

## **Product Data Sheet**

# **LES1600 Series Console Servers**



LES1604A, front view



LES1604A, back view



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LES1608A, back view

## **OVERVIEW**

The LES1600 Series Secure Serial Console Servers simplify out-of-band management for your network infrastructure in data centers and remote sites.

Use the console servers for secure out-of-band access to routers, switches, PDUs, firewalls and other serial consoles. These console servers give you visibility and control of your network and its physical environment for reliable 24/7 uptime. They provide serial console-port connectivity and support environmental monitoring, power management, plus remote site storage of off-line logs.

Out-of-band management enables remote setup, ongoing maintenance and disaster recovery of mission-critical IT infrastructure, even when the network is down. The LES1600 series features 4–8 port console servers. Gain immediate access to consoles via your preferred SSH client or integrated HTTPS AJAX web terminal. Monitor and log systems health and the physical environmental conditions for audit trail and forensics. Monitor and control UPS and power status. Alert operators and

undertake per-set complex actions depending on what is detected. Embedded 4G LTE modem connections provide technician access and complete independence from infrastructure faults.

#### **FEATURES**

- 4 to 8 port serial (RS-232) console server models
- Integrated USB console ports provide connectivity to next generation infrastructure devices
- Dual network connections with GbE copper ports
- Available 4G LTE cellular models for remote OOB access during primary outage
- Built-in ZTP for automated provisioning of configuration, reducing errors and saving time
- Built-in LLDP to discover, identify and verify attached devices
- Enterprise-grade security, FIPS 140-2 validated encryption, AAA including LDAPS & TACACS+, lock down ports per-user and group
- Audit trail logging to 4 GB local storage or remote log server, expandable with SD card

## **BENEFITS**

- Minimize MTTR and increase MTBF. Proactive problem identification, quick notification and automated remediation reduce operating and downtime costs
- Ensure uninterrupted availability. Transparent automatic failover and always-on OOB access keep the business up and running
- Leverage existing tools and workflow. Integrates with standard management tools and existing infrastructure

## **SPECIFICATIONS**

Console Specifications		
Console Ports	LES1604A, LES1604A-V, LES1604A-T, LES1604A-R: (4) RJ-45 RS-232 Cisco straight pinout console ports LES1608A: (8) RJ-45 RS-232 Cisco straight pinout console ports	
Interface		
Ethernet Ports	(2) 10-/100-/1000-Mbps Ethernet RJ-45 ports	
Serial Ports	Cisco straight 50 to 230,400 bps	
USB Ports	(4) USB 2.0 console ports	
Remote Access	Dual Ethernet, aggregation and redundancy, Automatic Network Failover, Easy browser UI, IPv6	
I/O Ports	(2) TTL level digital I/O ports (DIO), 5 VDC max. @ 20 mA (supports external water/smoke/motion dry contact sensors); (2) high-voltage digital outputs (HVDO), 5–30 VDC @100 mA (drives relays, alarms, etc.)	
Console Management	Built-in web terminal, SSH direct to consoles, optional console keystroke logging, alert on cable disconnects, inline power control, multiple concurrent sessions	
Power Requirements		
Power Adapter	110-240 VAC to 12 VDC external power adapter	
Power Consumption	Less than 11.5 W	
Physical		
Dimensions	5.1"H x 4.8"W x 1.4"D (13 x 12 x 3.5 cm)	
Form Factor	Compact	
Memory and CPU		
CPU	800 MHz Armada 370 ARMv7 SoC (Marvell 88F6W11)	
Memory	256 MB DDR3 SDRAM; 32 MB Embedded NOR Flash	
Internal Storage	4 GB NAND Flash	
Environmental		
Operating Temperature	-13 to +140° F (-25 to +60° C)	
Storage Temperature	-40 to +167° F (-40 to +75° C)	
Humidity	5 to 90%	
Security, Encryption and Authentication		

# SPECIFICATIONS (CONTINUED)

<b>Automation and Scalability</b>	ZTP, Virtual Central Management System (VCMS);	
	RESTful API, programmable and extensible;	
	Auto-Response, SNMP, LLDP, NTP	
Certifications		
Emissions	FCC Part 15 Subpart B:2015;	
	EN55022:2010;	
	CISPR 22:2008;	
	ICES-003 Issue 5 (2014);	
	AS/NZS CISPR 22: 2009+ A1:2010;	
	EN 61000-3-2:2006/A2:2009;	
	EN 61000-3-3:2008	
Immunity	EN 55024:2010	
,	CISPR 24:2010;	
	EN 61000-4-2:2009;	
	EN 61000-4-3:2006+A2:2010;	
	EN 61000-4-4:2004+A1:2010;	
	EN 61000-4-5:2006;	
	EN 61000-4-6:2009;	
	EN 61000-4-8:2010;	
	EN 61000-4-11:2004	
Other Agency Approvals	CE, UL 1950, TUV, C-Tick, RoHS compliant, Security features to support NERC CIP standards, FIPS 140-2 validated module Certificate #2473, CCC	

## **AVAILABLE MODELS**

4-Port Models			
LES1604A	(4) RJ-45 serial Cisco straight pinout, (2) Gigabit Ethernet ports		
LES1604A-V	(4) RJ-45 serial Cisco straight pinout, (2) Gigabit Ethernet ports with embedded Verizon cellular modem		
LES1604A-T	(4) RJ-45 serial Cisco straight pinout, (2) Gigabit Ethernet ports with embedded AT&T cellular modem		
LES1604A-R	(4) RJ-45 serial Cisco straight pinout, (2) Gigabit Ethernet ports with 4G LTE cellular modem for international use		
8-Port Model			
LES1608A	(8) RJ-45 serial Cisco straight pinout, (2) Gigabit Ethernet ports		

### ORDERING INFORMATION

Item	Code
LES1600 Series Console Servers	
4 ports	LES1604A
8 ports	LES1608A
Verizon 4G LTE Cellular	
4 ports	LES1604A-V
ATT 4G LTE Cellular	
4 ports	LES1604A-T
ROW 4G LTE Cellular	
4 ports	LES1604A-R

## WHAT'S INCLUDED

- (1) LES1604A, LES1604A-V, LES1604A-T, LES1604A-R or LES1608A Console Server
- (1) DB9F-to-RJ-45 crossover serial adapter
- (1) 12-VDC switching DC power supply with UK, EU, AU adapters
- (1) Rackmount kit (1 ear, 2 rack screws, 2 nuts, 4 screws)
- (4) Adhesive-backed rubber feet
- (1) Digital I/O converter (terminal block)
- (1) SIM holder
- (2) Antennas
- (1) Quick Start Guide

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