# Extreme networks

## Highlights

- High-density, fixed form factor Router with either 80 x 100 GbE or 40 x 100GbE ports for ultra-high-end data centers and cross connections for Internet Exchange Points (IXPs)

- Ultra-deep buffers of up to 16GB to ensure optimal performance to handle traffic in virtually any network for bursty traffic patterns

- Fully featured Data Center Switch and Router with carrier-class MPLS, VXLAN, and Dual Stack IPv4/IPv6 functionality

- Integrated Application Hosting supports an open kernel-based virtual machine (KVM) environment to accommodate Extreme-provided or third-party customer specific applications, containers - with complete isolation from the networking operating system

- Collapsed Campus Core with deep buffer and aggregation with fixed form factor switches with 10/25/40/100 GbE connections

- BGP EVPN-VXLAN for Data Center Spine and Data Center Interconnect (DCI) networking



BUILT ON
BROADCOM®
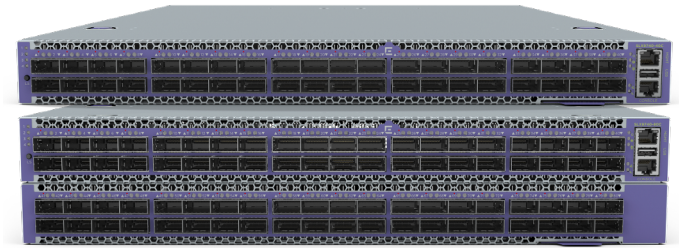
# ExtremeRouting™ SLX 9740

## Next-Generation Fixed Form Router for Core Aggregation at Service Providers and Large Enterprise Data Centers

Increasingly organizations are expanding from on-premise, private and hybrid cloud to full multi-cloud architectures to address agility, scale, security, reliability and cost requirements as digital transformation reshapes their business environment. To succeed in the digital era, organizations need network platforms with the adaptability to address these rapidly evolving demands and enable them to simplify and scale operations while driving out cost.

The ExtremeRouting SLX 9740 Series platforms serve as demarcation between the enterprise networks and the service provider networks (Internet) where the ISP connections terminate. Basic requirements include support for a full Internet routing table, mainstream routing protocols BGP, OSPF and IS-IS, EVPN VxLAN, ACLs, BGP Internet peering scale, MPLS, deep buffer, device management and entry level DDoS protection.

Extreme Networks offers a choice for selecting the right routing solution to meet your business needs. The options include the SLX 9740 (1U) with 40 x 100 GbE ports and the SLX 9740 (2U) with 80 x 100 GbE ports to deliver cost effective solutions for the most demanding Enterprise and Service Provider customers.
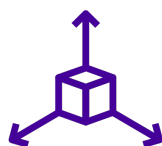
## Internet-Scale Routing Platform

The SLX 9740 is designed to cost-effectively deliver the scale and performance needed to address the explosive growth in network bandwidth, devices, and services – today and well into the future. This flexible platform, powered by Extreme SLX-OS, provides carrier-class advanced features that leverage proven Extreme routing, MPLS, Carrier Ethernet, and VXLAN overlay technology currently deployed in the most demanding service provider, data center, and enterprise networks.

## Integrated Application Hosting

The SLX 9740 can run third-party VM-based applications alongside the routing OS - all without impacting performance. This flexible and open solution enables organizations to deploy Extreme-provided or third-party applications and tools directly on the router. This design does not impact the control plane or forwarding of data traffic.

## Ultra-Deep Buffers

The SLX 9740 offers a deep buffering platform that is purpose-built for the most demanding service provider and enterprise networks. The border router is the interconnection point between internal networks and the internet. With more traffic moving across these routers, there is added demand for capacity, the ability to absorb speed mis-matches and handle microbursts without compromising performance. The SLX 9740-40C has 8GB and SLX 9740-80C has 16GB of deep packet buffers.

## Internet Exchange Points

The ever-increasing growth of IXPs traffic with new record highs demand wide spread 100 GbE connectivity at the edge of the network. Cost per port is a key factor as customers migrate from 10 GbE to 100 GbE and ultra-high density are essential with the right mix of technologies (e.g. VPLS and EVPN) with the SLX 9740.

