



OPEN NETWORKING

# OPENLAN SWITCH

## SN-3824GBP-6Y-2AC-HSP-HSF

L3HCX, 24\*1G ETH+6X25G, Port 1-8 Support BT 90w, 2 hot swappable PSU 600W+600W(PoE budget 500W+500W), USB, OOB, Console



## HIGHLIGHTS

- AC5X Solution with MACsec (Optional)
- Full L3 Features with Commonly-Used Unicast and Multicast Routing Protocols, Redundant Routing Protocols, and DHCP Relay and Server
- Enhanced Security and IPv6
- Ports 24 RJ-45 10/100/1000BASE-T Ports + 4 25G Uplink
- Ports + 2x25G SFP28 DSP Uplink Ports
- Open-network switching for programmable deployment models
- High-capacity access and aggregation interfaces
- Flexible control-plane and management integration
- Power, cooling, and security options across supported configurations

**3824GBP-6Y-2AC-HSP-HSF**

MODEL

**OPEN NETWORKING**

PLATFORM

**CUSTOM CONFIGURATION**

AVAILABLE



# PRODUCT SPECIFICATIONS

SN-3824GBP-6Y-2AC-HSP-HSF is a openlan switch configured for L3HCX, 24\*1G ETH+6X25G, Port 1-8 Support BT 90w, 2 hot swappable PSU 600W+600W( PoE budget 500W+500W), USB, OOB, Console.

|                      |                                                                                                                          |
|----------------------|--------------------------------------------------------------------------------------------------------------------------|
| Product              | SN-3824GBP-6Y-2AC-HSP-HSF                                                                                                |
| Platform             | OpenLAN Switch                                                                                                           |
| Application          | L3HCX, 24*1G ETH+6X25G, Port 1-8 Support BT 90w, 2 hot swappable PSU 600W+600W( PoE budget 500W+500W), USB, OOB, Console |
| Source specification | Corresponding technical product series datasheet                                                                         |

## Technical Characteristics

| Characteristic        | Specification                                |
|-----------------------|----------------------------------------------|
| MAC Address Table     | MAC Address Table 32 K                       |
| Dimensions            | Dimensions 442x420x43 (WxDxH)                |
| Operating Temperature | Operating Temperature -5°C to 45°C           |
| Operating Humidity    | Operating Humidity 5% - 95% (non-condensing) |

The product configuration and applicable interface, power, cooling, and software options are defined by the selected model and project requirements.

# NETWORK FEATURES

## Quality of Service

|                                                   |                                             |
|---------------------------------------------------|---------------------------------------------|
| Traffic classification and prioritization         | Strict priority and weighted scheduling     |
| Rate limiting, traffic shaping, and policing      | Policy maps and class-based traffic actions |
| QoS based on IP, MAC, VLAN, and protocol criteria |                                             |

## Security

|                                           |                                             |
|-------------------------------------------|---------------------------------------------|
| RADIUS and TACACS+ authentication         | Port security and role-based access control |
| DHCP snooping and IP source protection    | Access-control lists and management ACLs    |
| DoS protection, secure copy, SSH, and SSL |                                             |

## Layer 2

|                                               |                                                   |
|-----------------------------------------------|---------------------------------------------------|
| 802.1Q VLANs, QinQ, and private VLAN services | STP, RSTP, and MSTP loop prevention               |
| Link aggregation and LACP                     | Port mirroring, isolation, and loopback detection |
| LLDP and LLDP-MED neighbor discovery          |                                                   |

## Layer 3

|                                                       |                                         |
|-------------------------------------------------------|-----------------------------------------|
| IPv4 and IPv6 dual-stack operation                    | Static routing and inter-VLAN routing   |
| Policy-based routing and route maps                   | DHCP server, relay, and client services |
| OSPF and RIP capabilities on supported configurations |                                         |

## Multicast

|                             |                                                   |
|-----------------------------|---------------------------------------------------|
| IGMP and MLD snooping       | PIM multicast routing on supported configurations |
| Multicast VLAN registration | Traffic containment and multicast policy control  |

## High Availability

|                                                             |                                                         |
|-------------------------------------------------------------|---------------------------------------------------------|
| Redundant network protocols and equal-cost multipath        | Virtual router redundancy                               |
| Storm control for broadcast, multicast, and unicast traffic | Stacking or redundant chassis operation where supported |

# MANAGEMENT & COMPLIANCE

## Management

|                                                  |                                                          |
|--------------------------------------------------|----------------------------------------------------------|
| Web-based graphical interface                    | Industry-standard command-line interface                 |
| SSH, Telnet, SNMP, and syslog integration        | Controller-based or standalone operation where supported |
| USB, console, and out-of-band management options |                                                          |

## Monitoring and Diagnostics

|                                                                |                                         |
|----------------------------------------------------------------|-----------------------------------------|
| System event, alarm, and operating logs                        | Port and traffic statistics             |
| Temperature, power-supply, and fan monitoring where applicable | Ping, traceroute, and cable diagnostics |
| Digital diagnostic monitoring on supported optical interfaces  |                                         |

