VSP 7400

Highlights

- Supports Fabric Connect and/or conventional Routed IP networking deployments
- Leverages Extreme Fabric Connect to simplify the network while helping segment traffic to meet regulatory/security needs
- Extreme Integrated Application Hosting for third-party application hosting without impacting switch performance.
- Intuitive and centralized cloud-based system management with ExtremeCloud™ IQ and ExtremeCloud IQ — Site Engine

Key Hardware Features

- Compact 1U form factor
- Non-blocking wire-speed design
- Hot-swappable modular power supplies and fans
- AC and DC power supply options
- Front-to-back and back-to-front air flow options
- Wide range of port speeds for a range of connectivity options, from 1Gb to 100Gb

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High-Performance Fabric-Enabled Core and Aggregation Switches

The Virtual Services Platform (VSP) 7400 Series are space-efficient, high-performance core and aggregation switches that deliver wire-speed 100Gb and 25Gb Ethernet connectivity. Supporting a range of interface speeds (including 1Gb, 10Gb, 25Gb, 40Gb, and 100Gb) all in a compact 1U form factor, the VSP 7400 Series can be flexibly deployed in either core and aggregation or spine and leaf high-density, top-of-rack architectures. VSP 7400 switches support Extreme Fabric Connect for simplified, automated network services delivery, and can handle a variety of high-bandwidth applications. Available to use with the switch is a variety of QSFP28, QSFP+, SFP28, and SFP+ transceivers which support a range of fiber interface needs.

Two VSP 7400 models are available. The VSP7400-32C model is a core or spine switch with 32 100Gb QSFP28 ports, while the VSP7400-48Y-8C model is an aggregation or leaf switch with 48 25Gb SFP28 ports and eight 40Gb or 100Gb QSFP28 uplink ports.

Extreme Fabric Connect

The VSP 7400 Series supports Extreme Fabric Connect technology. Based on an extended implementation of the Shortest Path Bridging (SFB) standards of IEEE 802.1aq, Fabric Connect offers you the ability to create a Layer 2 and Layer 3 virtualized network that simplifies network provisioning and reduces strain on network and IT teams. This allows your network to become a single cloud, as Fabric Connect instantly propagates all the end points' service attributes to every other node within your network's fabric. Fabric Connect delivers an edge-only provisioning model that seamlessly integrates with orchestration and automation, eliminates the need to configure network-wide VLANs, and removes the risk of network loops.

The VSP 7400 also natively supports Fabric Extend, a feature of Fabric Connect that extends Fabric Connect's simplified provisioning and virtualization services over an intermediate, Layer 2 or Layer 3-based third-party network. For example, Fabric Extend allows you to connect two Fabric Connect environments or islands over a Service Provider WAN, such as MPLS or Ethernet WAN.

Advanced Layer 3 Services

The VSP 7400 Series supports advanced Layer 3 services, including IPv4 and IPv6 dynamic routing as well as IP multicast services. This enables it to satisfy conventional IP routing deployments in addition to its fabric-based services.

VSP 7400 models support Distributed Virtual Routing (DVR) leaf services, VXLAN Gateway services, as well as IP routing technologies (such as RIPv1/2, RIPng, and OSPFv2/v3), multicast services (such as PIM-SM/SMM, IGMP v1, 2, and 3), and Fabric Connect to PIM gateway.

Network Intelligence

The VSP 7400 Series can provide intelligent insight to your network via its native analytics capabilities, which include line-rate, hardware accelerated IPFIX, and sFlow for the analysis of traffic flow data through the switch. These tools enable VSP 7400 models to provide visibility into both your network and applications so you can make data-driven decisions without the need for expensive sensors or collectors.

Integrated Application Hosting

VSP 7400 models support Extreme's Integrated Application Hosting which leverages the switch's hardware and software to run onboard applications without impacting switch or network performance. This enables organizations to run a Guest VM to deploy third-party or custom applications and tools for real-time visibility or to meet specific business or operational needs. This can help improve network visibility and performance while reducing operational costs.
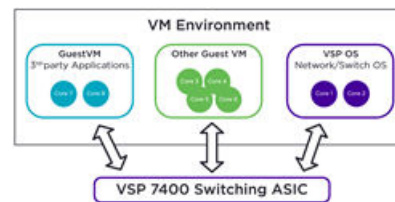

Figure 1: Extreme Integrated Application Hosting on VSP 7400 Series

Cloud-Based Network Management

The VSP 7400 Series can be managed by ExtremeCloud IQ and ExtremeCloud IQ—Site Engine for centralized switch management, giving you a consolidated view of users, devices, and applications across wired and wireless networks. Simple on-box management functions are delivered by a web-based GUI, and a generic command-line interface (CLI) is available for manual configuration.

Zero-touch provisioning lets you quickly bring new switches online, and a granular view of devices, ports, and users enables efficient inventory and network topology management.