## Core Aggregation

Enterprise and Co-location data center consolidate on multiple layers with the SLX 9740 and can sit as an edge router above the datacenter network. With the use of MPLS or layer 3 protocols the SLX 9740 links the datacenter gear to another datacenter or the outside world. Multi-Chassis Trunking (MCT) provides dynamic flow-based load balancing to multiple network nodes to enable resilient and high-performance networks.

## Flexible Border Routing Solution

The SLX 9740 is the industry's most powerful compact deep buffer dual stack IPv4/IPv6 Internet border router, providing a cost-efficient solution that is purpose-built for the most demanding service provider and enterprise data centers and MAN/WAN applications. The robust system architecture and a versatile feature set including IPv4, IPv6 and MPLS/VPLS combined with Carrier Ethernet 2.0 and OAM capabilities provides deployment flexibility. The SLX 9740 supports true internet scale border routing solutions with support for a maximum of 3.5M IPv4/IPv6 unicast routes.

# SLX 9740 Switch Specifications

| Item | Extreme SLX 9740-80C | Extreme SLX 9740-40C |
|---|---|---|
| Maximum 100 GbE/40 GbE ports | 80 | 40 |
| Maximum 10/25 GbE | 144 ports in breakout mode (36x4) | 72 ports in breakout mode (18x4) |
| Switch fabric capacity (data rate, full duplex) | 8.0 Tbps in each direction (front panel ports, 80x100Gbps) | 4.0 Tbps in each direction (front panel ports, 40x100Gbps) |
| Forwarding capacity (data rate, full duplex) | 4000 Mpps (packet size=284B) | 2000 Mpps (packet size=284B) |
| Airflow | Front to back or back to front (orderable option) | Front to back or back to front (orderable option) |
| Fan module slots | 4 (3+1 redundancy) | 6 (5+1 redundancy) |
| Maximum AC power supply rating | 1600 W | 1600 W |
| Power Supplies Modular | 1600W AC/DC power supply (up to four PSUs) | 1600W AC/DC power supply (up to two PSUs) |
| Height | 3.41 in / 8.66 cm | 1.7 in / 4.31 cm |
| Width | 17.72 in / 45.00 cm | 17.72 in / 45.00 cm |
| Depth chassis only without cable management or fan handles | 25.2 in / 64.00 cm | 25.2 in / 64.00 cm |
| Weight Chassis | 4 PS, 4 fans: 58.46 lb, 26.52 kg | 2 PS, 6 fans: 29.98 lb, 13.60 kg |
| Weight Chassis | 4 PS, 4 fans, rack mount kit (4 post): 64.99 lb, 29.48 kg | 2 PS, 6 fans, rack mount kit (4 post): 36.24 lb, 16.44 kg |
| Weight Empty chassis (no PS, no fans) | 45.46 lb, 20.62 kg, Fan: 0.71 lb, 0.32 kg., PS: 2.54 lb, 1.15 kg | 23.28 lb, 10.56 kg, Fan: 0.27 lb, 0.13 kg., PS: 2.54 lb, 1.15 kg |
| Port type | QSFP28 Port Configs: 80x100GbE, 80x40GbE, 144x25GbE, 144x10GbE | QSFP28 Port Configs: 40x100GbE, 40x40GbE, 72x25GbE, 72x10GbE |
| Packet buffers per switch | 16 GB | 8 GB |
| Operating Conditions | Operating temperature and operating altitude for airflow front to back: 0°C to 40°C (32°F to 104°F) / 6.000 ft (1.800m) | |
| | Operating temperature and operating altitude for airflow back to front: 0°C to 25°C (32°F to 77°F) / 1.500 ft (457m) | |
| | Storage temperature: –25°C to 55°C (–13°F to131°F) | |
| | Relative humidity: 5% to 90%, at 40°C (104°F), non-condensing | |
| | Storage humidity: 95% maximum relative humidity, non-condensing | |
| | Storage altitude: 15,000 ft (4,500 m)maximum | |

