

5720 Series

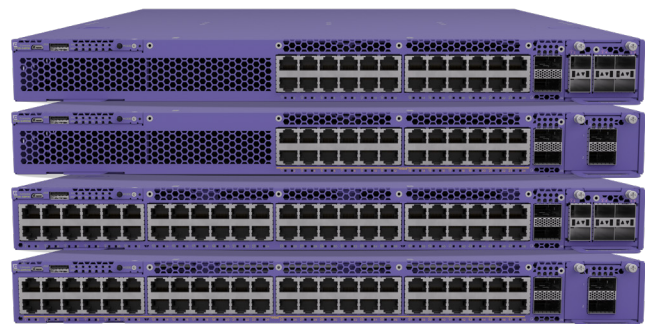
Universal Edge and Aggregation Switch Platform

Highlights

- Intuitive and centralized cloud-managed switching with ExtremeCloud™ IQ and ExtremeCloud IQ – Site Engine
- Choice of operating system (OS) with universal dual-persona hardware
- Fabric-enabled operations with Extreme Fabric Connect for simplified and secure network provisioning and automation

Key Hardware Features

- 24 and 48-port multi-gig models with 1, 2.5, 5 and 10Gb Ethernet connectivity
- 30W, 60W, and 90W PoE (Power over Ethernet) support for powering Ethernet connected devices
- Choice of 6 x 1Gb/10Gb/25Gb port or 2 x 100Gb port modular uplink options
- High-performance 400Gb per unit stacking of up to eight switches
- Hot-swappable, redundant power supplies and fans
- Secure link encryption with MACsec across both access and uplink ports
- Non-blocking wire speed design



The 5720 Series is a family of high-performance, feature-rich edge and aggregation switches designed for the next-generation digital enterprise. Available in 24 and 48-port gigabit and multi-gigabit models, the 5720 is a universal hardware platform, providing end-to-end secure network segmentation and advanced policy capabilities. Compatible with your choice of Extreme's flagship switch OS, the 5720 is a uniquely flexible, stackable platform that can be deployed across a range of edge, aggregation, and wiring-closet environments.

All models offer 90W PoE in support of NextGen powered Ethernet devices, such as digital signage, pan-tilt-zoom cameras, smart lighting, or point-of-sale terminals.



Cloud-Based Network Management

The 5720 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 for efficient inventory and network topology management. ExtremeCloud IQ enables zero touch provisioning, allowing you to quickly bring new 5720 switches online as well as enable the selection of the OS persona.

Alternatively, 5720 on-box management can be done manually via a web-based GUI or generic command-line interface (CLI).



Universal Hardware Platform

The 5720 Series comes with a dual-persona capability, allowing you to choose your OS. Either the Switch Engine (EXOS)¹ or Fabric Engine (VOSS)² can be selected at switch start-up or changed at a later stage. When selected, the switch assumes the features/capabilities of that OS.

5720 OS selection can also be automated with ExtremeCloud IQ so that the desired OS can be automatically loaded at switch start-up, facilitating remote OS enablement.

¹Switch Engine is the new name for ExtremeXOS (EXOS) on all universal switch platforms, starting with Version 31.6

² Fabric Engine is the new name for the VSP Operating System Software (VOSS) on all universal switch platforms, starting with Version 8.6



Power over Ethernet (PoE)

All 5720 Series models support 30W, 60W, and 90W PoE that conforms with IEEE 802.3bt. This enables the 5720 to address the needs of powered edge devices, while eliminating the need for additional electrical cabling and circuits. In addition, 5720 PoE models support perpetual and fast PoE for even more efficient and reliable powered edge device operation.



Ethernet Fabric Services

The 5720 supports a variety of Ethernet Fabric services, including Extreme's Fabric Connect when running Fabric Engine and Extreme's IP Fabric when running Switch Engine. It also supports Fabric Attach for automated connection to either Layer 2 or Layer 3 Fabric services.

Extreme's Fabric Connect and IP Fabric enable the creation of virtualized networks that automate network operations, simplify network provisioning, and enhance security, all while reducing the strain on network and IT personnel.



