

# VSP 4900 Series Switches

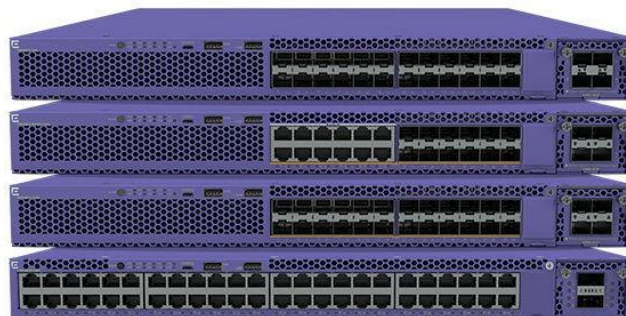


## Highlights

- Intuitive and centralized cloud-managed switching with ExtremeCloud™ IQ and ExtremeCloud IQ—Site Engine
- MACsec on 10Mb/100Mb/1000Mb and 10Gb access ports as well as modular uplink ports for secure link encryption
- Leverages Extreme Fabric Connect to simplify your network to meet regulatory and security needs
- Fabric-enabled switch operations with Fabric Extend for transparent extension of Fabric Connect services over third-party networks
- Supports both Fabric Connect and/or conventional Routed IP networking deployments

## Key Hardware Features

- Compact 1U form factor
- Non-blocking wire-speed switching architecture
- Hot-swappable, redundant power supplies and fans



## Fixed-Form Switches for Branch and Network Edge

The Virtual Services Platform (VSP) 4900 Series is the next generation of Extreme Fabric Connect fixed-form factor switches designed for network edge and aggregation deployments. Available in four models to address a range of campus, remote site, and multiservice needs, the 4900 Series enables end-to-end fabric services from network edge to aggregation to core, as well as transparent extension of fabric services to the branch.

Multiple models support 1GbE 30W PoE, 1Gb or 10GbE SFP/SFP+ fiber, and 1GbE, 2.5GbE, 5GbE, or 10GbE multi-rate 60W PoE access ports. With modular uplink support at 10Gb, 25Gb, and 40Gb, VSP 4900 switches can be linked to other switches or devices over a range of media. This provides high-performance, resilient, and secure Gigabit and multi-Gigabit Ethernet connectivity, enabling VSP 4900 switches to leverage advanced capabilities that enable full-featured network virtualization to be flexibly deployed across a range of network environments.

## Ethernet Fabric Services

The VSP 4900 Series natively supports Extreme Fabric Connect technology, offering you the ability to create a virtualized network that simplifies network provisioning and reduces strain on network and IT teams based on an extended implementation of the Shortest Path Bridging standards of IEEE 802.1aq. 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 4900 also natively supports Fabric Extend, a feature of Fabric Connect that extends its 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 4900 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 4900 models support Distributed Virtual Routing (DVR) leaf services, IP routing technologies (such as RIPv1/2, RIPv6, and OSPFv2/v3), as well as multicast services (such as PIM-SM/ SSM, IGMP v1, 2, and 3) and Fabric Connect to PIM gateway.

## Power over Ethernet (PoE)

Select VSP 4900 models support PoE that conforms to IEEE standards to address the needs of powered edge devices. VSP 4900-48P model supports IEEE 802.3at 30W PoE on each of its 48 ports, while the VSP 4900-12MXU-12XE model supports IEEE 802.3bt 60W PoE on its 12 multi-rate ports. In addition, both these models support fast and perpetual PoE capabilities for faster startup and more continuous operation of connected, PoE-powered endpoints.

## Integrated Application Hosting

Select VSP 4900 models support Extreme's Integrated Application Hosting, which leverages the switch's hardware and software design to extend services without impacting switch or network performance. VSP4900-12MXU-12XE and VSP4900-24XE models can run a Guest VM directly on the switch, supporting Extreme or third-party 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.

## MACsec Link Encryption

IEEE 802.1AE MACsec is supported on VSP 4900 Series access and modular uplink ports, enabling the encryption and decryption of packets between connected switches or devices. As a link-only encryption, 4900 switches can still apply services to the packet, such as policy or QoS, without compromising the security of packets across the link. With 128-bit and 256-bit Advanced Encryption Standard (AES) support, the VSP 4900 provides the most secure link encryption.