# Power and Heat Dissipation

| | 1600W AC PSU | 1600W DC PSU |
|---|---|---|
| Dimensions | 3.4" x 1.58" x 9.45" - 86.36mm x 40.13mm x 240.03mm (WxHxD) | 3.4" x 1.58" x 10.04" - 86.36mm x 40.13mm x 255.02mm (WxHxD) |
| Weight | 2.54 lb (1.15 kg) | 2.54 lb (1.15 kg) |
| Voltage Input Range | front to back: 90 to 264 VAC; back to front: 180 to 264 VAC | +/-39 VDC to +/-72 VDC |
| Line Frequency Range | 47 to 63 Hz | NA |
| PSU Input Socket | IEC 320, C14 | Amphenol Connector C10-747795 or similar |

| SLX 9740-80C Maximum Heat Dissipation (BTU/hr) (Fans high, all ports 100% traffic, 4 PSU) | SLX 9740-80C Maximum Power Dissipation (Watts) (Fans high, all ports 100% traffic, 4 PSU) |
|---|---|
| 6592.26 BTU/hr | 1932 |

| SLX 9740-40C Maximum Heat Dissipation (BTU/hr) (Fans high, all ports 100% traffic, 2 PSU) | SLX 9740-40C Maximum Power Dissipation (Watts) (Fans high, all ports 100% traffic, 2 PSU) |
|---|---|
| 3524.74 BTU/hr | 1033 |

## Acoustics

| Sound Pressure | SLX 9740-40C (F-B) | SLX 9740-40C (B-F) | SLX 9740-80C (F-B) | SLX 9740-80C (B-F) |
|---|---|---|---|---|
| Front | 57.3 dBA, re: 20 μPa | 61.7 dBA, re: 20 μPa | 61.3 dBA, re: 20 μPa | 69 dBA, re: 20 μPa |
| Rear | 60.2 dBA, re: 20 μPa | 65.1 dBA, re: 20 μPa | 65.2 dBA, re: 20 μPa | 70.8 dBA, re: 20 μPa |
| Right | 50.5 dBA, re: 20 μPa | 54.9 dBA, re: 20 μPa | 55.5 dBA, re: 20 μPa | 62.9 dBA, re: 20 μPa |
| Left | 51.9 dBA, re: 20 μPa | 55.9 dBA, re: 20 μPa | 55.9 dBA, re: 20 μPa | 64 dBA, re: 20 μPa |
| Average | 55 dBA, re: 20 μPa | 59.4 dBA, re: 20 μPa | 59.5 dBA, re: 20 μPa | 66.7 dBA, re: 20 μPa |

## SLX 9740 Software Specifications

| Item | SLX 9740 Default Profile | SLX 9740 Route Profile |
|---|---|---|
| Maximum MAC addresses | 600,000 | 190,000 |
| Maximum VLANs | 4,096 | 4,096 |
| Maximum ACLs (IPv4/IPv6/L2) | 4,000 IPv4 / 2,000 IPv6 / 2,000 L2 | 4,000 IPv4 / 2,000 IPv6 / 2,000 L2 |
| Maximum members in a standard LAG | 64 | 64 |
| Maximum number of MCT switches | 2 | 2 |
| Maximum number of Bridge Domains | 4,000 | 4,000 |
| Maximum IPv4 unicast routes | 2,000,000 | 3,500,000 |
| Maximum IPv6 unicast routes | 2,000,000 | 3,500,000 |
| Maximum IPv4 host routes (ARP entries) | 102,000 | 95,000 |
| Maximum IPv6 host routes - route scale | 102,000 | 95,000 |
| Maximum jumbo frame size | 9,216 bytes | 9,216 bytes |
| QoS priority queues (per port) | 8 | 8 |

# Product Specifications

## IEEE Compliance

### Ethernet
- 802.3-2005 CSMA/CD Access Method and Physical Layer Specifications
- 802.3ab 1000BASE-T
- 802.3ae 10 Gigabit Ethernet
- 802.3u 100BASE-TX, 100BASE-T4, 100BASE-FX Fast Ethernet at 100Mbps with Auto-Negotiation
- 802.3x Flow Control
- 802.3z 1000BASE-X Gigabit Ethernet over fiber optic at 1 Gbps
- 802.3ad Link Aggregation
- 802.1Q Virtual Bridged LANs
- 802.1D MAC Bridges
- 802.1w Rapid STP
- 802.1s Multiple Spanning Trees
- 802.1ag Connectivity Fault Management(CFM)
- 802.3.bj 100 Gigabit Ethernet
- 802.1ab Link Layer Discovery Protocol
- 802.1x Port-Based Network Access Control
- 802.3ah Ethernet in the First Mile Link OAM3
- ITU-T G.8013/Y.1731 OAM mechanisms for Ethernet
- G.8032

