

PRODUCT OVERVIEW



LN-2648G-4XGF-I-R

Highlights

- ▶ AC5 Solution
- ▶ 48x1G RJ45 + 4x10G SFP+ Uplinks
- ▶ Industrial Grade: -40°C to +75°C Operation
- ▶ Redundant Power: DC 12-58V & AC 100-240V
- ▶ IP40 Fan-less Metal Housing
- ▶ High Performance: 352 Gbps Switching Capacity
- ▶ 4KV Surge Protection for Ports & Power
- ▶ Marvell ROS Support



HARDWARE SPECIFICATIONS

Switching Performance

Switch ASIC	98DX2518
Host CPU Cores	single-Core ARM 55 CPU Cores
Host CPU Speed	1200Mhz
Ports	48x10/100/1000Base-T RJ45 4x10G Base-X SFP+
Capacity	352Gbit/s
Packet Buffer	12Mbit
Packet forwarding rate	261Mpps
MAC address table	16K
VLAN	4K
Forwarding delay	<10us
Jumbo Frame	Support 10Kbytes
SPI Flash	32Mb
DDR	4Gb

Management Port

Serial Console	1
USB	1

Physical and Environmental

Dimensions	440x245x44mm
Net Weight	3.6KG
Operating Temperature	-40°C~+75°C
Operating Humidity	10%-90%RH (non-condensing)

MTBF

Certificate	>100,000 hours
-------------	----------------



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 Attack 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

CERTIFICATION & COMPLIANCES

Regulatory

FCC

BIS

TEC

Environmental

RoHS

CE



LN-2648G-4XGF-I-R

ORDERING INFORMATION

Models	Description
LN-2648G-4XGF-I-R	48x1G+4x10G SFP+

Switch includes a 3-year HW Warranty.