## VIM Options for Flexible Uplinks

The VSP 4900 supports Versatile Interface Modules (VIM) for its uplink ports as well as its single VIM slot available for uplinks. VIM options include two and four-port modules that support 10Gb, 25Gb, and 40Gb data rates.

## Cloud-Based Network Management

The VSP 4900 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. ExtremeCloud IQ enables zero-touch provisioning, allowing you to quickly bring new VSP 4900 switches online and a granular view that enables efficient inventory and network topology management.

Alternatively, VSP 4900 on-box management can be done manually via a web-based GUI or generic command-line interface (CLI).

## Performance and Scaling

Switch Model	Max Active 10/100/1000MbPorts	Max Active 100M/1Gb/2.5Gb/5Gb/10Gb Ports	Max Active 100M/1Gb SFP ports	Max Active 1/10Gb SFP+ ports	Max Active 10/25Gb SFP28 ports	Max Active 40Gb QSFP+ ports*	Aggregated Switch Bandwidth	Frame Forwarding Rate
VSP4900-48P	48	0	0	4	2	1	196 Gbps	145.8 Mpps
VSP4900-24S	0	0	24	4	2	1	148 Gbps	110.1 Mpps
VSP4900-24XE	0	0	0	28	4	2	680 Gbps	505.9 Mpps
VSP4900-12MXU-12XE	n/a	12	0	16	4	2	680 Gbps	505.9 Mpps

\*40Gb ports on the VIM5 module can also be broken out individually into 4 x 10Gb ports.

## External Ports and Slots

### Switches

Part Number	Max Active 10/100/1000 Mb Ports
VSP4900-48P	<ul style="list-style-type: none"> <li>• 48 x 10/100/1000BASE-T 802.3at (30w) ports <ul style="list-style-type: none"> <li>○ Full/ Half-Duplex</li> <li>○ MACsec capable (128-bit)</li> </ul> </li> <li>• 1 x Serial (console port RJ-45)</li> <li>• 1 x 10/100/1000BASE-T out-of-band management port</li> <li>• 1 x USB Micro-B management port</li> <li>• 2 x USB A ports for external USB flash 1 VIM5 slot</li> </ul>
VSP4900-24S	<ul style="list-style-type: none"> <li>• 24 x 100/1000BASE-X SFP ports (unpopulated)</li> <li>• 1 x Serial (console port RJ-45)</li> <li>• 1 x 10/100/1000BASE-T out-of-band management port</li> <li>• 1 x USB Micro-B management port</li> <li>• 2 x USB A ports for external USB flash 1 VIM5 slot</li> </ul>
VSP4900-24XE	<ul style="list-style-type: none"> <li>• 24 x 1/10GBASE-X SFP+ ports (unpopulated) <ul style="list-style-type: none"> <li>○ LRM and MACsec capable (256-bit)</li> </ul> </li> <li>• 1 x Serial (console port RJ-45)</li> <li>• 1 x 10/100/1000BASE-T out-of-band management port</li> <li>• 1 x USB Micro-B management port</li> <li>• 2 x USB A ports for external USB flash 1 VIM5 slot</li> </ul>
VSP4900-12MXU-12XE	<ul style="list-style-type: none"> <li>• 12 x 100M/1/2.5/5/10GBASE-T 802.3bt Type3 (60w) ports</li> <li>• 12 x 1/10GBASE-X SFP+ ports (unpopulated) <ul style="list-style-type: none"> <li>○ MACsec capable (256-bit)</li> </ul> </li> <li>• 1 x Serial (console port RJ-45)</li> <li>• 1 x 10/100/1000BASE-T out-of-band management port</li> <li>• 1 x USB Micro-B management port</li> <li>• 2 x USB A ports for external USB flash 1 VIM5 slot</li> </ul>

### VIM Modules

Part Number	Max Active 10/100/1000 Mb Ports
VIM5-4X	<ul style="list-style-type: none"> <li>• 4 x 1/10GBASE-X SFP+ (unpopulated ports)</li> </ul>
VIM5-4XE	<ul style="list-style-type: none"> <li>• 4 x 1/10GBASE-X SFP+ (unpopulated ports) <ul style="list-style-type: none"> <li>○ LRM capable</li> <li>○ MACsec capable (256-bit)</li> </ul> </li> </ul>
VIM5-4YE	<ul style="list-style-type: none"> <li>• 4 x 10/25GBASE-X SFP28 (unpopulated ports) <ul style="list-style-type: none"> <li>○ MACsec capable (256-bit)</li> </ul> </li> </ul>
VIM5-2Q	<ul style="list-style-type: none"> <li>• 2 x 40GBASE-X QSFP+ (unpopulated ports)</li> </ul>