High-Performance Stacking

The 5720 Series supports high-speed stacking when running Switch Engine via its two built-in QSFP28 stacking ports. Up to eight switches can be stacked using qualified SFP+/SFP-DD direct attach cables and optical transceivers. Stacking is not supported when running Fabric Engine.



Integrated Application Hosting

Some 5720 Series models support Extreme's Integrated Application Hosting which leverages the switch's hardware and software design to run onboard applications without impacting switch performance. 5720-24MXW and 5720-48MXW models can run a Guest VM directly on the switch, supporting third-party or customized applications to meet specific business or operational needs. This can provide additional network insight or enable new network applications without a separate hardware device.

*Requires a Premier License



Audio Video Bridging

The 5720 Series supports IEEE 802.1 Audio Video Bridging (AVB) when running Switch Engine OS. This allows 5720 models to deliver reliable, real-time audio/video transmission over Ethernet, meeting the quality of service required for today's high-definition, time-sensitive multimedia streams.

External Interfaces

Switch Model	Interfaces
5720-24MW	24 x 100M/1/2.5/5GBASE-T 802.3bt (90W) ports <ul style="list-style-type: none"> • Full-Duplex • MACsec-capable 2 x Stacking/QSFP28 ports (unpopulated) 1 x Serial console port (RJ-45) 1 x 10/100/1000BASE-T out-of-band management port 2 x USB A ports for management or external USB flash 1 x USB Micro-B console port 1 x VIM slot
5720-48MW	48 x 100M/1/2.5/5GBASE-T 802.3bt (90W) ports <ul style="list-style-type: none"> • Full-Duplex • MACsec-capable 2 x Stacking/QSFP28 ports (unpopulated) 1 x Serial console port (RJ-45) 1 x 10/100/1000BASE-T out-of-band management port 2 x USB A ports for management or external USB flash 1 x USB Micro-B console port 1 x VIM slot
5720-24MXW	24 x 100M/1/2.5/5/10GBASE-T 802.3bt (90W) ports <ul style="list-style-type: none"> • Full-Duplex • MACsec-capable 2 x Stacking/QSFP28 ports (unpopulated) 1 x Serial console port (RJ-45) 1 x 10/100/1000BASE-T out-of-band management port 2 x USB A ports for management or external USB flash 1 x USB Micro-B console port 1 x VIM slot 1 x SSD slot
5720-48MXW	48 x 100M/1/2.5/5/10GBASE-T 802.3bt (90W) ports <ul style="list-style-type: none"> • Full-Duplex • MACsec-capable 2 x Stacking/QSFP28 ports (unpopulated) 1 x Serial console port (RJ-45) 1 x 10/100/1000BASE-T out-of-band management port 2 x USB A ports for management or external USB flash 1 x USB Micro-B console port 1 x VIM slot 1 x SSD slot
5720-VIM-6YE	6 x 1/10/25G SFP28 ports <ul style="list-style-type: none"> • MACsec-capable
5720-VIM-2CE	2 x 100Gb QSFP28 ports <ul style="list-style-type: none"> • MACsec-capable • 10/25/40Gb data rates supported via channelization

Performance and Scale

Switch Model	Max Active 1Gb/2.5Gb/5Gb ports	Max Active 1Gb/2.5Gb/5Gb/10Gb ports	Max Active 10Gb SFP+ ports ¹	Max Active 25Gb SFP28 ports ¹	Max Active 40Gb QSFP+ ports ²	Max Active 50Gb ports ³	Max Active 100Gb QSFP28 ports ²	Max Active 100Gb Stacking ports ⁴	Aggregated Switch Bandwidth	Frame Forwarding Rate
5720-24MW	24	0	16	16	2	4	4	2	1040Gbps	774Mpps
5720-48MW	48	0	16	16	2	4	4	2	1280Gbps	810Mpps
5720-24MXW	0	24	16	16	2	4	4	2	1280Gbps	810Mpps
5720-48MXW	0	48	16	16	2	4	4	2	1760Gbps	810Mpps

¹ When stacking is enabled, 8 of the 10Gb SFP+ and 8 of the 25Gb SFP28 ports are unavailable

² When stacking is enabled, 2 of the 40Gb QSFP+ ports and 2 of the 100Gb ports are unavailable

³ 50Gb available only in Switch Engine mode via the two integrated stacking/QSFP28 ports; when stacking is enabled, the 50Gb ports are unavailable as uplinks

⁴ Stacking supported in Switch Engine mode only. Stacking ports can also run at 50Gb in support of cross-stacking with the 5520.

