

PRODUCT OVERVIEW



LN-3848G-LIGHT-SERIES

Highlights

- ▶ AC5X Solution
- ▶ Stacking With 8 Devices
- ▶ ITU-T G.8032 ERPS L2 Ring Protection
- ▶ Comprehensive and Field-Proven Software Features for ISPs/ Carriers, Providing Broadband Access, IPTV Services
- ▶ Full L3 Features with Commonly-Used Unicast and Multicast Routing Protocols, Redundant Routing Protocols, and DHCP Relay and Server
- ▶ Complete Private MIB to Fully Control and Monitor the Switch via Customer's EMS
- ▶ Enhanced Security and IPv6
- ▶ Simple Management (CLI, SNMP, Web)
- ▶ Marvell ROS Support



HARDWARE SPECIFICATIONS

	1G RJ45 Downlinks	10G SFP+ Uplinks	PoE Budget/W	Internal PSU	Hot Swappable PSU	Hot Swappable Fans
LN-3848G-6XG	48	6	-	1	-	-
LN-3848GP-6XG	48	6	400	1	-	-
LN-3848GMP-6XG	48	6	740	1	-	-
LN-3848G-6XG-RPS	48	6	-	2	-	-
LN-3848G-6XG-2-HSP-HSF	48	6	-	-	2	3+1
LN-3848GP-6XG-RPS	48	6	400	2	-	-
LN-3848GMP-6XG-RPS	48	6	740	2	-	-

Each switch has USB, OOB, and Console interfaces.

Switching Performance

Switch ASIC	98DX3510
Ports	48x1G RJ-45 Ports + 6x10G SFP+ Uplink Ports
Capacity	216 Gbps
MAC Address Table	32 K
Packet forwarding rate	321.4 Mpps
Buffer	24 Mbit
Jumbo Frame	Support 10Kbytes
Forwarding delay	<5us
MDX/MIDX	Support

Hardware

Nand Flash	512 MB
DDR	2 GB

Physical and Environmental

Dimensions	440x280x44mm
Net Weight	4.7kgs
Operating Temperature	0°C to 50°C
Operating Humidity	5% – 95% (non-condensing)

Approvals

Certificate	FCC Class A/CE/Safety Compliance: CB/Safety Compliance: UL
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MARVELL ROS SOFTWARE FEATURES

Basic Functions

Port Speed/duplex management	VLANS (Protocol / MAC / IPv4 based)
Port Auto management	GVRP/GARP
VCT Diagnostics Port features	Multicast/CPE(Triple Play) VLAN
Jumbo Frames (FE and GE)	QinQ
LAG / LACP	Flow Control 802.3x
Green Ethernet	Back Pressure
STP/RSTP/MSTP etc.	Loopback and UDLD (Unidirectional link) detection
Optical Transceiver Analysis	

Quality of Service

Basic / Advanced QOS (Port/Flow)	CoS/QoS
Ingress/egress Rate Limiting/Shaping	SP/WRR Queue settings
L2/L3 CoS->Queue mapping	Per-Flow Actions

Security

Access Control and logging	Radius Authentication/Accounting/802.1x
Time based ACL	TACACS+ Client and Accounting
MAC/Port based security	Syslog
Ace priority	DHCP Snooping
802.1x enhanced (all variants)	ARP inspection
802.1x MAC/Port/Web/Time based	IP Source Guard
Secure Control Technology (protect CPU)	DoS Attach prevention
MACsec	

Monitoring

Mirroring SPAN/RSPAN	Environmental PS/RPS, FAN, Temperature
RMON/SMON	SFLOW v5
SNMP v1/2/3 with MIBs	Counters with History

Multicast

IGMP Snooping v1/2/3	*PIM-SM (optional)
MLD Snooping v1/2	IGMP/MLD Proxy
MLD Querier	Ports, Flows, CP
Unregistered Mcast	

MARVELL ROS SOFTWARE FEATURES

Management

OOB & serial Console support	DNS, DHCP, SNTP, LLDP-MED, UpnP
CLI/SNMP management (IPv4,IPv6) over Telnet or SSH	LLDP 802.1ab + LLDP MED
USB/SD flash storage support	WEB-GUI interface for basic management
DHCP based Self-Configuration/Update	Time based scheduled features
Multi-File Configs, Dual-Firmware	*Detailed REST compatible API (Optional)
RMON, Syslog, Radius, TACACS+	

Power Over Ethernet

PoE 802.3af 802.3at 60W PoE	Time Based PoE
PoE Budget with LLDP negotiation	PoE Consumption monitor
PSE/PD if HW supported	

*IP Routing (Optional)

L3 DHCP Relay	IP SLA
Proxy ARP for IP Routing	Loopback IP interface (Source Address Selection)
OSPF / RIP	Directed Broadcast
Equal Cost Multiple Path (ECMP)	UDP Relay
VRRP	IPv6 static unicast routing

*Stacking (Optional)

Optional Stacking up to 8(16) units using uplinks	Real cross-unit features, not just Management
Stand-alone and Stack-mode operation	Stack Master Election process
Firmware Version Control	Stack Backup capabilities
Unit joining or leaving the stack	Stacking Fast Failover
Stacking LAG	

*Optional Features for ROS

Ring protection	VxLAN
WEB-GUI with flexible configuration options	Radius COA
PTP	BGP



ORDERING INFORMATION

Model	Description
LN-3848G-6XG	48x1G ETH, 6x10G Uplinks, Non-PoE, Single PSU 36w, 2GB DDR+512MB Nand Flash
LN-3848GP-6XG	48x1G ETH, 6x10G Uplinks, PoE, Single PSU 440w (PoE Budget 400w), 2GB DDR+512MB Nand Flash
LN-3848GMP-6XG	48x1G ETH, 6x10G Uplinks, PoE, Single PSU 850w (PoE Budget 740w), 2GB DDR+512MB Nand Flash
LN-3848G-6XG-RPS	48x1G ETH, 6x10G Uplinks, Non-PoE, RPS Internal 2 PSU, 36w, 2GB DDR+512MB Nand Flash
LN-3848G-6XG-2-HSP-HSF	48x1G ETH, 6x10G Uplinks, Non-PoE, Hot-swap 1+1 PSU 350w, Hot swappable 3+1 fans, 2GB RAM+4G EMMC
LN-3848GP-6XG-RPS	48x1G ETH, 6x10G Uplinks, RPS Internal 2 PSU 440w (PoE Budget 400w), 2GB DDR+512MB Nand Flash
LN-3848GMP-6XG-RPS	48x1G ETH, 6x10G Uplinks, RPS Internal 2 PSU 850w (PoE Budget 740w), 2GB DDR+512MB Nand Flash

Models include a 1-year HW Warranty.