### General Protocols
- RFC 768 UDP
- RFC 791 IP
- RFC 792 ICMP
- RFC 793 TCP
- RFC 826 ARP
- RFC 854 TELNET
- RFC 894 IP over Ethernet
- RFC 903 RARP
- RFC 906 TFTP Bootstrap
- RFC 950 Subnet
- RFC 951 BootP
- RFC 1027 Proxy ARP
- RFC 1042 Standard for The Transmission of IP
- RFC 1166 Internet Numbers
- RFC 1122 Host Extensions for IP Multicasting
- RFC 1191 Path MTU Discovery
- RFC 1340 Assigned Numbers
- RFC 1519 CIDR
- RFC 1542 BootP Extensions
- RFC 1591 DNS (client)
- RFC 1812 Requirements for IPv4 Routers
- RFC 1858 Security Considerations for IP Fragment Filtering
- RFC 2131 BootP/DHCP Helper
- RFC 2578 Structure of Management Information Version 2
- RFC 2784 Generic Routing Encapsulation
- RFC 3021 Using 31-Bit Prefixes on IPv4 Point-to-Point Links
- RFC 3768 VRRP
- RFC 4001 Textual Conventions for Internet Network Addresses
- RFC 4950 ICMP Extensions for MPLS
- RFC 5880 Bidirectional Forwarding Detection
- RFC 5881 Bidirectional Forwarding Detection for IPv4 and IPv6 (Single Hop)
- RFC 5882 Generic Application of Bidirectional Forwarding Detection
- RFC 5884 Bidirectional Forwarding Detection for Multihop Paths
- Egress ACL Rate Limiting

### BGP4
- RFC 1745 OSPF Interactions
- RFC 1772 Application of BGP in the Internet
- RFC 1997 Communities and Attributes
- RFC 2385 BGP Session Protection via TCP MD5
- RFC 2439 Route Flap Dampening
- RFC 2918 Route Refresh Capability
- RFC 3392 Capability Advertisement
- RFC 3682 Generalized TTL Security Mechanism for eBGP Session Protection
- RFC 4271 BGPv4
- RFC 4364 BGP/MPLS IP Virtual Private Networks
- RFC 4456 Route Reflection
- RFC 4486 Sub Codes for BGP Cease Notification Message
- RFC 4724 Graceful Restart Mechanism for BGP
- RFC 6793 BGP Support for Four-octet AS Number Space
- RFC 5065 BGP4 Confederations
- RFC 5291 Outbound Route Filtering Capability for BGP-4

- RFC 5396 Textual Representation of Autonomous System (AS) Numbers
- RFC 5668 4-Octect AS specific BGP Extended Community
- draft-ietf-rtgwg-bgp-pic-07.txt - BGP Prefix Independent Convergence
- RFC 5575 Dissemination of Flow Specification Rules (BGP Flow Spec)
- RFC 8092 BGP Large Community Attribute
- sFlow BGP AS path

### OSPF
- RFC 1745 OSPF Interactions
- RFC 1765 OSPF Database Overflow
- RFC 2154 OSPF with Digital Signature (Password,MD-5)
- RFC 2328 OSPF v2
- RFC 3101 OSPF NSSA
- RFC 3137 OSPF Stub Router Advertisement
- RFC 3630 TE Extensions to OSPF v2
- RFC 3623 Graceful OSPF Restart
- RFC 4222 Prioritized Treatment of Specific OSPF Version2
- RFC 5250 OSPF Opaque LSA Option

### IS-IS
- RFC 1195 Routing inTCP/IP and Dual Environments
- RFC 1142 OSI IS-IS Intra-domain Routing Protocol
- RFC 3277 IS-IS Blackhole Avoidance
- RFC 5120 IS-IS Multi-Topology Support
- RFC 5301 Dynamic Host Name Exchange
- RFC 5302 Domain-wide Prefix Distribution
- RFC 5303 Three-Way Handshake for IS-IS Point-to-Point
- RFC 5304 IS-IS Cryptographic Authentication(MD-5)
- RFC 5306 Restart Signaling for ISIS (helper mode)
- RFC 5309 Point-to-point operation over LAN in link state routing protocols

### IPv4 Multicast
- RFC 1112 IGMP v1
- RFC 2236 IGMP v2
- RFC 4601 PIM-SM
- RFC 4607 PIM-SSM
- RFC 4610 Anycast RP using PIM
- RFC 5059 BSR for PIM
- PIM IPv4 (MCT future)