5720 Software Scaling Values

5720-MXW (24 and 48-port) with Switch Engine

MAC Table: 294,000

IPv4 ARP Table: 172,000

IPv4 Route Table: 294,000

IP Multicast Entries (S,G,V): 110,000

IPv6 Neighbor Table: 78,000

IPv6 Route Table: 218,000

ACLs (Ingress/Egress): 38,864/2,048

QoS Egress Queues per port: 8

VLANs: 4,094

Routed VLANs: 4,094

One Policy Scaling

Policy Profiles: 63

Unique Permit/Deny Rules per switch: 16,312

5720-MW (24 and 48-port) with Switch Engine

MAC Table: 163,000

IPv4 ARP Table: 80,000

IPv4 Route Table: 166,000

IP Multicast Entries (S,G,V): 61,000

IPv6 Neighbor Table: 24,000

IPv6 Route Table: 109,000

ACLs (Ingress/Egress): 18,432/2,048

QoS Egress Queues per port: 8

VLANs: 4,094

Routed VLANs: 4,094

One Policy Scaling

Policy Profiles: 63

Unique Permit/Deny Rules per switch: 12,216

5720-MXW (24 and 48-port) with Fabric Engine

MAC Table: 164,000

IPv4 ARP Table: 65,536

IPv4 Route Table: 24,576

IP Multicast Entries (S,G,V): 6,000

IPv6 Neighbor Table: 32,768

IPv6 Route Table: 12,288

ACLs (Ingress/Egress): 8,192/6,144

QoS Egress Queues per port: 8

VLANs: 4,059

IP Interfaces (Routed VLANs): 1,000

5720-MW (24 and 48-port) with Fabric Engine

MAC Table: 100,000

IPv4 ARP Table: 24,600

IPv4 Route Table: 16,384

IP Multicast Entries (S,G,V): 6,000

IPv6 Neighbor Table: 24,576

IPv6 Route Table: 8,192

ACLs (Ingress/Egress): 6,144/3,072

QoS Egress Queues per port: 8

VLANs: 4,059

IP Interfaces (Routed VLANs): 1,000

Fabric Connect Scaling (all 5720 models)

Fabric Adjacencies per switch: 255

Fabric nodes per area (BEB + BCB): 1,000

BEB Nodes per VSN: 2,000

L2 VSNs: 4,000

LE VSNs: 256

Weights and Dimensions

Part Number	Weight	Physical Dimensions
5720-24MW	8.05 kg (17.75 lb.)	Height: 43.2 mm (1.7 in.) Width: 444.5 mm (17.5 in.) Depth: 525.8 mm (20.7 in.)
5720-48MW	8.55 kg (18.85 lb.)	
5720-24MXW	8.05 kg (17.75 lb.)	
5720-48MXW	8.55 kg (18.85 lb.)	
5720-VIM-6YE	0.24 kg (0.53 lb.)	Height: 40.6 mm (1.6 in.) Width: 50.8 mm (2.0 in.) Depth: 175.3 mm (6.9 in.)
5720-VIM-2CE	0.22 kg (0.49 lb.)	

Power Supply Unit Specifications

	715W AC PSU	1100W AC PSU	2000W AC PSU*
Voltage Input Range (Nominal)	100-127/200-240 VAC	100-127/200-240 VAC	100-127/200-240 VAC
Line Frequency Range	50Hz to 60Hz	50Hz to 60Hz	50Hz to 60Hz
Power Supply Input Socket	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
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)

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

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)**
5720-24MW	86	293	2549	389
5720-24MXW	105	359	2576	416
5720-48MW	103	354	4078	543
5720-48MXW	105	359	4096	561

