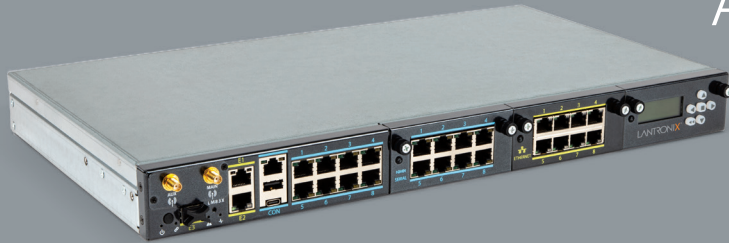


LM83X

Remote Environment Management



ADVANCED OUT-OF-BAND MANAGEMENT

LANTRONIX
Connectivity Services

Advanced Out-of-Band Management for Enterprise Scalability & Performance

The Lantronix LM83X is a modular platform designed to act independently from the network to remotely monitor, manage and control up to 104 devices including a managed power supply.

The LM Series

An advanced out-of-band solution that provides access, monitoring and control of network infrastructure that operates whether the network is up or down.

- **Secure** | The LM Series are closed appliances, meaning the underlying OS is locked down. We work with your TACACS/Radius and have several options for secure connections.
- **Automated** | Detect, analyze and take data-driven runbook actions rapidly and automatically
- **Resilient** | If the primary network link goes down, the LM Series can fail-over site traffic to the out-of-band connection. With automated testing of out-of-band links and LM "heartbeats," Lantronix ensures out-of-band is available when you need it.
- **Scalable** | Three expansion bays let you customize your LM83X with up to 104 serial ports, or a combination of serial and dedicated Ethernet ports. An LCD keypad is also available.

Zero Touch Deployment

New, factory fresh LM Series appliances can use DHCP and/or DNS to automatically find and register themselves with the Lantronix Control Center (LCC), allowing network engineers to easily provision them via the LCC, eliminating the need to stage configurations or send technical personal to remote sites for deployment purposes.

Automatic Configuration of NTP and DNS Servers via DHCP

Primary and secondary NTP and DNS servers are automatically set per those delivered in a DHCP Offer if NTP and DNS servers are not already configured. Any NTP and DNS servers configured via the CLI or the UCC will override server information delivered via DHCP.

Automatically Detect and Configure Internal Modems

An internal modem is automatically detected and configured if one is present – this includes setting the modem make, model and serial bit rate for all internal modems. PPP settings will be automatically configured for the case of a cellular modem.

Lantronix Software Services

Control Center - enables advanced out-of-band management by providing a centralized point of control for all LM Series appliances and managed devices deployed throughout your distributed IT environment. <https://www.lantronix.com/products/control-center/>

Connectivity Services - North American and global cellular data plans and VPN security with an easy-to-use cloud platform to manage your SIMs and services. <https://www.lantronix.com/connectivity-services/>



Perfect For:



Data Center



Branch Office



Remote Sites

LM Series Highlights

- Network Independent Management
- Patented Automated Actions
- Flexible, Secure Remote Access