### QOS
- RFC2474 DiffServ Definition
- RFC2475 An Architecture for Differentiated Services
- RFC 2597 Assured Forwarding PHB Group
- RFC 2697 Single Rate Three-Color Marker
- RFC 2698 ATwo-RateThree-Color Marker
- RFC 3246 An Expedited Forwarding PHB

### IPv6 Core
- RFC 1887 IPv6 unicast address allocation architecture
- RFC 1981 IPv6 Path MTU Discovery
- RFC 2375 IPv6 Multicast Address Assignments
- RFC 2450 Proposed TLA and NLA Assignment Rules
- RFC 2460 IPv6 Specification
- RFC 4862 IPv6 Stateless Address - Auto Configuration
- RFC 2464 Transmission of IPv6 over Ethernet Networks
- RFC 2471 IPv6 Testing Address allocation
- RFC 2711 IPv6 Router Alert Option
- RFC 3587 IPv6 Global Unicast—Address Format
- RFC 4193 Unique Local IPv6 Unicast Addresses
- RFC 4291 IPv6 Addressing Architecture
- RFC 4301 IP Security Architecture
- RFC 4303 Encapsulation Security Payload
- RFC 4305 ESP and AH cryptography
- RFC 4443 ICMPv6
- RFC 4552 Auth for OSPFv3 using AH/ESP
- RFC 4835 Cryptographic Alg. Req. for ESP
- RFC 4861 Neighbor Discovery for IP version 6 (IPv6)
- RFC 3315 Dynamic Host Configuration Protocol for IPv6 (DHCPv6)

### IPv6 Routing
- RFC 5340 OSPF for IPv6
- RFC 2545 Use of BGP-MP for IPv6
- RFC 5308 Routing IPv6 with IS-IS
- RFC 6106 Support for IPv6 Router Advertisements with DNS Attributes
- RFC 6164 Using 127-Bit IPv6 Prefixes on Inter-Router Links

## MPLS

- RFC 2205 RSVP v1 Functional Specification
- RFC 2209 RSVP v1 Message Processing Rules
- RFC 2702 TE over MPLS
- RFC 2961 RSVP Refresh Overhead Reduction Extensions
- RFC 3031 MPLS Architecture
- RFC 3032 MPLS Label Stack Encoding
- RFC 3037 LDP Applicability
- RFC 3097 RSVP Cryptographic Authentication
- RFC 3209 RSVP-TE
- RFC 3270 MPLS Support of Differentiated Services
- RFC 3478 LDP Graceful Restart
- RFC 3815 Definition of Managed Objects for the MPLS, LDP
- RFC 4090 Fast Reroute Extensions to RSVP-TE for LSP Tunnels
- RFC 4364 BGP/MPLS IP Virtual Private Networks
- RFC 4379 OAM
- RFC 4448 Encapsulation methods for transport of Ethernet over MPLS networks
- RFC 5036 LDP Specification
- RFC 5305 ISIS-TE
- RFC 5443 LDP IGP Synchronization
- RFC 5561 LDP Capabilities
- RFC 5712 MPLS Traffic Engineering Soft Preemption
- RFC 5918 LDP "Typed Wildcard" FEC
- RFC 5919 Signaling LDP Label Advertisement Completion

## Layer 2 VPN and PWE3

- RFC 3343 TTL Processing in MPLS networks
- RFC 3985 Pseudowire Emulation Edge to Edge (PWE3) Architecture
- RFC 4364 BGP/MPLS IP Virtual Private Networks
- RFC 4447 Pseudowire Setup and Maintenance using LDP
- RFC 4448 Encapsulation Methods for Transport of Ethernet over MPLS Networks
- RFC 4664 Framework for Layer 2 Virtual Private Networks
- RFC4665 Service Requirements for Layer 2 Provider-Provisioned Virtual Private Networks
- RFC4762 VPLS using LDP Signaling
- RFC 5542 Definitions of Textual Conventions for Pseudowire (PW) Management
- RFC 6391 Flow-Aware Transport of Pseudowires
- RFC 6870 PW Preferential Forwarding Status Bit
- RFC7432BGP MPLS-Based Ethernet VPN -Partial
- RFC 7348 Virtual eXtensible Local Area Network (VXLAN): A Framework for Overlaying Virtualized Layer 2 Networks over Layer 3 Networks (Partial)
- draft-sd-l2vpn-evpn-overlay-03 (A Network Virtualization Overlay Solution using EVPN) Partial
- draft-ietf-bess-evpn-overlay-04 (A Network Virtualization Overlay Solution using EVPN with VXLAN encapsulation) Partial
- draft-ietf-bess-evpn-overlay-12 A Network Virtualization Overlay Solution using EVPN
- draft-ietf-bess-evpn-igmp-mld-proxy-00 (IGMP and MLD Proxy for EVPN)