Ansible Network Modules

The VSP 7400 Series is compatible with Ansible Network modules, which can be used to configure, test, and validate existing network state on the entire VSP family of devices. These modules work with your VSP 7400 switch to deliver the benefit of simple, powerful, agentless automation to your network administrators.

Product Specifications

Model	VSP 7400-32C	VSP 7400-48Y-8C
Ports	• 32 x QSFP28 10Gb/25Gb/40Gb/100Gb ports 　◦ Up to 32 x 40Gb/100Gb Ethernet interfaces 　◦ Up to 124 x 10Gb/25Gb Ethernet interfaces • 1 x Serial console port RJ-45 • 1 x 10/100/1000BASE-T out-of-band management port • Micro-USB Type A storage port	• 48 x SFP28 1Gb/10Gb/25Gb ports • 8 x QSFP28 40Gb/100Gb ports • 1 x Serial console port RJ-45 • 1 x 10/100/1000BASE-T out-of-band management port • Micro-USB Type A storage port
Performance	Line Rate 6.4 Tbps Switching Capacity (3.2 Tbps ingress, 3.2 Tbps egress) / Average Latency: 800 ns / Forwarding Rate: 2,000 Mpps	Line Rate 4.0 Tbps Switching Capacity (2.0 Tbps ingress, 2.0 Tbps egress) / Average Latency: 800 ns / Forwarding Rate: 1,000 Mpps
Dimensions	44.0 cm / 57.0 cm / 4.3 cm (17.3 in. W / 22.4 in. D / 1.7in. H)	44.0 cm / 53.2 cm / 4.3 cm (17.3 in. W / 20.9 in. D / 1.7in. H)
Weight	7.39 kg (16.3 lb) no PSU 8.20 kg (19.9 lb) with single PSU	7.42 kg (16.4 lb) no PSU 9.07 kg (20.0 lb) with single PSU
Power Supply Options	Internal 750W AC power supply (up to 2 PSUs) Internal 750W DC power supply (up to 2 PSUs) Front-Back and Back-Front airflow options 1 + 1 redundancy	
Fan Tray	6 fan modules (5 + 1 redundancy) Front-Back and Back-Front airflow options	
CPU/Memory	8 Core Processor 16GB DDR4 ECC memory 128GB SSD memory	
Operating Conditions	0°C to 45°C (32°F to 113°F) operation 5% to 95% relative humidity, non-condensing 0 - 3000 meters altitude	

Power Supply Specifications

	750W AC PSU XN-ACPWR-750W-F/R	750W DC PSU XN-DCPWR-750W-F/R
Dimensions	8.0 cm x 4.0 cm x 20.6 cm (3.15 in W x 1.57 in H x 8.11 in D)	8.0 cm x 4.0 cm x 20.6 cm (3.15 in W x 1.57 in H x 8.11 in D)
Weight	0.81 kg (1.79 1b)	0.85 kg (1.85 1b)
Voltage Input Range	100-127 VAC / 200-240 VAC	-40 to -75 VDC
Line Frequency Range	50 - 60 HZ	N/A
PSU Input Socket	IEC 320 C14	Terminal Block
PSU Output Cord	IEC 320 C13	N/A
Operating Conditions	0°C to 55°C (32˚F to 131˚F) operation	0°C to 55°C (32˚F to 131˚F) operation

Power and Heat Dissipation

Switch Model	Minimum Heat Dissipation (BTU/hr) (Idle, no ports linked)	Minimum Power Consumption (W) (Idle, no ports linked)	Maximum Heat Dissipation (BTU/hr) (100% fans, 30 ports, 100% traffic)	Maximum Power Consumption (W) (100% fans, 30 ports, 100% traffic)
VSP7400-48Y-8C-AC-F VSP7400-48Y-8C-AC-R	553	167	1600	469
VSP7400-32C-AC-F VSP7400-32C-AC-R	734	215	1573	461

Note: All configurations with 2 PSUs @ 220V

General

VSP7400-32C
- Physical Connectivity: 32 x QSFP28 ports
- Switch Fabric Architecture: 6.4 Tbps total capacity (3.2 Tbps ingress, 3.2 Tbps egress)

VSP7400-48Y-8C
- Physical Connectivity: 48 x SFP28 ports + 8 x QSFP28 ports
- Switch Fabric Architecture: 4.0 Tbps total capacity (2.0 Tbps ingress, 2.0 Tbps egress)

Performance and Scale

Layer 2
- MAC Address: up to 160,000
- Port-based VLANs: 4,059
- MSTP Instances: 64
- LACP Links per Group: 8 Active

Layer 3 IPv4 Routing Services
- ARP Entries: up to 56,000
- IP Routes: up to 16,000
- RIP Interfaces: 200
- OSPF Interfaces: 512
- BGP Peers: 256
- VRF Instances: up to 256

Layer 3 IPv6 Routing Services
- Neighbors: up to 32,000
- IP Routes: up to 7,500
- RIPng Interfaces: 48
- OSPFv3 Interfaces: 500
- BGPv6 Peers: 256
- VRF Instances: up to 256