## Weights and Dimensions

### Switches

Part Number	Weight	Physical Dimensions	
		Chassis Only	With PSU
VSP4900-48P	8.39 kg (18.49 lb)	Height: 43.18 mm (1.70 in) Width: 440.44 mm (17.34 in) Depth: 488.44 mm (19.23 in)	Height: 43.18 mm (1.70 in) Width: 440.44 mm (17.34 in) Depth: 506.22 mm (19.93 in)
VSP4900-24S	8.17 kg (18.01 lb)		
VSP4900-24XE	7.66 kg (16.89 lb)		
VSP4900-12MXU-12XE	7.58 kg (16.67 lb)		

### VIM Modules

Part Number	Weight	Physical Dimensions
VIM5-4X	0.17 kg (0.37 lb)	Height: 40.89 mm (1.61 in) Width: 48.77 mm (1.92 in) Depth: 146.30 mm (5.76 in)
VIM5-4XE	0.19 kg (0.41 lb)	
VIM5-4YE	0.19 kg (0.41 lb)	
VIM-2Q	0.17 kg (0.37 lb)	

### Power Supplies

Part Number	Weight	Physical Dimensions
10953 (350W AC)	1.08 kg (2.38 lb)	Height: 39.62 mm (1.56 in) Width: 82.55 mm (3.25 in) Depth: 287.02 mm (11.30 in)
10951 (715W AC)	1.16 kg (2.55 lb)	
10941 (1100W AC)	1.16 kg (2.55 lb)	
XN-ACPWR-2000W-F (2000W AC)	1.16 kg (2.56 lb)	Height: 39.62 mm (1.56 in) Width: 82.55 mm (3.25 in) Depth: 292.10 mm (11.50 in)

## Power Supply Unit Specifications

Item	10953	10951	10941	XN-ACPWR-2000W-F*
Voltage Input Range (Nominal)	100-127 / 200-240 VAC	100-127 / 200-240 VAC	100-127 / 200-240 VAC	100-127 / 200-240 VAC
Line Frequency Range	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz
Power Supply Input Socket	IEC/EN 60320 C14	IEC/EN 60320 C16	IEC/EN 60320 C16	IEC/EN 60320 C16
Power Cord Input Plug	IEC/EN 60320 C15	IEC/EN 60320 C15	IEC/EN 60320 C15	IEC/EN 60320 C15
Operating Temperature	0°C to 55°C (32°F to 131°F) Normal Operation	0°C to 50°C (32°F to 122°F) Normal Operation	0°C to 50°C (32°F to 122°F) Normal Operation	0°C to 55°C (32°F to 131°F) Normal Operation

\*200-240 VAC is required to achieve full 2000W output. If run at 100-120 VAC, output is limited to 1100W.

Item	XN-ACPWR-350W-FB	XN-ACPWR-715W-FB	XN-ACPWR-1100W-FB	XN-ACPWR-2000W-FB*
Voltage Input Range (Nominal)	100-240 VAC	100-240 VAC	100-240 VAC	100-240 VAC
Line Frequency Range	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz
Power Supply Input Socket	IEC/EN 60320 C14	IEC/EN 60320 C16	IEC/EN 60320 C16	IEC/EN 60320 C16
Power Cord Input Plug	IEC/EN 60320 C15	IEC/EN 60320 C15	IEC/EN 60320 C15	IEC/EN 60320 C15
Operating Temperature	0°C to 55°C (32°F to 131°F) Normal Operation	0°C to 55°C (32°F to 131°F) Normal Operation	0°C to 50°C (32°F to 122°F) Normal Operation	0°C to 50°C (32°F to 122°F) Normal Operation

\*200-240 VAC is required to achieve full 2000W output. If run at 100-120 VAC, output is limited to 1100W.

## PoE Power Budget

Switch Model	1 x 715W PSU	2 x 715W PSU	1 x 1100W PSU	2 x 1100W PSU	1 x 2000W @ 200-240 VAC	1 x 2000W @ 100-120 VAC	2 x 2000 @ 200-240 VAC	2 x 2000W @ 100-120 VAC
VSP4900-48P	460W	1045W	845W	1440W	1440W	845W	1440W	1440W
VSP4900-12MXU-12XE	TBD	720W	720W	720W	720W	720W	720W	720W

Note: It is recommended that primary and secondary power supply units (PSUs) be of the same type to support optimal PoE operation.

