

# Bringing Al-Driven Out-of-Band Management to the IDF and Small Sites

The Lantronix LM4 is the first console server specifically designed and priced for IDFs and very low port environments such as ATMs, kiosks, and remote aggregation points.

### **About the LM Series**

Lantronix's LM-Series console servers are the fifth generation of purpose-built network management automation devices. Easy to use, with resilient out-of-band access, onboard processing / storage and LMOS software, the LM-Series serial console servers are deployed in enterprises worldwide ranging from ultra-secure military and financial networks to downtime-intolerant networks in healthcare and energy.

## More than just a compact console server

For more than 20 years, most of our industry-leading solutions for out-of-band management have deployed into data centers or building MDFs (Medium Distribution Frame), while the IDF (Intermediate Distribution Frame) networking closets were often deemed too numerous or too costly to merit their own out-of-band management solutions. Until now.

The LM4 is an advanced out-of-band solution that provides access, monitoring and control of network infrastructure that operates whether the network is up or down. With up to four ports of serial console connections for directly managing gear plus support for up to 48 virtual ports, the LM4's size is deceiving.

Running the powerful LMOS software, the LM4 brings the most advanced out-of-band management capabilities to the edge of your network with enterprise-grade automation, cybersecurity, and compliance functionality.

## **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.

#### **Lantronix Control Center**

- Centralized point of control for Advanced OOB devices and the managed devices connected to them
- Web-based GUI for real-time data to manage, configure, and control network devices and servers + define custom automated management actions
- Compliance reporting and integration with centralized management tools

The Lantronix LM-Series are the only state-aware console servers—an expert system using rules-based AI to recover and mitigate network infrastructure securely, reliably, and automatically.

## Perfect For:



IDFs



Kiosks



Front-Ending Basic Console Servers

## **LM Series Highlights**

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



## Key Local Management Features and Capabilities

Feature	Capability
Access	

Proactiv

Remote

Real-Time Log

Inspection &

Management Service Level Verification

reature	Саравінту
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 (with external modem)	The LM4 can use an external cellular modem connected over USB. 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	
Hotorogonoous	Advanced driver support for remotely managing Cisco, Nortel, 3COM, Juniper, Alcatel, NetScreen, and Tasman routers, switches, and firewalls; TippingPoint intrusion prevention systems (IRS); Coming CRS devices: Company NR

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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.
	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.
Supports OS ungrade with verification and locally archives OS images with full rollback

ve nance	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
e Power	

Management	
	configuration change fails, immediately rolls the device back to the last known good figuration; supports full commit and rollback operations

If a configuration change fails, immediately rolls the device back to the last known good configuration; supports full commit and rollback operations
Collects and inspects device console data in real-time; Sends alarm or takes predefined

recovery action based specific log messages to shorten MTTR
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, prinpoint 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	LM-Series software is FIPS 140-2 compliant
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 4 devices via serial (RS-232); One 10/100/1000 BaseT Ethernet interface and one RS-232 console port; One 1-Gbps
- Peripheral connectivity: Two USB-A ports

### **Dimensions and Weight**

- Height, Width and Depth: 44.45 mm (1.75 in.) x 158.75 mm (6.25 in.) x 158.75 mm (6.25 in.)
- Weight: 1.42 kg (3.13 lbs.)

## **Operating Environment**

- · Power Requirements:
  - · DC input: 9 to 60 VDC
  - · Power consumption: Less than 24W
- External AC to DC Power Supply:
  - AC Input: 100-240VAC, 50-60HZ, 1.4A
- DC Output: 12VDC, 3A
- Environmental
  - Operating: 0° C to 55° C (32° F to 131° F) at mean sea level, 10% to 90% relative humidity, non-
  - Non-operating: -30° C to 60° C (-22° F to 140° F) at mean sea level, 90% relative humidity, non-

## Regulatory

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

## Product SKUs

Part Number	Description	
Product		
LM4-4S	LM4, 4 serial ports, AC power	
LM4-2S	LM4, 2 serial ports, AC power	
	AC plug options available when ordering	
Post-Purchase Serial Port Activation		
61-5900-00	1 serial port activation	
Optional External Modems		
M114B00FS	LTE CAT. 1 BIS - RS-232 & USB PORTS - 2 I/	
	OS - MPACK	
M114F002S	EMEA - LTE cat. 1 band 20, 3, 7 - 2G FB band 8	
	3 - RS-232 & USB ports - 2 I/Os - Mpack	
M114F003S	Asia Pacific - LTE cat. 1 band 28, 8, 3 - 3G FB	
IVI I 14FUU3S	band 1 - RS-232 & USB ports - 2 I/Os - Mpack	