Multicast
- IGMP Interfaces: 4,059
- PIM Active Interfaces: 128
- MLD Interfaces: 4,059
- IP Multicast Streams: 6,000

Fabric Connect
- MAC Address: 80,000
- NNI Interfaces/Adjacencies: up to 256
- BEB Nodes per VSN: 2,000
- BCB/ BEB Nodes per Region: 2,000
- L2 Virtual Service Networks: 4,000
- L3 Virtual Service Networks: up to 256
- IP Shortcut Routes: IPv4 up to 16,000 and IPv6 7,500
- L2 Multicast Virtual Service Networks: 2,000
- L3 Multicast Virtual Service Networks: 256

QoS and Filtering
- ACL non-IPv6: 512 Ingress and 254 Egress
- ACL IPv6: 384 Ingress and 256 Egress
- IPv4 ACE (Ingress): 768 each for Security and QoS (total of 1536)
- IPv4 ACE (Egress): 783
- IPv6 ACE (Ingress): 768
- IPv6 ACE (Egress): 511
- Egress Port Shaper Granularity: 1Mbps to 100Gbps per Port

Operations and Management
- Mirrored Ports: up to 125 when all applicable ports are channelized
- sFlow: up to 3,000 samples per second
- Fabric RSPAN: up to 1,000 VSN IDs per Region

Environmental

Environmental Specifications
EN/ETSI 300 019-2-1v2.1.2 - Class 1.2 Storage
EN/ETSI 300 019-2-2 v2.1.2 - Class 2.3 Transportation

EN/ETSI 300 019-2-3 v2.1.2 - Class 3.1e Operational

EN/ETSI 300 753 (1997-10) - Acoustic Noise

ASTM D3580 Random Vibration Unpackaged 1.5 G

Environmental Compliance

EU RoHS: 2011/65/EU

EU WEEE: 2012/19/EU

China RoHS: SJ/T 11363-2006

Taiwan RoHS: CNS 15663(2013.7)

Packaging and Storage Specifications

Temp: -40° C to 70° C (-40° F to 158° F)

Humidity: 10% to 95% relative humidity, non-condensing

Packaged Shock (half sine) : 180m/s2 (18 G), 6 ms, 600 shocks

Packaged Vibration: 5 to 62 Hz at velocity 5 mm/s, 62 to 500 Hz at 0.2 G

Packaged Random Vibration: 5 to 20 Hz at 1.0 ASD w/-3 dB/oct. from 20 to 200 Hz

Packaged Drop Height: 14 drops minimum on sides and corners at 42 inches (<15 kg box)

Regulatory and Safety

North American ITE

UL 60950-1

UL 62368-1

Complies with FCC 21CFR 1040.10 (U.S. Laser Safety)

CDRH Letter of Approval (US FDA Approval)

CAN/ CSA 22.2 No. 60950-1

CAN/ CSA No. 22.2 62368-1-14

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 60950-1AS/NZS 60950-1 (Australia / New Zealand)

IEC 62368-1

GB 4943.1-2011

CNS 4336-1

EMI/EMC Standards

North American EMC for ITE

FCC CFR 47 Part 15 Class A (USA)

ICES-003 Class A (Canada)

European EMC Standards

EN 55032 Class A

EN 55024

EN 61000-3-2,2014 (Harmonics)

EN 61000-3-3 2013 (Flicker)

EN 300 386 v1.6.1(EMC Telecommunications)

2014/30/EU EMC Directive

EN 55011 Class A

International EMC Certifications

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, 15 kV Air, Criteria A

IEC 61000-4-3 / EN 61000-4-3 Radiated Immunity 10V/m, Criteria A

IEC 61000-4-4 / EN 61000-4-4 Transient Burst, 1kV, Criteria A

IEC 61000-4-5 / EN 61000-4-5 Surge, 2 kV L-L, 2 kV L-G, Level 3, Criteria A

IEC 61000-4-6 Conducted Immunity, 0.15-80 MHz, 10V/m unmod. RMS, Criteria A

IEC/EN 61000-4-11 Power Dips & Interruptions, >30%, 25 periods, Criteria C

IEC 61000-4-8 / EN 61000-4-8

CISPR 11 Class A

GB/ T 9254-2008

Country Specific

VCCI Class A (Japan Emissions)

ACMA RCM (Australia Emissions)

CCC Mark (China)

KCC Mark, EMC Approval (Korea)

EAC Mark (Custom Union)

NRCS / SABS Mark (South Africa)

BSMI Mark (Taiwan)

Telecom Standards

CE 2.0 Compliant

Standards Compliance

IEEE 802.1 Bridging (Networking) and Network Management

802.1D MAC Bridges (a.k.a. Spanning Tree Protocol)

802.1p Traffic Class Expediting and Dynamic Multicast Filtering

802.1t 802.1D Maintenance

802.1w Rapid Reconfiguration of Spanning Tree (RSTP)

