

PRODUCT OVERVIEW

Tailor-made network hardware & software development



LN-2648G-4XGF-HSP-HSF

Highlights

- ▶ AC5+ Solution
- ▶ 48-Port 10/100/1000Base-T RJ45 with or without PoE and 4x1G/2.5G/10G SFP+ Ports
- ▶ Comprehensive End to End QoS
- ▶ Total Power Consumption Up to 850 Watts
- ▶ Enhanced Data Security and Network Traffic Management
- ▶ Rack-Mountable, Desktop Installation
- ▶ Hot-Swappable PSU and Fans
- ▶ 2GB RAM
- ▶ 1GB Flash
- ▶ Marvell ROS Support



HARDWARE SPECIFICATIONS

Switching Performance

Switch ASIC	98DX2538
Ports	48-Port 10/100/1000Base-T RJ45 with or without PoE and 4x1G/2.5G/10G SFP+ Ports
Capacity	336 Gbps
Packet Buffer	12MB

Hardware

CPU	Dual-Core ARM - 8.2 Cortex - A55
Memory	1GB
SSD	2GB

Management Port

USB	1 x USB 2.0
Serial Console	1 x RJ45
Management Port	1 x RJ45 100/1000Base-T out-of-band

Power

Over-current protection	Support
Input Voltage	AC100-240V, 50/60Hz
Total Power Consumption	≤850W

Physical and Environmental

Installation Method	Rack-mount, Desktop
Weight	7.5 KG
Dimension(WxDxH)mm	440x400x44mm
Storage temperature	-10°C~+70°C
Operating Temperature	0°C~+50°C
Storage humidity	5%-95%
Operating Humidity	10%~90% (non-condensing)



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-2648G-4XGF-HSP-HSF	48x1G+4x10G, 2GB DDR, 1GB FLASH, Non PoE, HSP+HSF
LN-2648GMP-4XGF-HSP-HSF	48x1G+4x10G, 2GB DDR, 1GB FLASH, PoE, HSP+HSF

Models include a 1-year HW Warranty.