## Minimum/Maximum Power Consumption and Heat Dissipation

Switch Model	Minimum Power Consumption (W)	Minimum Heat Dissipation (BTU/hr)	Maximum Power Consumption (W)*	Maximum Heat Dissipation (BTU/hr)**
VSP4900-48P	74	254	1746	1046
VSP4900-24S	52	179	173	590
VSP4900-24XE	80	271	207	707
VSP4900-12MXU-12XE	73	250	970	854

\* Includes maximum PoE load (W) through the switch

\*\* Does not include PoE load heat dissipated through external electronic load

## Product Specifications

### Memory

- VSP4900-48P and VSP4900-24S
  - 2GB DRAM / 8GB eMMC NVRAM
- VSP4900-12MXU-12XE and VSP4900-24XE
  - 8GB DRAM / 8GB eMMC NVRAM

### Layer 2

- MAC Address: up to 80,000
- Port-based VLANs: 4,059
- MSTP Instances: 12
- LACP Links per Group: 8 Active

### Layer 3

#### IPv4 Routing Services

- ARP Entries: up to 32,000
- IP Routes: up to 15,488
- RIP Interfaces: 200
- OSPF Interfaces: 500
- BGP Peers: 256
- VRF Instances: up to 256

#### IPv6 Routing Services

- Neighbors: up to 8,000
- IP Routes: up to 7,744
- 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: 40,000
- NNI Interfaces/Adjacencies: up to 255
- BEB Nodes per VSN: 500
- BCB/ BEB Nodes per Region: 550
- L2 Virtual Service Networks: 4,059
- L3 Virtual Service Networks: up to 256
- IP Shortcut Routes: IPv4 up to 15,488 and IPv6 7,488
- L2 Multicast Virtual Service Networks: 2,000
- L3 Multicast Virtual Service Networks: 256 Maximum SGVs: 6,000

### QoS and Filtering

- IPv4 ACE: 1536 (1024 Security + 512 QOS) Ingress and 248 Egress
- IPv6 ACE: 1024 Ingress and 256 Egress
- QoS priority queues- 8

### Operations and Management

- Mirrored Ports: 49
- sFlow: up to 3100 samples per second
- Fabric RSPAN: 1,000 VLAN IDs

### IEEE 802.3 Media Access Standards

- IEEE 802.3ab 1000BASE-T
- IEEE 802.3ae 10GBASE-X
- IEEE 802.3aq 10GBASE-LRM
- 25Gb Ethernet implemented per Ethernet Consortium specification and IEEE 802.3 standard
- IEEE 802.3ba / 802.3bm 40GBASE-X
- IEEE 802.3at PoE Plus
- IEEE 802.3az Energy Efficient Ethernet

## Environmental

### Environmental Specifications

- EN/ETSI 300 019-2-1 v2.1.2 – 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 1.5G

### Environmental Compliance

- EU RoHS 2011/65/EU
- EU WEEE 2012/19/EU
- China RoHS SJ/T 11363-2006
- Taiwan RoHS CNS 15663(2013.7)

### Operating Conditions

- Temp: 0°C to 45°C (32°F to 113°F)
- Humidity: 10% to 95% relative humidity, non-condensing
- Altitude: 0 to 3,000 meters (9,850 feet)
- Shock (half sine) 30m/s<sup>2</sup> (3G), 11ms, 60 shocks
- Random vibration: 3 to 500Hz at 1.5G rms

### 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/s<sup>2</sup> (18 G), 6ms, 600 shocks
- Packaged Vibration: 5 to 62Hz at velocity 5mm/s, 62 to 500Hz at 0.2G
- Packaged Random Vibration: 5 to 20Hz at 1.0 ASD w/-3 dB/oct. from 20 to 200Hz
- 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 60950-1 AS/NZS 60950-1 (Australia /New Zealand)
- IEC 62368-1
- GB 4943.1-2011
- CNS 14336-1

## 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
- 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, 1 kV, 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

## Ordering Notes

VSP 4900 Series systems are ordered and shipped as a bundled offering. The bundle includes the base VSP 4900 system along with a single Power Supply, Fan Modules, and the VOSS operating system. (Note: "Unbundled" VSP 4900 systems without a PSU can also be ordered.) With all VSP 4900 systems, the VIM5 modules, additional power supply, power cords, console cables, transceivers/optics and optional Premier Software Licenses must be separately ordered.