## Standards and Compliance

|                                                   |                                                       |
|---------------------------------------------------|-------------------------------------------------------|
| IEEE 802.1 and 802.3 Ethernet standards           | RoHS environmental compliance                         |
| CE and FCC regulatory conformity where applicable | Energy-efficient Ethernet on supported configurations |
| PoE and PoE+ standards on power-enabled models    |                                                       |

## Source-Specified Standards

|                                                                    |
|--------------------------------------------------------------------|
| Switching Performance                                              |
| FCC Class A/CE/Safety                                              |
| Compliance: CB/Safety                                              |
| Compliance: UL                                                     |
| LAG / LACP Flow Control 802.3x                                     |
| Quality of Service                                                 |
| Access Control and logging Radius Authentication/Accounting/802.1x |
| Ace priority DHCP Snooping                                         |

# DETAILED TECHNICAL SPECIFICATIONS

TECHNICAL DATA | 1 OF 6

## HARDWARE SPECIFICATIONS

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

|             |                       |
|-------------|-----------------------|
|             | FCC Class A/CE/Safety |
| Certificate | Compliance: CB/Safety |
|             | Compliance: UL        |

# DETAILED TECHNICAL SPECIFICATIONS

TECHNICAL DATA | 2 OF 6

## 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   |                    |

# DETAILED TECHNICAL SPECIFICATIONS

TECHNICAL DATA | 3 OF 6

## 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        |

# DETAILED TECHNICAL SPECIFICATIONS

TECHNICAL DATA | 4 OF 6

## 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 |
|----------|-----|





# DETAILED TECHNICAL SPECIFICATIONS

TECHNICAL DATA | 5 OF 6

## System

|                                |                                                                                                                                    |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| NTP                            | ONIE Install                                                                                                                       |
| CLI                            | TACACS+                                                                                                                            |
| ConfigDB                       | SONiC to SONiC upgrade                                                                                                             |
| Multiple Images support        | gRPC                                                                                                                               |
| Sensor transceiver monitoring  | LLDP extended MIB: Ildpremtable, Ildploporttable, Ildpremanaddrttable, Ildploctmanaddrttable, 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               |                                                                                                                                    |

# DETAILED TECHNICAL SPECIFICATIONS

TECHNICAL DATA | 6 OF 6

## ORDERING INFORMATION

| Model                        | Description                                                                                                          |
|------------------------------|----------------------------------------------------------------------------------------------------------------------|
| SN-3824G-6Y                  | L3HCX, 24x1G+4x25G, 2x25GSFP+ DSP                                                                                    |
| SN-3824GBP-6Y                | L3HCX, 24x1G+4x25G, 2x25GSFP+ DSP, PoE++ 400W, ports 1 - 8 up to 90W each                                            |
| SN-3824GBPP-6Y               | L3HCX, 24x1G+4x25G, 2x25G SFP+DSP, PoE++ 740W, ports 1 - 8 up to 90W each                                            |
| SN-3824G-6Y-2AC-HSP          | L3HCX, 24x1G+4x25G, 2x25GSFP+ DSP, Hot Swappable PSU (AC+AC)                                                         |
| SN-3824G-6Y-ACDC-HSP         | L3HCX, 24x1G+4x25G, 2x25GSFP+ DSP, Hot Swappable PSU (AC+DC)                                                         |
| SN-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) |
| SN-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) |
| SN-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) |
| SN-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) |
| SN-3824G-6Y-RPS-RF           | L3HCX, 24x1G+4x25G, 2x25G DSP, Redundant PSU and FAN                                                                 |
| SN-3824G-6Y-M                | 24x1G+6x25G, MacSec                                                                                                  |
| SN-3824GBP-6Y-M              | 24x1G+6x25G, PoE++, 90W, 1-8ports, 400W, MacSec                                                                      |
| SN-3824GBPP-6Y-M             | 24x1G+6x25G, PoE++, 90W, 1-8ports, 740W, MacSec                                                                      |
| SN-3824G-6Y-2AC-HSP-M        | 24x1G+6x25G, Hot Swappable PSU (AC+AC), MacSec                                                                       |
| SN-3824G-6Y-ACDC-HSP-M       | 24x1G+6x25G, Hot Swappable PSU (AC+DC), MacSec                                                                       |
| SN-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.

# SUPPORT & CUSTOM ENGINEERING

| Service Area          | SIDERA Intelligent Systems Capability                                         |
|-----------------------|-------------------------------------------------------------------------------|
| Technical support     | Pre-sales, deployment, configuration, and operational assistance              |
| Product customization | Customer-specific hardware, software, interface, and mechanical modifications |
| Project engineering   | Application review, design adaptation, validation, and implementation support |
| Lifecycle support     | Documentation, troubleshooting, maintenance guidance, and upgrade planning    |

## TECHNICAL SUPPORT & CUSTOM ENGINEERING

SIDERA Intelligent Systems provides comprehensive technical support and customer-specific product customization, tailored to individual operational and project requirements.

Contact  
info@sidera-holding.com  
+971 4 582 6754  
Dubai, U.A.E.

*Technical specifications are subject to change without notice.*