Key Local Management Features and Capabilities

Feature	Capability
Access	
Heterogeneous Device Access	Secure remote access and native support for any console-managed device
Secure Remote Access	Provides access via Secure Shell (SSHv2), integrates with remote authentication and accounting such as TACACS and Radius. Supports additional security features such as source address (IP and caller ID) filtering
Out-of-Band Connectivity with WAN Traffic Failover	Options for POTS lines, cellular modems, fiber, DSL, and satellite. Supports dial-in/ PPP dial-out (with VPN support) via optional embedded, Iridium or GlobalStar modems. With the loss of the primary WAN connection, LM-Series devices can provide a tethered WAN traffic failover option by sharing its cellular out-of-band connection with the local router
In-depth Device Monitoring	Leverage serial connection to managed device to collect data, either in-band or out-of-band, on hundreds of performance variables every 5 to 30 seconds
Environmental Monitoring	Collects and reports device environmental data for temperature and humidity to be used to trending and root cause analysis
KVM over Service Processor	Enables local access and control to a remote server (i.e. provisioning, monitoring, troubleshooting, restricting access) without having to deploy external KVM appliances; functions independent of the availability of server's operating system or the primary network connection
Remote Web Access	Offers secure access to remote devices with web-only management interfaces without requiring additional overhead to manage
Control	
Heterogeneous Device Management	Advanced driver support for remotely managing Cisco, Nortel, 3COM, Juniper, Alcatel, NetScreen, and Tasman routers, switches, and firewalls; TippingPoint intrusion prevention systems (IPS); Garmin GPS devices; Comtech, ND SatCom, and iDirect satellite modems; Iridium and GlobalStar external data modems; Solaris, Linux and Windows servers (console port); Sun, Dell, IBM, HP servers (service processor port); APC, ServerTech, and Baytech power controllers.
Robust Automation	Provides automation of routine management tasks through rule-based engine. Includes diagnosis of non-standard operational state based on configurable thresholds, and execution of recovery procedure to restore normal operational state. Can be used to restore a last known good configuration, diagnose and correct failures across multiple devices, and notify IT staff of the problem and recovery action taken.
Proactive Maintenance	Supports OS upgrade with verification and locally archives OS images with full rollback support. Power-On-Self-Test (POST) data and diagnosis data (e.g. – Cisco "show tech"). Enables password recovery for certain devices through combination of device boot and power management procedures
Remote Power Management	Monitors power utilization and controls power to remotely restart a managed device
Device Recovery with SurgicalRollback™	If a configuration change fails, immediately rolls the device back to the last known good configuration; supports full commit and rollback operations
Real-Time Log Inspection & Management	Collects and inspects device console data in real-time; Sends alarm or takes predefined recovery action based specific log messages to shorten MTTR
Service Level Verification	Uses synthetic transactions to regularly collect network- and application-specific performance data. LM-Series devices locally correlate service-level data with infrastructure performance data to triangulate, pinpoint and correct service-related problems
Service Processor Automation	Provides the ability to remotely monitor, manage, diagnose and recover servers, even if operating system has hung or the server is powered down
Enforce	
FIPS 140-2 Level 2	LM-Series software is FIPS 140-2 certified. The hardware is in-process for FIPS 140-2 Level 2 certification.
Session Management	Automates session management to prevent unauthorized access
Granular Authorization	Ensures the right users have the right access by enforcing role-based, command-level authorization
Complete Logging	Audits all user access, device changes, and session activity for compliance

System Specifications

System

- Management interfaces: Supports up to 104 devices via serial (RS-232); Two 10/100/1000 BaseT Ethernet interfaces (with failover support) and one RS-232 console port; One 1-Gbps SFP port
- On-board storage: 256GB NVMe supporting TCG Opal 2.0, 256-bit AES encryption
- Peripheral connectivity: One USB-A port, one USB-C port
- One option slot (RS232; V.92, cellular, and fiber cards available)
- Three expansion slots for 8-Port, 16-Port, and 32-Port serial cards; 8-Port Ethernet card (10/100/1000 Mbps); LCD keypad

Dimensions and Weight

- Height, Width and Depth: 43.2 mm (1.7 in.) x 445 mm (17.5 in.) x 264 mm (10.4 in.); 1 rack unit (1RU)
- Weight: 3.72 kg (8.2 lbs.)

Operating Environment

- Power Supply: Redundant internal universal power (100-240 VAC) 50/60 Hz, 60 W
- Operating: 0° C to 45° C (32° F to 113° F) at mean sea level, 20% to 80% relative humidity, non-condensing
- Non-operating: -30° C to 60° C (-22° F to 140° F) at mean sea level, 90% relative humidity, non-condensing

Regulatory

- Emissions: FCC class A sub part B
- Safety: TUV
- RoHS compliant

Product SKUs

Part Number	Description
Product	
83X-8S-000-NAA	LM83X, 8 serial ports, AC power
83X-8S-000-YAA	LM83X, 8 serial ports, FIPS certified, AC power
Expansion Bay Cards*	
83X-8SA	8-Port Serial
83X-16SA	16-Port Serial with 1.5M or 3M cable
83X-32SA	32-Port Serial with 1.5M or 3M cable
83X-8EA	8-Port Ethernet
83X-LCDA	LCD Module
Option Cards	
88-CAT4ATTA	US LTE CAT 4 Internal modem for AT&T
88-CAT4EUA	LTE CAT4 EU/UK/AUS/NZ
88-CAT4GLOBAL	LTE CAT4 GLOBAL
88-CAT4VA	LTE CAT 4 for Verizon
88-CATM1ATTA	LTE CAT M1 for AT&T
88-CATM1VA	LTE CAT M1 for Verizon
88-FIBERMMMA	Fiber-E Module, w/Multi-Mode Fiber SFP

* Expansion cards are sold installed in LM83X chassis with unique SKUs based on card type and expansion slot number. See lantronix.com for a complete list of part numbers.