802.1Q Virtual Local Area Networking (VLAN)

802.1Qbp Equal-Cost Multi-Path (Shortest Path Bridging)

802.1Qcj Automatic Attachment to Provider Backbone Bridging (PBB) Services (Partial Support)

802.1s Multiple Spanning Trees (MSTP)

802.1v VLAN Classification by Protocol & Port

802.1ag Connectivity Fault Management

802.1ah Provider Backbone Bridges

802.1aq Shortest Path Bridging (SPB) MAC-in-MAC

802.1X Port-based Network Access Control

802.1AB-2005 Station & Media Access Control Connectivity Discovery; aka LLDP (partial support)

802.1AX Link Aggregation

IEEE 802.3 Ethernet

802.3-1983 CSMA/CD Ethernet(ISO/IEC 8802-3)

802.3i-1990 10Mb/s Operation, 10BASE-T Copper

802.3u-1995 100Mb/s Operation, 100BASE-T Copper, with Auto-Negotiation

802.3x-1997 Full Duplex Operation

802.3z-1998 1000Mb/s Operation, implemented as 1000BASE-X (Auto-negotiation not supported)

802.3ab-1999 1000Mb/s Operation, 1000BASE-T Copper

802.3ae-2002 10Gb/s Operation, implemented as 10GBASE-SFP+

802.3an-2006 10Gb/s Operation, 10GBASE-T Copper

802.3ba-2010 40Gb/s and 100Gb/s Operation

802.3bm-2015 40Gb/s and 100Gb/s Operation, implemented as 40GBASE-QSFP+ & 100GBASE-QSFP28