## Base Software and Optional Premier License

VSP 4900 Series hardware models come with base software that provide most features available on the switch. Certain features, however, require a Premium Software license in order to operate. These include:

- Layer 3 Virtual Services Networks (L3 VSNs)
- 17 or more BGP peers
- 25 or more VRFs
- MACsec support
- Integrated Application Hosting\*

\* Integrated Application Hosting supported on VSP4900-24XE and VSP4900-12MXU-12XE models only.

## Ordering Information

### VSP 4900 Systems

Part Number	Product Name	Description
VSP4900-48P	VSP4900-48P	VSP 4900 System with 48 x 10/100/1000Base-T Full/Half-Duplex 802.3at PoE (30W) MACsec-capable ports, includes 3 fan modules, 1 unpopulated VIM5 slot, 4 post rack mount kit, VOSS operating system (PSU must be ordered separately)
VSP4900-48P-B1	VSP4900-48P with 1100W PSU Bundle	VSP 4900 System with 48 x 10/100/1000Base-T Full/Half-Duplex 802.3at PoE (30W) MACsec-capable ports, includes 3 fan modules, 1 unpopulated VIM5 slot, 1 x 1100W PSU FB (10941), 4 post rack mount kit, VOSS operating system
VSP4900-48P-B1-4X	VSP4900-48P, VIM5-4X Bundle	VSP 4900 System with 48 x 10/100/1000Base-T Full/Half-Duplex 802.3at PoE (30W) MACsec-capable ports, includes 3 fan modules, 1 VIM5-4X module, 1 x 1100W PSU FB (10941), 4 post rack mount kit, VOSS operating system
VSP4900-48P-B1-4XE	VSP4900-48P, VIM5-4XE Bundle	VSP 4900 System with 48 x 10/100/1000Base-T Full/Half-Duplex 802.3at PoE (30W) MACsec-capable ports, includes 3 fan modules, 1 VIM5-4XE module, 1 x 1100W PSU FB (10941), 4 post rack mount kit, VOSS operating system
VSP4900-24S	VSP4900-24S	VSP 4900 System with 24 x 100/1000BASE-X ports, includes 3 fan modules, 4 post rack mount kit, VOSS operating system (PSU must be ordered separately)
VSP4900-24S-B3	VSP4900-24S with 350W PSU Bundle	VSP 4900 System with 24 x 100/1000BASE-X ports, includes 3 fan modules, 1 x 350W PSU (10953), 4 post rack mount kit, VOSS operating system
VSP4900-24XE	VSP4900-24XE	VSP 4900 System with 24 x 1/10GBASE-X SFP+ MACsec and LRM-capable ports, includes 2 fan modules, 1 unpopulated VIM5 slot, 4 post rack mount kit, VOSS operating system (PSU must be ordered separately)
VSP4900-24XE-B3	VSP4900-24XE with 350W PSU Bundle	VSP 4900 System with 24 x 1/10GBASE-X SFP+ MACsec and LRM-capable ports, includes 2 fan modules, 1 unpopulated VIM5 slot, 1 x 350W PSU (10953), 4 post rack mount kit, VOSS operating system
VSP4900-12MXU-12XE	VSP4900-12MXU-12XE	VSP 4900 System with 12 x 100M/1/2.5/5/10GBASE-T 802.3bt PoE (60W) ports and 12 x 1/10GBASE-X SFP+ MACsec-capable ports, includes 3 fan modules, 1 unpopulated VIM5 slot, 4 post rack mount kit, VOSS operating system (PSU must be ordered separately)
VSP4900-12MXU-12XE-B1	VSP4900-12MXU-12XE with 1100W PSU Bundle	VSP 4900 System with 12 x 100M/1/2.5/5/10GBASE-T 802.3bt PoE (60W) ports and 12 x 1/10GBASE-X SFP+ MACsec-capable ports, includes 3 fan modules, 1 unpopulated VIM5 slot, 1 x 1100W PSU FB (10941), 4 post rack mount kit, VOSS operating system

