

## Datasheet

# LX Series

## 4000T Console Servers



### A Complete Out-of-Band Networking Solution

The 4000T Series of console servers (also referred to as terminal servers) gives IT administrators the ability to perform secure remote management of operational and physical infrastructures.

With models ranging from 8 to 48 ports, the LX-4000T Series can meet a wide range of needs. The 4000T Series uses the proven LX Series software, for an easy transition from other LX Series models. Dual Ethernet ports support automatic failover to secondary paths. The 4000T Series offers single and dual power options in all port densities. An optional internal modem provides flexibility and dial up connectivity. The optional Digital Volt Meter provides visibility to power levels for DC power sources.

The 4000T Series can be used with MRV's 5250/ 4800 Power Control Series to provide administrators with the ability to manage, control, and monitor individual power outlets for critical equipment. Using secure access through the 4000T series, network managers can remotely power cycle a locked up server, bring a redundant system online or turn on an auxiliary air conditioner.

Physical infrastructure control and monitoring can be enabled on each 4000T Series serial port, supporting 2 sensor inputs or 2 control outputs. For sites that need expanded sensor monitoring, the 7204 Sensor Manager augments the 4000T Series to support high density wet and dry contact and analog loop sensors with control outputs. Sophisticated Trigger/Action control can be used for customizing that meets specific organizational notification and control needs.

### Industry Leading Security

MRV offers the industry's first console servers to meet the demanding US Government FIPS 140-2 cryptographic security standard. With US government approved agency testing, the LX Series software delivers the most secure and richest set of features, including, point and click access to any port, per port password protection, SSH v2.0, SNMP V3, IP V6, RADIUS, SecurID, LDAP, TACACS+, PPP PAP/ CHAP, PPP dial-back, user access lists, and on-board database. The Cluster Control and Configuration features simplify configuration and control of large networks without a single point of failure.

### Applications

- Enterprise data centers
- Remote/branch offices
- Telco central office and remote facilities
- Utilities
- Test and development labs

### Benefits

- Cutting Costs - Nearly eliminate the need for personnel to be physically present at remote equipment site
- Increasing Security, Lowering Risk - Protect service ports from unauthorized, undetected access - Capture logs as a record of system activity to meet regulations such as Sarbanes-Oxley, HIPAA, etc.
- Improving Service Levels - Easy, efficient access uses scarce technical resources more effectively - Reduces need for redundancy by minimizing downtime
- Simplifying Operations - Verify access using existing security infrastructure
- Simplifying Event Notification and Response - Automatic response to an emergency can increase safety and avoid disasters

### Easy, Powerful Management Tools

The 4000T Series has a management option to fit every style. The easy to use browser based Graphical User Interface allows full configuration and management, while the industry standard style extensive Command Line Interface is a powerful tool for automated scripts. MRV's MegaVision product can be used as a standalone network management and fault management system, or be combined with other management platforms.



## Datasheet

### Technical Specifications

Number of Ports	8,16, 32 or 48
Internal Modem Option	V.92
Sensor Inputs	2 sensor inputs per port
Control Outputs	2 control outputs per port
Rack Mount Form Factor	19 or 23 inches, 1U rack unit
Port Speeds	134 to 230.4 Kbps

#### Power

Available Options	Single or dual power supplies
120-240V AC, 50/60Hz	0.5 Amp
36 - 72 VDC, dual feed	0.75 Amp

#### General

Network Interface	2 Ethernet RJ-45 10/100Base-T ports
Serial Interface	RS-232, RJ-45
Height	4.34 cm, 1.71 in
Width	44.4 cm, 17.48 in
Depth	25.4 cm, 10 in
Weight	7.9 lbs (3.58 kg)
Base Memory	16 MB Flash, 128 MB SDRAM
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)

#### Certifications

Emissions/Immunity	FCC Part 15, Class A
Safety	UL 60950-1; CSA C22.2 No. 60950-00; CB Scheme
Telecommunications	NEBS Level 3 (DC models, limitations apply to modem ) Modem Models: FCC Part 68, IC CS 03 and CTR21
Environmental	RoHS 5/6
Security	FIPS 140-2*
Government	JITC for Department of Defense
Warranty	Three years

### Ordering Information

AC Models	DC Models	Ports	Options
Single Power Supply			
LX-4008T-001AC	LX-4008T-011DC	8	
LX-4008T-101AC	LX-4008T-111DC	8	Modem
LX-4016T-001AC	LX-4016T-011DC	16	
LX-4016T-101AC	LX-4016T-111DC	16	Modem
LX-4032T-001AC	LX-4032T-011DC	32	
LX-4032T-101AC	LX-4032T-111DC	32	Modem
LX-4048T-001AC	LX-4048T-011DC	48	
LX-4048T-101AC	LX-4048T-111DC	48	Modem

#### Dual Power Supply

LX-4008T-002AC	LX-4008T-012DC	8	Dual Power
LX-4008T-102AC	LX-4008T-112DC	8	Dual Pwr Modem
LX-4016T-002AC	LX-4016T-012DC	16	Dual Power
LX-4016T-102AC	LX-4016T-112DC	16	Dual Pwr Modem
LX-4032T-002AC	LX-4032T-012DC	32	Dual Power
LX-4032T-102AC	LX-4032T-112DC	32	Dual Pwr Modem
LX-4048T-002AC	LX-4048T-012DC	48	Dual Power
LX-4048T-102AC	LX-4048T-112DC	48	Dual Pwr Modem

\* Append "F" to order code for FIPs 140-2 certified models.  
Example: LX-4008T-001ACF

#### Digital Volt Meter

	LX-4016T-014DC	16	DVM
	LX-4016T-114DC	16	DVM, Modem
	LX-4048T-014DC	48	DVM
	LX-4048T-114DC	48	DVM, Modem



MRV has more than 50 offices throughout the world. Addresses, phone numbers, and fax numbers are listed at [www.mrv.com](http://www.mrv.com). Please e-mail us at [sales@mr.v.com](mailto:sales@mr.v.com) or call us for assistance.

MRV (West Coast USA)  
20415 Nordhoff St.  
Chatsworth, CA 91311  
800-338-5316  
818-773-0900

MRV (East Coast USA)  
295 Foster St.  
Littleton, MA 01460  
800-338-5316  
978-952-4700

MRV (International)  
Business Park Moerfelden  
Waldeckerstrasse 13  
64546 Moerfelden-Walldorf  
Germany  
Tel. (49) 6105/2070  
Fax. (49) 6105/207-100

All statements, technical information and recommendations related to the products herein are based upon information believed to be reliable or accurate. However, the accuracy or completeness thereof is not guaranteed, and no responsibility is assumed for any inaccuracies. Please contact MRV Communications for more information. MRV Communications and the MRV Communications logo are trademarks of MRV Communications, Inc. Other trademarks are the property of their respective holders.

March, 2008