LARCH
NETWORKS

Tailor-made network hardware & software development

PRODUCT OVERVIEW

LN-2608GBP-4XGF-I

Highlights

▶ AC5 Solution

▶ 4x 10G SFP+ Uplinks with Bypass Protection

▶ High-Power PoE++ (802.3bt) Capability

▶ Hardened for Harsh Environments

▶ Redundant Power & Intelligent Management

▶ Marvell ROS Support

larch-networks.com

HARDWARE SPECIFICATIONS

Switching Performance

Switch ASIC	Marvell AC5 98DX2538
Ports	8 x 10/100/1000Base-T RJ45 (PoE) + 4 x 1G/2.5G/10G Base-X SFP+
Bypass	2 Channels Optical Bypass
Console	1 x RJ45 Serial Console
Capacity	96 Gbps
Forwarding Rate	143 Mpps
Packet Buffer	12M
MAC Address	16K
VLAN	4K
Jumbo Frame	10Kbytes

Power

Input Voltage	DC 44-57V (Redundant Inputs)
Connection	Removable 4-pin Industrial Terminal Block
Protection	Reverse Polarity, Over-current

PoE Specifications

PoE Standard	IEEE 802.3bt (Ports 1-2), 802.3at/af (Ports 3-8)
PoE Power Budget	240 W Total
Max Output	90W (bt ports) / 30W (at ports)

Hardware

CPU	Marvell AC5 Series 1.2GHz
RAM	512 MB
Flash	512 MB

Physical and Environmental

Dimensions (WxDxH)	54mm x 115mm x 158mm
Protection	IP40 metal box protection, 6KV Surge Protection
Operating Temperature	-40°C to +75°C
Humidity	5% – 95% RH (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 enchanced (all variants)	ARP inspection
802.1x MAC/Port/Web/Time based	IP Source Guard
Secure Control Technology (protect CPU)	DoS Attach prevention

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-2608GBP-4XGF-I	8 x 10/100/1000Base-T RJ45 (PoE) + 4 x 1G/2.5G/10G Base-X SFP+, PoE++