## Management and Visibility

- Integrated industry-standard Command Line Interface (CLI)
- RFC 854 Telnet
- RFC 2068 HTTP
- RFC 2818 HTTPS
- RFC 3176 sFlowv5
- sFlow extension to VXLAN
- RFC 4253 Secure Shell (SSH)
- Secure Copy (SCPv2)
- SFTP
- RFC 8040 RESTCONF Protocol -PATCH, PUT, POST, DELETE support.
- RFC 5905 Network Time Protocol Version 4
- RFC 3986 Uniform Resource Identifier (URI): GenericSyntax
- RFC 6241 NETCONF Configuration Protocol (Partial)
- RFC4742 "Using the NETCONF Configuration Protocol over Secure Shell (SSH)"
- RFC 6020,"YANG- A Data Modeling Language for the Network Configuration Protocol (NETCONF)"
- RFC 6021, "Common YANG DataTypes"
- RFC4741 NETCONF (Partial)
- Chrome
- Curl
- SNMP Infrastructure (v1, v2c, v3)
- RFC 1157 Simple Network Management Protocol
- RFC 1908 Coexistence between Version 1 and Version 2 of the Internet-standard Network Management Framework
- RFC 2578 Structure of Management Information Version 2
- RFC 2579 Textual Conventions for SMIv2
- RFC 2580 Conformance Statements for SMIv2
- RFC 3410 Introduction and Applicability Statements for Internet Standard Management Framework

- RFC 3411 An Architecture for Describing SNMP Management Frameworks
- RFC 3412 Message Processing and Dispatching
- RFC 3413 SNMP Applications
- RFC 3414 User-based Security Model
- RFC 3415 View-based Access Control Model
- RFC 3416 Version 2 of SNMP Protocol Operations
- RFC 3417 Transport Mappings
- RFC 3418 Management Information Base (MIB) for the SNMP
- RFC 3584 Coexistence between Version1, Version2, and Version3 of the Internet-standard Network Management Framework
- RFC 3826 The Advanced Encryption Standard (AES) Cipher Algorithm in the SNMP User-based Security Model
- SNMP MIBs
- IANA-ADDRESS-FAMILY-NUMBERS-MIB
- IANA if Type-MIB
- sFlow v5 MIB
- RFC 1213 Management Information Base for Network Management of TVP/IP based internets v5 MIB
- RFC 2674 Bridge MIB
- RFC 2790 Host Resource MIB
- RFC2819 RMON Groups 1, 2, 3, 9
- RFC 2863 The Interfaces Group MIB (IF)
- RFC 3289 Diffserv MIB
- RFC 3635 Etherlike InterfaceType MIB
- RFC 3811 MPLS TCSTD MIB
- RFC 3812 MPLS TESTD MIB
- RFC 3813 MPLS LSR MIB
- RFC 4001 Textual Conventions for Internet Network Addresses
- RFC4022 Textual Conventions for Internet Network Addresses (TCP)
- RFC 4113 Management Information Base for the User Datagram Protocol (UDP)
- RFC 4133 Entity MIB
- RFC 4273 BGP-4 MIB
- RFC 4292 IP Forwarding Table MIB (IP-FORWARD)
- RFC 4293 Management Information Base for the Internet Protocol (IP)
- RFC 4444 IS-IS MIB
- RFC 4750 OSPF v2 MIB
- RFC 4878 DOT3-OAM-MIB
- RFC 7257 VPLS MIB (Partial)
- RFC 7331 BFD MIB

## Management and Visibility (cont.)

- IEEE/MEF MIBs
- IEEE-802 LLDP MIB
- MEF-SOAM-PM-MIB
- IEEE-8021-CFM-MIB
- IEEE-8021-CFM-V2-MIB
- 3rd party Applications,like e.g. TCPdump, Wireshark and PerfSONAR