IETF

768 UDP

783 TFTP

791 IP

792 ICMP

793 TCP

826 ARP

854 Telnet

894 Transmission of IP Datagrams over Ethernet Networks

896 Congestion Control in IP/TCP internetworks

906 Bootstrap Loading using TFTP

950 Internet Standard Subnetting Procedure

951 BOOTP: Relay Agent-only

959 FTP

1027 Using ARP to Implement Transparent Subnet Gateways

1058 RIP

1112 Host Extensions for IP Multicasting

1122 Requirements for Internet Hosts - Communication Layers

1155 Structure and Identification of Management Information for TCP/IP-based Internets

1156 MIB for Network Management of TCP/IP

1157 SNMP

1212 Concise MIB Definitions

1213 MIB for Network Management of TCP/IP-based Internets: MIB-II

1215 Convention for Defining Traps for use with the SNMP

1256 ICMP Router Discovery

1258 BSD Rlogin

1271 Remote Network Monitoring MIB

1305 NTPv3

1321 MD5 Message-Digest Algorithm

1340 Assigned Numbers

1350 TFTPv2

1398 Ethernet MIB

1442 SMIv2 of SNMPv2

1450 SNMPv2 MIB

1519 CIDR

1541 DHCP

1542 Clarifications and Extensions for BOOTP

1573 Evolution of the Interfaces Group of MIB-II

1587 OSPF NSSA Option

1591 DNS Client

1650 Definitions of Managed Objects for the Ethernet-like Interface Types

1657 Definitions of Managed Objects for BGP-4 using SMIv2

1723 RIPv2 Carrying Additional Information

1812 Router Requirements

1850 OSPFv2 MIB

1866 HTMLv2

1907 SNMPv2 MIB

1930 Guidelines for creation, selection, and registration of an AS

1981 Path MTU Discovery for IPv6

2021 Remote Network Monitoring MIBv2 using SMIv2

2068 HTTP

2080 RIPng for IPv6

2131 DHCP

2138 RADIUS Authentication

2139 RADIUS Accounting

2236 IGMPv2 Snooping

2284 PPP Extensible Authentication Protocol

2328 OSPFv2

2362 PIM-SM

2404 HMAC-SHA-1-96 within ESP and AH6

2407 Internet IP Security Domain of Interpretation for ISAKMP6

2408 Internet Security Association and Key Management Protocol

2428 FTP Extensions for IPv6 and NAT

2452 TCP IPv6 MIB

2453 RIPv2

2454 UDP IPv6 MIB

2460 IPv6 Basic Specification

2463 ICMPv6

2464 Transmission of IPv6 Packets over Ethernet Networks

2466 MIB for IPv6: ICMPv6 Group

2474 Differentiated Services Field Definitions in IPv4 and IPv6 Header

2575 VACM for SNMP

2576 Coexistence between v1/v2/v3 of the Internet-standard Network Management Framework

2578 SMIv2

2579 Textual Conventions for SMIv2

2580 Conformance Statements for SMIv2

2597 Assured Forwarding PHB Group

2598 Expedited Forwarding PHB

2616 HTTPv1.1

2710 MLD for IPv6

2716 PPP EAP TLS Authentication Protocol

2787 Definitions of Managed Objects for VRRP

2818 HTTP over TLS

2819 Remote Network Monitoring MIB

2863 Interfaces Group MIB

2865 RADIUS

2869 RADIUS Extensions (partial support)

2874 DNS Extensions for IPv6

2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations

2933 IGMP MIB

2934 PIM MIB for IPv4

2992 ECMP Algorithm

3046 DHCP Relay Agent Information Option 82

3162 RADIUS and IPv6

3246 Expedited Forwarding PHB

3315 DHCPv6

3339 Date and Time on The Internet: Timestamps

3376 IGMPv3

3411 Architecture for Describing SNMP Management Frameworks

3412 Message Processing and Dispatching for SNMP

3413 SNMP Applications

3414 USM for SNMPv3

3415 VACM for SNMP

3416 Protocol Operations v2 for SNMP

3417 Transport Mappings for SNMP

3418 MIB for SNMP

3484 Default Address Selection for IPv6

3513 IPv6 Addressing Architecture

3569 Overview of SSM

3579 RADIUS Support for EAP

3587 IPv6 Global Unicast Address Format

3596 DNS Extensions to support IPv6

3748 Extensible Authentication Protocol

3810 MLDv2 for IPv6

3879 Deprecating Site Local Addresses

4007 IPv6 Scoped Address Architecture

4022 TCP MIB

4087 IP Tunnel MIB

4113 UDP MIB

4133 Entity MIB Version 3 (partial support)

4193 Unique Local IPv6 Unicast Addresses

4213 Basic Transition Mechanisms for IPv6 Hosts and Routers

4250 SSH Assigned Numbers

4251 SSH Protocol Architecture

4252 SSH Authentication Protocol

4253 SSH Transport Layer Protocol

4254 SSH Connection Protocol

4255 DNS to Securely Publish SSH Key Fingerprints

4256 Generic Message Exchange Authentication for SSH

4291 IPv6 Addressing Architecture

4292 IP Forwarding Table MIB

4293 IP MIB

4301 Security Architecture for IP[1]

4302 IP Authentication Header[1]

4303 IP Encapsulating Security Payload[1]

4308 Cryptographic Suites for IPsec

4363 Definitions of Managed Objects for Bridges with Traffic Classes, Multicast Filtering and VLAN Extensions (partial support)

4429 Optimistic DAD for IPv6 (partial support)

4443 ICMP for IPv6

4541 Considerations for IGMP and MLD Snooping Switches

4552 Authentication/Confidentiality for OSPFv3

4601 PIM-SM: Revised Protocol Specification

4607 Source-Specific Multicast for IP

4675 RADIUS Attributes for Virtual LAN and Priority Support (partial support)

4835 Cryptographic Algorithm Implementation Requirements for ESP and AH

4861 Neighbor Discovery for IPv6

4862 IPv6 Stateless Address Auto-Configuration

5095 Deprecation of Type 0 Routing Headers in IPv6

5176 Dynamic Authorization Extensions to RADIUS

5187 OSPFv3 Graceful Restart (Helper-mode)

5308 Routing IPv6 with IS-IS

5340 OSPF for IPv6

5424 The Syslog Protocol

5798 VRRPv3 for IPv4 and IPv6

5905 NTPv4: Protocol and Algorithms Specification

5997 Use of Status-Server Packets in RADIUS

6105 IPv6 Router Advertisement Guard

6329 IS-IS Extensions supporting IEEE 802.1aq SPB

6933 Entity MIBv4 (partial support)

7358 VXLAN: A Framework for Overlaying Virtualized L2 Networks over L3 Networks (partial support)

7610 DHCPv6 Shield: Protecting against Rogue DHCPv6 Servers

Internet-Draft IP/IPVPN services with IEEE 802.1aq SPB networks (draft-unbehagen-spb-ip-ipvpn-00)

Internet-Draft SPB Deployment Considerations (draft-lapuh-spb-deployment-03)

[1] Implemented to deliver IPsec capability for Control Plane traffic only.

Base Software and Licensing

The VSP 7400 Series is being introduced with the VSP Operating System Software (VOSS) 8.0 release, which is the minimum required to operate the switch. Base software included with the VSP 7400 Series hardware purchase provides most of the features available on the switch. A Premium Software license, however, is required to enable the following features on the switch:

· Layer 3 Virtual Services Networks (VSNs)
· Distributed Virtual Routing Controller
· VXLAN Gateway
· 25 or more VRFs
· Extreme Insight Architecture