## Versatile Interface Modules (VIM)

Part Number	Product Name	Description
VIM5-4X	VIM5-4X	4x 1G/10G SFP+ VIM supported on VSP 4900
VIM5-4XE	VIM5-4XE	4x 1G/10G SFP+ LRM and MACsec capable VIM supported on VSP 4900
VIM5-4YE*	VIM5-4YE	4x 10G/25G SFP28 MACsec capable VIM supported on VSP 4900
VIM5-2Q**	VIM5-2Q	2x 10G/40G QSFP VIM supported on VSP 4900

\*VSP 4900-48P and VSP 4900-24S limited to 2 x uplink ports (10GbE or 25GbE) on VIM5-4YE module

\*\*VSP 4900-48P and VSP 4900-24S limited to 1 x 10/40GbE port on VIM5-2Q module

## Accessories

Part Number	Product Name	Description
XN-ACPWR-350W-FB*	350W AC PSU FB	350W AC Power Supply Module - Front to Back airflow, also used on 5520 and X465
XN-ACPWR-715W-FB*	715W AC PSU FB	715W AC PoE Power Supply Module - Front to Back airflow, also used on 5520 and X465
XN-ACPWR-1100W-FB*	1100W AC PSU FB	1100W AC PoE Power Supply Module - Front to Back airflow, also used on 5520 and X465
XN-ACPWR-2000W-FB*	2000W AC PSU FB	2000W AC PoE Power Supply Module - Front to Back airflow, also used on 5520 and X465
10953	350W AC PSU	350W PSU for VSP 4900
10951	715W AC PSU	715W PSU for VSP 4900, also used on X465, X450-G2, and X460-G2
10941	1100W AC PSU	1100W PSU for VSP 4900, also used on X465, X450-G2, and X460-G2
XN-ACPWR-2000W-F	2000W AC PS FB	2000W PSU for VSP 4900 also used on X465
XN-FAN-002-F	Spare Fan Module	Spare Fan module for VSP 4900
XN-SSD-001-120	120GB SSD module	120GB Solid-State Drive (SSD) module. Required for use with Extreme Integrated Application Hosting on the VSP 4900 Series
XN-4P-RKMT-001	Spare Four-Post Rack Mount Kit	Spare Four Post Rack Mount Kit for VSP 4900
XN-2P-RMKIT-001	Optional Two Post Rack Mount Kit	Optional Two Post Rack Mount Kit for VSP 4900
XN-RJ45-DB9-CONSOLE-CBL	RJ45 to DB9 Console cable	RJ45 to DB9 console cable 6ft
XN-RJ45-USBA-CONSOLE-CBL	RJ45 to USBA Console cable	RJ45 to USB 2.0 Type A male console cable 6ft
XN-RJ45-USBC-CONSOLE-CBL	RJ45 to USBC Console cable	RJ45 to USB-C console cable 6ft

\*XN-ACPWR-xxx-FB power supply units cannot be used with the legacy 10941, 10951, 10953, or XN-ACPWR-2000W-F PSUs on the same switch.

## Software Licenses

Part Number	Product Name	Description
VSP-PRMR-L-LIC-P	Premier License for VSP 4900	VSP 4900 Premier Software License: Enables L3 VSNs, > 16 BGP peers, > 24 VRFs and Integrated Application Hosting*
VSP-PRMR-LE-LIC-P	Premier License with MACsec for VSP 4900	VSP 4900 Premier Software License with MACsec; Enables LVSNS, > 16 BGP peers, > 24 VRFs and Integrated Application Hosting*

\*Integrated Application Hosting supported on VSP4900-24XE and VSP4900-12MXU-12XE models only

## Warranty

All VSP 4900 Series models are covered under Extreme's Universal LLW policy. For warranty details, please visit our [Policies and Warranties page](#).

## Power Cords

In support of Extreme Networks green initiatives, power cords are not included with the VSP 4900 but can be ordered separately. They should be specified at the time of ordering.

## Console Cables

Console cables are not included with the VSP 4900 in support of our green initiatives but can be ordered separately.

## Optics/Transceivers

For a list of the optics and transceivers supported on the VSP 4900 Series hardware, refer to our [Extreme Optics Compatibility Tool](#)

## Maintenance Services

Extreme's maintenance and support services are provided 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 parts 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.

## Certifications

For information on Industry, Security, and Government certifications for VSP 4900 Series models, contact your Sales Representative.