* Includes maximum PoE load (W) through the switch

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

PoE Power Budget

Switch Model	1 x 715W	2 x 715W	1 x 1100W	2 x 1100W	1 x 2000W @ 110-132VAC	2 x 2000W @ 110-132VAC	1 x 2000W @ 220-264VAC	2 x 2000W @ 220-264VAC
5720-24MW	450W	1093W	835W	1825W	835W	1825W	1735W	2160W
5720-24MXW	450W	1093W	835W	1825W	835W	1825W	1735W	2160W
5720-48MW	450W	1093W	835W	1825W	835W	1825W	1735W	3535W
5720-48MXW	450W	1093W	835W	1825W	835W	1825W	1735W	3535W

Note: It's recommended that primary and secondary PSUs be of the same type to support optimal PoE operation.

Acoustics and Noise

Switch Model	Bystander Sound Pressure (dB)	Weighted Sound Power level (B)
5720-24MW	48.8	6.3
5720-48MW	55.1	6.7
5720-24MXW	48.5	6.3
5720-48MXW	54.7	6.7

Note: All ports link up with full traffic, 50% PoE Budget Load, Dual 2000W PSU, 25°C

Product Specifications

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 1.5 G

Environmental 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)

Environmental Operating Conditions

Temp: 0°C to 50°C (32°F to 122°F)
Humidity: 10% to 95% relative humidity, non-condensing
Altitude: 0 to 3,000 meters (9,850 feet)
Shock (half sine) 30m/s² (3G), 11ms, 60 shocks
Random vibration: 3 to 500 Hz at 1.5 G 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): 180 m/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/CuL 62368-1 Listed
CSA 22.2 No. 60950-1 2nd edition 2014 (Canada)
Complies with FCC 21CFR 1040.10 (U.S. Laser Safety)
CDRH Letter of Approval (US FDA Approval)

European ITE

EN 60950-1 2nd Edition
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
CB Report & Certificate IEC 62368-1
AS/NZS 60950-1 (Australia/New Zealand)

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 (EMC Telecommunications)
2014/30/EU EMC Directive

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 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, 2 kV, Criteria B
IEC 61000-4-5/EN 61000-4-5 Surge, 2 kV L-L, 2 kV L-G, Level 3, Criteria B
IEC 61000-4-6 Conducted Immunity, 0.15-80 MHz, 10V/rms, 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 (China)
KCC Mark, EMC Approval (Korea)
BSMI (Taiwan)
Anatel (Brazil)
NoM (Mexico)
EAC (Russia, Belarus, Kazakhstan)
NRCS (South Africa)

IEEE 802.3 Media Access Standards

IEEE 802.3ab 1000BASE-T
IEEE 802.3bz 2.5G/5G/10GBASE-T
IEEE 802.3bt Type 4 PoE
IEEE 802.3ae 10GBASE-X
IEEE 802.3by 25GBASE-X
IEEE 802.3ba/802.3bm 40GBASE-X and 100GBASE-X
IEEE 802.3az Energy Efficient Ethernet

Ordering Notes

When you order a 5720 switch, you will receive the base switch along with that base's software license, fan modules, and rack-mount kit.

Versatile Interface Modules (VIMs), power supplies, transceiver and optics, power cords, and Premier and/

or MACsec licenses must be ordered separately. At least one Power Supply Unit (PSU) is required to operate 5720 models, and a second PSU is required for redundancy or additional power.

Base Software and Optional Premier License

The Base software included with each 5720 unit supports the most available switch features. However, certain features require a Premier license to operate.

For Switch Engine, a Premier License is required for:

- Five or more OSPF interfaces
- Three or more BGP Peers
- PIM DM / PM SSM
- Anycast RP (Rendezvous Point)
- Multi-Source Discovery Protocol (MSDP)
- IS-IS/BGP4/MBGP
- GRE Tunneling
- Ethernet VPN (EVPN)
- Integrated Application Hosting

For Fabric Engine, a Premier license is required for:

- Five or more OSPF or RIP interfaces
- Three or more BGP peers
- Layer 3 Virtual Service Networks (L3 VSNs)
- Distributed Virtual Routing (DvR) Controller
- Integrated Application Hosting