## Element Security

- AAA
- Username/Password (Challenge and Response)
- Bi-level Access Mode (Standard and EXEC Level)
- Role-Based Access Control (RBAC)
- RFC 2865 RADIUS
- RFC 2866 RADIUS Accounting
- •TACACS/TACACS+draft-grant-tacacs-02TACACS+ - Command Authorization, Authentication, Accounting
- RFC 5905 NTP Version 4 NTP date
- RFC 5961 TCP Security
- RFC 4250 Secure Shell (SSH) Protocol Assigned Numbers
- RFC 4251 Secure Shell (SSH) Protocol Architecture
- RFC 4252 Secure Shell (SSH) Authentication Protocol
- RFC 4253 Secure Shell (SSH ) Transport Layer Protocol
- RFC 4254 Secure Shell (SSH) Connection Protocol
- RFC 4344 SSH Transport Layer Encryption Modes
- RFC 4419 Diffie-Hellman Group Exchange for the Secure Shell (SSH) Transport Layer Protocol
- draft-ietf-secsh-filexfer-13.txt SSH File Transfer Protocol (SFTP)
- Secure Copy (SCP v2) (see RFC4251)
- RFC 2068 HTTP
- RFC 4346 TLS 1.1
- RFC 5246 TLS 1.2
- Protection against Denial of Service (DoS) attacks such as TCP SYN or Smurf Attacks

## Environmental Regulatory Compliance

- EU RoHS - 2011/65/EU
- EU WEEE - 2012/19/EU
- EU REACH - Regulation (EC) No 1907/2006 - Reporting
- China RoHS - SJ/T 11363-2006
- Taiwan RoHS CNS 15663(2013.7)

## Regulatory and Safety

### North American ITE

- CAN/CSA C22.2 NO. 60950-1-01, CAN/CSA C22.2 NO. 62368-1-14
- CAN/CSA C22.2 NO. 60950-1-01, CAN/CSA C22.2 NO. 62368-1-14
- UL60950-1, UL 62368-1

### European ITE

- EN 60950-1
- EN 62368-1
- EN 60825-1 Class 1 (Lasers Safety)
- 2014/35/EU Low Voltage Directive

### International ITE

- CB Report & Certificate per IEC 60950-1 + National Differences
- CB Report & Certificate IEC 62368-1
- AS/NZS 60950-1 (Australia/New Zealand)

### European ITE

- ETS 300 132-1 Equipment Requirements for AC Power Equipment Derived from DC Sources
- ETS 300 132-2 Equipment Requirements for DC Powered Equipment
- ETS 300 253 Facility Requirements
- ETS 300 253 Facility Requirements

### EMI/EMC Standards

North American EMC Standards
- FCC CFR 47 part 15 Class A (USA)
- ICES-003 Class A (Canada)

### European EMC Standards

- EN 55032 Class A
- EN 55024
- EN 55011
- EN 61000-3-2: (Harmonics)
- EN 61000-3-3 (Flicker)
- EN 300 386 (EMC Telecommunications)
- 2014/30/EU EMC Directive

### International EMC Standards

- CISPR 32 Class A (International Emissions)
- AS/NZS CISPR32
- CISPR 24 Class A (International Immunity)
- IEC 61000-4-2/EN 61000-4-2 Electrostatic Discharge, 8kV Contact, 16kV Air, Criteria B
- IEC 61000-4-3/EN 61000-4-3 Radiated Immunity 10V/m, Criteria A
- IEC 61000-4-4 / EN 61000-4-4 Transient Burst, 2kV, Criteria B
- IEC 61000-4-5/EN 61000-4-5 Surge, 1kV L-L, 2kV L-G, Level 3 Criteria B
- IEC 61000-4-6/EN 61000-4-6 Conducted Immunity, 0.15-80 Mhz, 10Vrms, 80%AM (1kHz) Criteria A
- IEC/EN 61000-4-11 Power Dips & Interruptions, >30%, 25 periods, Criteria C

### Country Specific

- VCCI Class A (Japan Emissions)
- ACMA RCM (Australia Emissions)
- CCC Mark
- KCC Mark, EMC Approval (Korea)
- BSMI (Taiwan)
- Anatel (Brazil)
- NoM (Mexico)
- EAC (Russiam Belarus, Kazhakstan)