Ordering Information

VSP 7400 Series Systems

Part Number	Product Name	Product Description
		VSP 7400 Series Systems
VSP7400-32C	VSP 7432CQ	VSP 7400, 32 X l00Gbps QSFP28 ports, 8-core CPU, 16GB RAM, 128GB SSD, 4-post rack mount kit, No PSU, No Fans
VSP7400-32C-AC-F	VSP 7432CQ-F	VSP 7400, 32 X l00Gbps QSFP28 ports, 8-core CPU, 16GB RAM, 128GB SSD, Single 750W AC PSU, six fans, 4-post rack mount kit, Front to Back Airflow
VSP7400-32C-AC-R	VSP 7432CQ-R	VSP 7400, 32 X l00Gbps QSFP28 ports, 8-core CPU, 16GB RAM, 128GB SSD, Single 750W AC PSU, six fans, 4-post rack mount kit, Back to Front Airflow
VSP7400-48Y-8C	VSP7400-48Y-8C	VSP 7400, 48 X 1/10/25Gbps SFP28 ports, 8 x l00Gbps QSFP28 ports. 8-core CPU, 16GB RAM, 128GB SSD, 4-post rack mount kit, No PSU, No Fans
VSP7400-48Y-8C-AC-F	VSP7400-48Y-8C-AC-F	VSP 7400, 48 X 1/10/25Gbps SFP28 ports, 8 x l00Gbps QSFP28 ports. 8-core CPU, 16GB RAM, 128GB SSD, Single 750W AC PSU. six fans. 4-post rack mount kit, Front to Back Airflow
VSP7400-48Y-8C-AC-R	VSP7400-48Y-8C-AC-R	VSP 7400, 48 X 1/10/25Gbps SFP28 ports, 8 x l00Gbps QSFP28 ports. 8-core CPU, 16GB RAM, 128GB SSD, Single 750W AC PSU. six fans. 4-post rack mount kit, Back to Front Airflow
XN-FAN-001-F	VSP/SLX Front to Back Fan	Single Fan module, Front-to-Back Airflow supported on VSP7400
XN-FAN-001-R	VSP/SLX Back to Front Fan	Single Fan module, Back-to-Front Airflow supported on VSP7400
XN-ACPWR-750W-F	VSP/SLX 750W AC PSU Front to Back airflow	AC 750W PSU, Front-to-Back Airflow supported on VSP 7400
XN-ACPWR-750W-R	VSP/SLX 750W AC PSU Back to Front airflow	AC 750W PSU, Back-to-Front Airflow supported on VSP 7400
XN-DCPWR-750W-F	VSP/SLX 750W DC PSU Front to Back airflow	DC 750W PSU, Front-to-Back Airflow supported on VSP 7400
XN-DCPWR-750W-R	VSP/SLX 750W DC PSU Back to Front airflow	DC 750W PSU, Back-to-Front Airflow supported on VSP 7400
XN-2P-RKMT299	Two Post Rail Kit VSP 7400, SLX9150	Spare two post rack mount rail kit supported on VSP 7400
XN-4P-RKMT298	Four Post Rail Kit VSP 7400, SLX9150	Spare four post rack mount rail kit supported on VSP 7400

Firmware Licenses

Part Number	Product Name	Product Description
VSP-PRMR-LIC-P	VSP Premier License	VSP 7400 Premier Feature LIcense (includes Insight Architecture)

100Gb Optical Transceivers and Direct Attach Cables

Part Number	Product Name	Product Description
10401 or AA1405005-E6	100Gb QSFP28 SR4	100Gb, 100GBASE-SR4, 70m OM3 / 100m OM4 MMF, QSFP28, MPO (8 fiber)
10403 or AA1405001-E6	100Gb QSFP28 LR4	100Gb, 100GBASE-LR4, 10 km SMF, QSFP28, LC
10404	100Gb QSFP28 CWDM4	QSFP28, LC 100Gb, CWDM4, 2km SMF, QSFP28, LC
10405	100Gb QSFP28 PSM4	100Gb, Parallel Single Mode PSM4, 2km SMF, QSFP28, MPO (8 fiber)
100G-ER4LT-QSFP40KM	100Gb QSFP28 ERF-lite	100Gb, ERF-lite 30km (w/o FEC), 40km (w/ FEC), SM F, QSFP28, LC
10411 or AA1405029-E6	100Gb, DAC QSFP28-QSFP28 1m	100Gb, QSFP28-QSFP28 Direct attach passive copper cable, 1m
10413 or AA1405031-E6	100Gb, DAC QSFP28-QSFP28 3m	100Gb, QSFP28-QSFP28 Direct attach passive copper cable, 3m
10414 or AA1405032-E6	100Gb, DAC QSFP28-QSFP28 5m	100Gb, QSFP28-QSFP28 Direct attach passive copper cable, 5m
10421	100Gb, DAC QSFP28- 4xSFP28 1m	100Gb, DAC QSFP28- 4xSFP28 1m
10423	100Gb, DAC QSFP28- 4xSFP28 3m	100Gb, DAC QSFP28- 4xSFP28 3m
10424	100Gb, DAC QSFP28- 4xSFP28 5m	100Gb, DAC QSFP28- 4xSFP28 5m
10444	100Gb, AOC QSFP28 x 4 SFP28 20m	100Gb, QSFP28-4xSFP28 (4x25Gb) Active optical breakout cable, 20m

