical Dimensions		
Height	4.1 cm, 1.62 in	4.1 cm, 1.62 in
Width	44.4 cm, 17.48 in*	44.4 cm, 17.48 in*
Depth	25.4 cm, 10 in	25.4 cm, 10 in
Weight	7.9 lbs. (3.58 kg)	8.4 lbs. (3.81 kg)

* Fits in 19"Rack

General

Network Interface	Two Ethernet/IEEE 802.3 RJ-45 (10/100Base-T) ports
Serial Interface	RS-232, Modular RJ-45 connectors
Base Memory	16 MB Flash, 128 MB DRAM

LEDS

Ethernet 1	Speed Indicator: 100 MB (green) else off
Ethernet 2	Speed Indicator: 100 MB (green) else off
Ethernet 1 – 2 rear	On each RJ/45 Connector – two leds indicating link status and activity.
Ports	Rcv/Xmt Activity/Diagnostic error code
System Status	OK and Fault (FLT)
DC Power: A/B feeds	OK and FLT
Regulator Status A/B	OK and FLT
Temperature	OK and FLT

Network Protocols	TCP/IP, PPP, Telnet, BOOTP/TFTP, FTP, SNTP, DHCP
Security Options	Per port password, multi-level password, RADIUS, access control lists PAP, CHAP, SecurID, IP Filtering, Secure Shell V2.0, TACAS+, LDAP, Modem Dial Back, Local Security Database
Network Management	SNMP V1/V2/V3, MIB I, MIB II, proprietary MIB extensions, Telnet
Environment Operating Temperature	32 to 104°F (0 to 40°C) Long Term; -5 to 50°C Short Term (DC units only)
Storage Temperature	-40 to 185°F (-40 to 85°C)
Humidity	5% to 85% Long Term; 5% to 90% Short Term (DC units only)
Compliance	(In Process)

All Models

Emissions/Immunity	FCC Part 15, Class A
Safety	Complies with UL 60950, third edition; CSA C22.2 No. 60-950-00; CB Scheme certified
Telecommunications	NEBS Level 3 (DC Units only) Modem Models All modem models are FCC Part 68, IC CS 03 and CTR 21 compliant.

Warranty	Three years

Introduction of the LX-8000S models further solidifies the In-Reach console management solu-tions as the most secured and robust high-density console, alarm, sensor and power management offering available in the industry today.

MRV has more than 50 offices throughout the world. Addresses, phone numbers, and fax numbers are listed at www.mrv.com. Please e-mail us at **sales@mrv.com** or call us for assistance.

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