Ordering Information

Part Number	Product Name	Description
5720 Systems		
5720-24MW	5720 24-port 1G/2.5G/5G Switch with 90W PoE	5720 Universal Switch with 24 x 1Gb/2.5Gb/5Gb 802.3bt 90W PoE ports, 2 x Stacking/QSFP28 ports, 1 unpopulated VIM slot, MACsec-capable, includes 2 x unpopulated PSU slots, fan modules 4-post rack mount kit, Base software license.
5720-48MW	5720 48-port 1G/2.5G/5G Switch with 90W PoE	5720 Universal Switch with 48 x 1Gb/2.5Gb/5Gb 802.3bt 90W PoE ports, 2 x Stacking/QSFP28 ports, 1 unpopulated VIM slot, MACsec-capable, includes 2 x unpopulated PSU slots, fan modules 4-post rack mount kit, Base software license.
5720-24MXW	5720 24-port 1G/2.5G/5G/10G Switch with 90W PoE	5720 Universal Switch with 24 x 1Gb/2.5Gb/5Gb/10Gb 802.3bt 90W PoE ports, 2 x Stacking/QSFP28 ports, 1 unpopulated VIM slot, MACsec-capable, includes 2 x unpopulated PSU slots, 1 x unpopulated SSD slot, fan modules, 4-post rack mount kit, Base software license.
5720-48MXW	5720 48-port 1G/2.5G/5G/10G Switch with 90W PoE	5720 Universal Switch with 48 x 1Gb/2.5Gb/5Gb/10Gb 802.3bt 90W PoE ports, 2 x Stacking/QSFP28 ports, 1 unpopulated VIM slot, MACsec-capable, includes 2 x unpopulated PSU slots, 1 x unpopulated SSD slot, fan modules, 4-post rack mount kit, Base software license.

Part Number	Product Name	Description
VIM Modules		
5720-VIM-6YE	6-port SFP28 module MACsec-capable	5720 Versatile Interface Module with 6 x 1Gb/10Gb/25Gb SFP28 MACsec-capable ports
5720-VIM-2CE	2-port QSFP28 module MACsec-capable	5720 Versatile Interface Module with 2 x 100Gb QSFP28 MACsec-capable ports
Accessories		
XN-ACPWR-715W-FB	715W AC PSU FB	715W AC Power Supply Module (PSU) - Front-to-Back airflow - also used in 5520, X465, and VSP 4900
XN-ACPWR-1100W-FB	1100W AC PSU FB	1100W AC Power Supply Module (PSU) - Front-to-Back airflow - also used in 5520, X465, and VSP 4900
XN-ACPWR-2000W-FB	2000W AC PSU FB	2000W AC Power Supply Module (PSU) - Front-to-Back airflow - also used in 5520, X465, and VSP 4900
XN-FAN-005-F	Spare Fan module	Spare Fan module used in 5720 Series switches
XN-SSD-002-120	120GB SSD Module	120GB Solid-State Drive (SSD) module for use with Integrated Application Hosting on the 5720-24MXW and 5720-48MXW model switches
XN-2P-RKMT299	Optional Two-Post Rack Mount Kit	Optional Two-Post rack mount kit for use with 5720 Series switches
XN-4P-RKMT299	Spare Four-Post Rack Mount Kit	Spare Four-Post rack mount kit for use with 5720 Series switches
Software Licenses		
5000-PRMR-LIC-P	Premier License for 5000 Series	Perpetual Premier License for 5000 Series switches
5000-MACSEC-LIC-P	MACsec License for the 5000 Series	Perpetual MACsec License for the 5000 Series switches

Warranty

All 5720 Series models are covered under Extreme's Universal LLW policy. For warranty details, please visit our [Policies and Warranties](#) page.

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 parts replacement, and on-site support, we augment your staff with expert resources to help you mitigate critical network issues fast. Visit our [ExtremeWorks Maintenance Services](#) for more information.

Optics/Transceivers

For a list of the optics and transceivers supported on the 5720 Series hardware, refer to our [Extreme Optics Compatibility Tool](#).

Power Cords

Power cords are not included with the 5720 in support of our green initiatives but can be ordered separately.



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