40Gb Optical Transceivers and Direct Attach Cables

Part Number	Product Name	Product Description
10319	QSFP+ SR4 Module	40Gb QSFP+ SR4 opt ical module, MPO connector, 100m MMF OM3, 140M MMF OM4
10320 or AA1404001-E6	QSFP+ LR4	40Gb QSFP+ LR4 optical module, LC connectors, 10km SMF
40GB-ESR4-QSFP or AA1404006-E6	QSFP+ ESR4	40Gb QSFP+ Extended Reach SR4, MMF, 300m OM4
10326	QSFP+ PSM Optical Module	40Gb QSFP+ Parallel single mode (PSM), LR4, MPO connector, 10km SMF link length
10329	40Gb Bidi MMF QSFP+	40Gb Bidrectional MMF, 100m OM3, QSFP+, Duplex LC
10334	40Gb LM4 QSFP+	40Gb QSFP+ LM4, 140m OM3 MMF, 1km SMF, LC
AA1404002-E6	40Gb LM4 QSFP+	40Gb QSFP+ LM4, 80m on OM3 and OM4 MMF, Duplex LC
AA1404003-E6	40Gb ER4 QSFP+	40Gb QSFP+ ER4, up to 30 km or 40km or engineered links
AA1404005-E6	40Gb-SR4 / 4X10Gb-SR QSFP+	40Gb-SR4/4X10Gb-SR QSFP+ MPO/ MTP, 850NM, 150m OM4 MMF
AA1404037-E6	QSFP+ to QSFP+ Direct Attach Cable 0.5m	Direct Attach Cable (QSFP+ to QSFP+) , 0.5m
AA1404029-E6	QSFP+ to QSFP+ Direct Attach Cable 1m	Direct Attach Cable (QSFP+ to QSFP+) , 1m
AA1404030-E6	QSFP+ to QSFP+ Direct Attach Cable 2m	Direct Attach Cable (QSFP+ to QSFP+) , 2m
AA1404031-E6	QSFP+ to QSFP+ Direct Attach Cable 3m	Direct Attach Cable (QSFP+ to QSFP+) , 3m

Part Number	Product Name	Product Description
AA1404032-E6	QSFP+ to QSFP+ Direct Attach Cable 5m	Direct Attach Cable (QSFP+ to QSFP+) , 5m
AA1404028-E6	QSFP+ to QSFP+ Active Optical cable 10m	Direct Attach Cable (QSFP+ to QSFP+) 10m active optical
AA1404033-E6	Breakout Cable (QSFP+ to 4xSFP+) , 1m	Breakout Cable (QSFP+ to 4xSFP+) , 1m
AA1404035-E6	Breakout Cable (QSFP+ to 4xSFP+) , 3m	Breakout Cable (QSFP+ to 4xSFP+) , 3m
AA1404036-E6	Breakout Cable (QSFP+ to 4xSFP+) , 5m	Breakout Cable (QSFP+ to 4xSFP+) , 5m
AA1404041-E6	Breakout Cable (QSFP+ to 4xSFP+) , 10m active optical	Breakout Cable (QSFP+ to 4xSFP+) , 10m active optical

25Gb Optical Transceivers and Direct Attach Cables

Part Number	Product Name	Product Description
10501	25Gb SFP28 SR MMF	25Gb, 25GBASE-SR, 70m OM3 / 10 0m OM4 MMF, SFP28, duplex LC
10502	25Gb SFP28 SR-Lite MMF	25Gb, 25GBASE-SR-Lite, 30m/50m/70m OM3, 40m/70m/100m OM4 (no FEC/BASE-R/RS FEC) , SFP28, duplex LC
10503	25Gb SFP28 ESR MMF	25Gb, Extended SR (ESR) , 200m OM3/400m OM4 MMF, SFP28, duplex LC
10504	25Gb SFP28 LR 10 km	25Gb, 25GBASE-LR, 10 km SMF, SFP28, LC
10520	25Gb, DAC SFP28-SFP28 1m	25Gb, SFP28-SFP28 Direct attach passive copper cable, 1m
10521	25Gb, DAC SFP28-SFP28 3m	25Gb, SFP28-SFP28 Direct attach passive copper cable, 3m
10522	25Gb, DAC SFP28-SFP28 5m	25Gb, SFP28-SFP28 Direct attach passive copper cable, 5m
10530	25Gb AOC SFP28-SFP28 10m	25Gb, SFP28-SFP28 Active optical breakout cable, 10m
10531	25Gb AOC SFP28-SFP28 20m	25Gb, SFP28-SFP28 Active optical breakout cable, 20m

