

### PRODUCT OVERVIEW



## LN-3824G-SERIES

### Highlights

- ▶ AC5X Solution with MACsec (Optional)
- ▶ 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
- ▶ SONiC OS Support



## HARDWARE SPECIFICATIONS

	1G RJ45 Downlinks	25G QSFP28 Uplinks	PoE Budget/W	PoE++ Budget/W	Hot Swap PSU	Hot Swap Fans	Redundant PSU and Fan
LN-3824G-6Y	24	6	-	-	-	-	-
LN-3824GBP-6Y	24	6	400	-	-	-	-
LN-3824GBPP-6Y	24	6	740	-	-	-	-
LN-3824G-6Y-2AC-HSP	24	6	-	-	AC+AC	-	-
LN-3824G-6Y-ACDC-HSP	24	6	-	-	AC+DC	-	-
LN-3824G-6Y-2AC-HSP-HSF	24	6	-	-	AC+AC	+	-
LN-3824GBP-6Y-AC-HSP	24	6	-	500+500	AC+AC	-	-
LN-3824GBMP-6Y-2AC-HSP	24	6	-	820+820	AC+AC	-	-
LN-3824GBP-6Y-2AC-HSP-HSF	24	6	-	500+500	AC+AC	+	-
LN-3824GBMP-6Y-2AC-HSP-HSF	24	6	-	820+820	AC+AC	+	-
LN-3824G-6Y-RPS-RF	24	6	-	-	-	-	+

Each switch has USB, OOB, and Console interfaces.

## Switching Performance

Switch ASIC	98DX3510/ 98DX3510(M)
Ports	24 RJ-45 10/100/1000BASE-T Ports + 4 25G Uplink Ports + 2x25G SFP28 DSP Uplink Ports
Capacity	348 Gbps
MAC Address Table	32 K

## Hardware

CPU	Dual-Core ARM - 8.2 Cortex - A55
Memory	4GB for SONiC version or 1GB for ROS version
SSD	8GB for SONiC version or 2GB for ROS version

## Physical and Environmental

Dimensions	442x420x43 (WxDxH)
Operating Temperature	-5°C to 45°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



## SONIC OS SOFTWARE FEATURES

### Layer 2/3 Feature list

BGP / BGP MP	BGP/Neighbor-down fib-accelerate
BGP-EVPN support (type 5), (related HLD Fpmsyncd,Vxlanmgr,template)	ECMP
LAG	ACL permit/deny, IPv6 ACL
LLDP	DHCP
VLAN	CoPP
IPv6	VLUN Trunk
FRR	Priority Flow Control
Asymmetric PFC	PFC Watermark
DHCP Relay Agent	Tunnel Decap
LACP Fallback	MTU Setting
Vlan Trunk	Static Port breakout
Dynamic ACL Upgrade	MAC Aging
L3 RIF counter support	Configurable drop counters

### Monitoring

SNMP	Syslog
EverFlow	OOM
TCPDump	Critical Recourse Monitor
Dtel	Mirroring
Egress mirroring	ACL action support check via SAI
Streaming Telemetry	Everflow enhancement
sFlow	HW resource monitor

### QoS

RDMA	ECN
PFC WD	WRED
COS	Watermark

### Virtualization

L3 VxLAN	VRF
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## SONIC OS SOFTWARE FEATURES

### System

NTP	ONIE Install
CLI	TACACS+
ConfigDB	SONiC to SONiC upgrade
Multiple Images support	gRPC
Sensor transceiver monitoring	LLDP extended MIB: Ildpretable, Ildploporttable, Ildpremanaddrttable, Ildplozmanaddrttable, Ildploporttable, IldpLocalSystemData
Warm Reboot	Incremental Config (IP, LAG, Port shut/unshut)
Routing Stack Graceful Restart	Mgmt VRF
Management Framework	Multi-DB optimization-Part 1
Sub-port support	

## ORDERING INFORMATION

Model	Description
LN-3824G-6Y	L3HCX, 24x1G+4x25G, 2x25GSFP+ DSP
LN-3824GBP-6Y	L3HCX, 24x1G+4x25G, 2x25GSFP+ DSP, PoE++ 400W, ports 1-8 up to 90W each
LN-3824GBPP-6Y	L3HCX, 24x1G+4x25G, 2x25G SFP+DSP, PoE++ 740W, ports 1-8 up to 90W each
LN-3824G-6Y-2AC-HSP	L3HCX, 24x1G+4x25G, 2x25GSFP+ DSP, Hot Swappable PSU (AC+AC)
LN-3824G-6Y-ACDC-HSP	L3HCX, 24x1G+4x25G, 2x25GSFP+ DSP, Hot Swappable PSU (AC+DC)
LN-3824GBP-6Y-AC-HSP	L3HCX, 24*1G ETH+4*25G, 2X25GSFP+ DSP, Port 1-8 Support BT 90W, 2 Hot Swappable PSU 600W+600W (PoE Budget 500W+500W)
LN-3824GBMP-6Y-2AC-HSP	L3HCX, 24x1G ETH+4x25G, 2x25GSFP+ DSP, Port 1-8 Support BT 90W, 2 Hot Swappable PSU 920W+920W (PoE Budget 820W+820W)
LN-3824GBP-6Y-2AC-HSP-HSF	L3HCX, 24x1G ETH+4x25G, 2x25GSFP+ DSP, Port 1-8 Support BT 90W, 2 Hot Swappable PSU 600W+600W (PoE Budget 500W+500W)
LN-3824GBMP-6Y-2AC-HSP-HSF	L3HCX, 24x1G ETH+4x25G, 2x25GSFP+ DSP, Port 1-8 Support BT 90W, 2 Hot Swappable PSU 920W+920W (PoE Budget 820W+820W)
LN-3824G-6Y-RPS-RF	L3HCX, 24x1G+4x25G, 2x25G DSP, Redundant PSU and FAN
LN-3824G-6Y-M	24x1G+6x25G, MacSec
LN-3824GBP-6Y-M	24x1G+6x25G, PoE++, 90W, 1-8ports, 400W, MacSec
LN-3824GBPP-6Y-M	24x1G+6x25G, PoE++, 90W, 1-8ports, 740W, MacSec
LN-3824G-6Y-2AC-HSP-M	24x1G+6x25G, Hot Swappable PSU (AC+AC), MacSec
LN-3824G-6Y-ACDC-HSP-M	24x1G+6x25G, Hot Swappable PSU (AC+DC), MacSec
LN-3824GBMP-6Y-2AC-HSP-HSF-M	24x1G ETH+6x25G, Port 1-8 Support BT 90W, 2 Hot Swappable PSU 920W+920W (PoE budget 820W+820W), Macsec

Models include a 1-year HW Warranty.