- NRCS (South Africa)

## Physical Design and Mounting

- 19-inch rack mount supporting racks compliant with:
  –ANSI/EIA-310-D

# Ordering Information

| Part Number | Description |
|---|---|
| **Extreme SLX 9740 Switch Hardware and Software** ||
| SLX9740-40C | Extreme SLX-9740, base unit with 40x100GE/40GE capable QSFP28 ports, 2 unpopulated power supply slots, 6 unpopulated fan slots and a 4-post rack mount kit |
| SLX9740-40C-AC-F | Extreme SLX-9740 with front to back airflow, base unit with 40x100GE/40GE capable QSFP28 ports, 2 AC power supplies, 6 fan modules and a 4-post rack mount kit |
| SLX9740-40C-AC-R | Extreme SLX-9740 with back to front airflow, base unit with 40x100GE/40GE capable QSFP28 ports, 2 AC power supplies, 6 fan modules and a 4-post rack mount kit |
| SLX9740-80C | Extreme SLX-9740, base unit with 80x100GE/40GE capable QSFP28 ports, 4 AC unpopulated power supply slots, 4 unpopulated fan slots and a 4-post rack mount kit |
| SLX9740-80C-AC-F | Extreme SLX-9740 with front to back air flow, base unit with 80x100GE/40GE capable QSFP28 ports, 4 AC power supplies, 4 fan modules and a 4-post rack mount kit |
| SLX9740-80C-AC-R | Extreme SLX-9740 router with back to front air flow, base unit with 80x100GE/40GE capable QSFP28 ports, 4 AC power supplies, 4 fan modules and a 4-post rack mount kit |
| SLX9740-40C-DC-F | Extreme SLX-9740 with front to back air flow, base unit with 40x100GE/40GE capable QSFP28 ports, 2 DC power supplies, 6 fan modules and a 4-post rack mount kit |
| SLX9740-80C-DC-F | Extreme SLX-9740 with front to back air flow, base unit with 80x100GE/40GE capable QSFP28 ports, 4 DC power supplies, 4 fan modules and a 4-post rack mount kit |
| XN-FAN-003-F | SLX 9740 FAN Front to Back airflow for SLX9740-40C |
| XN-FAN-003-R | SLX 9740 FAN Back to Front airflow for SLX9740-40C |
| XN-FAN-004-F | SLX 9740 FAN Front to Back airflow for SLX9740-80C |
| XN-FAN-004-R | SLX 9740 FAN Back to Front airflow for SLX9740-80C |
| XN-ACPWR-1600W-F | SLX 9740 Fixed AC 1600W Power Supply Front to Back. Power cords not included. |
| XN-ACPWR-1600W-R | SLX 9740 Fixed AC 1600W Power Supply Back to Front. Power cords not included. |
| XN-DCPWR-1600W-F | SLX 9740 Fixed DC 1600W Power Supply Front to Back. Power cords not included. |
| SLX9740-ADV-LIC-P | Advanced Feature License for MPLS, BGP-EVPN and Integrated Application Hosting for Extreme SLX 9740 |
| XN-2P-RKMT299 | 2-Post Rail Kit for SLX 9740-40C |
| XN-2P-RKMT300 | 2-Post Rail Kit for SLX 9740-80C |
| XN-4P-RKMT301 | 4-Post Rail Kit for SLX 9740-80C |
| XN-4P-RKMT302 | 4-Post Rail Kit for SLX 9740-40C |

## Optics/Transceivers

For the most up-to-date list of optics/transceivers supported on this product, refer to our Extreme Optics Compatibility Tool at https//optics.extremenetworks.com

## Power Cords

SLX series power cords can be ordered separately but need to be specified at time of ordering. Refer to https://www.extremenetworks.com/powercords/ for details on power cord availability for this product.

## Warranty

The SLX 9740 is covered under Extreme's 1 Year Warranty policy. For warranty details, please visit: https//www.extremenetworks.com/support/policies

## Maintenance Services

Extreme's maintenance and support services with 100% in-sourced engineering experts and over 90% first-person resolution ensure efficient operation of your business- essential network. 24x7x365 phone support, advanced parts replacement, and on-site support augment your staff with experienced resources that help you mitigate critical network issues fast. Visit Extreme Maintenance Services for more information.

http://www.extremenetworks.com/contact