10Gb Optical Transceivers and Direct Attach Cables

Part Number	Product Name	Product Description
10301 or AA1403015-E6	10Gb SR SFP+ module	10GBASE-SR SFP+, 850 nm, LC, 300m OM3 MMF, 400m OM4 MMF
10302 or AA1403011-E6	10Gb LR SFP+ module	10GBASE-LR SFP+, 1310 nm, LC, 10km SMF
10309 or AA1403013-E6	10Gb ER SFP+ module	10GBASE-ER, 1550 nm, up to 40 km SMF
10338	10Gb SFP+ 10GBASE-T	10Gb SFP+, 10GBASE-T RJ-45, 20m with CAT6a
AA1403043-E6	10Gb SFP+ 10GBASE-T	10GBase-T SFP+ RJ45, Up to 30m
AA1403165-E6	10Gb CWDM	10GBASE-CWDM, 1550 nm, up to 70 km SMF
AA1403169-E6	10Gb BX-TX	10GBASE-BX TX: 1270 nm, up to 10 km SMF
AA1403170-E6	10Gb BX-TX	10GBASE-BX TX: 1330 nm, up to 10 km SMF
AA1403019-E6	10Gb Direct Attach Cable, 3m	Direct Attach Cable (SFP+) , 3m passive copper
AA1403020-E6	10Gb Direct Attach Cable, 5m	Direct Attach Cable (SFP+) , 5m passive copper

Part Number	Product Name	Product Description
AA1403022-E6	10Gb Direct Attach Cable, 7m	Direct Attach Cable (SFP+) , 7m passive copper
AA1403018-E6	10Gb Direct Attach Cable, 10m	Direct Attach Cable (SFP+) , 10m
10GB-BX10-U	10 GB, Single Fiber SM, -U 10 KM	10Gb, Single Fiber SM, Bidirectional, 1330 nm Tx / 1270 nm RX, 10Km, Simplex LC SFP+ (must be paired with 10GB-BX10-U)
10GB-BX10-D	10 GB, Single Fiber SM, -D 10 KM	10Gb, Single Fiber SM, Bidirect ional, 1330 nm Tx / 1330 nm RX, 40Km, Simplex LC SFP+ (must be paired with 10GB-BX40 -D)

1Gb Optical Transceivers

Part Number	Product Name	Product Description
AA1419043-E6	1000BASE-T SFP (RJ-45)	1-port 1000BASE-T Small Form Pluggable (SFP), 8-pin modular connector (RJ-45)
AA1419048-E6	SFP 1000BASE-SX DDI (LC)	1-port 1000BASE-SX Small Form Factor Pluggable (SFP) connector type: LC
AA1419049-E6	SFP 1000BASE-LX DDI (LC)	1-port 1000BASE-LX Small Form Factor Pluggable (SFP) connector type: LC
AA1419069-E6	SFP 1000BASE-BX (LC) - 1310 nm	1-port 1000BASE-BX Small Form Factor Pluggable (SFP) connector type: LC - 1310 nm Wavelength. Must be paired with AA1419070-E6
AA1419070-E6	SFP 1000BASE-BX (LC) - 1490 nm	1-port 1000BASE-BX Small Form Factor Pluggable (SFP) connector type: LC - 1490 nm Wavelength. Must be paired with AA14190 69-E6
10051H	1000BASE-SX SFP, Hi	1000BASE-SX SFP, MMF 220 & 550 meters, LC connector, Industrial Temp
10052H	1000BASE-LX SFP, Hi	1000BASE-LX SFP, MMF 220 & 550 meters, SMF 10 km, LC connector, Industrial Temp
10053H	1000BASE-ZX SFP, Hi	1000BASE-ZX SFP, SMF 70 km, LC connector, Industrial Temp
MGBIC-BX40-U	1000BASE-BX-U BiDi SFP 40Km	1000BASE-BX-U SFP, single fiber, 1310 -nm TX/ 1490 -nm RX wavelength, 40Km Industrial Temp
MGBIC-BX40-D	1000BASE-BX-D BiDi SFP 40Km	1000BASE-BX-D SFP, single fiber, 1490 -nm TX/ 1310 -nm RX wavelength, 40Km Industrial Temp
MGBIC-BX120-U	1000BASE-BX-U BiDi SFP 120Km	1000BASE-BX-U SFP, single fiber, 1490 -nm TX/ 1590 -nm RX wavelength, 120Km Industrial Temp
MGBIC-BX120-D	1000BASE-BX-D BiDi SFP 120Km	1000BASE-BX-U SFP, single fiber, 1590 -nm TX/ 1490 -nm RX wavelength, 120Km Industrial Temp

Optics/Transceivers

For a list of the optics and transceivers supported on the 7400 Series hardware, refer to our Extreme Optics Compatibility Tool.

Power Cords

Power cords are not included with the 7400 in support of our green initiatives but can be ordered separately. Refer to www.extremenetworks.com/powercords/ for details.

Warranty

All VSP 7400 Series models are covered under Extreme's Universal LLW policy. For warranty details, visit: http://www.extremenetworks.com/support/policies.

Maintenance Services

Extreme's maintenance and support services are provided 100% by in-house engineering experts. We have a rate of over 90% first-person resolution, ensuring efficient operation of your business-essential network.

With 24x7x365 phone support, advanced part replacement, and on-site support, we augment your staff with expert resources to help you mitigate critical network issues fast.

Visit Extreme Maintenance Services for more information.