West Virginia Purchasing Division

2019 Washington Street, East
Charleston, WV 25305
Telephone: 304-558-2306
General Fax: 304-558-6026
Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Jump to: PRCUID Go

Procurement | Budgeting | Accounts Receivable | Accounts Payable

Solicitation Response(SR) Dept: 0323 ID: ESR05062500000006763 Ver.: 1 Function: New Phase: Final ▼ Modified by batch , 05/06/2025

Header 1

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1587922	SO Doc Code: CRFQ
Procurement Type: Central Purchase Order	SO Dept: 0323
Vendor ID: 000000223571	SO Doc ID: WWV2500000005
Legal Name: ADVANTAGE TECHNOLOGY LLC	Published Date: 4/25/25
Alias/DBA:	Close Date: 5/6/25
Total Bid: $0.00	Close Time: 13:30
Response Date: 05/06/2025	Status: Closed
Response Time: 11:37	Solicitation Description: Server and Networking Equipment
Responded By User ID: advjstewart	Total of Header Attachments: 1
First Name: James	Total of All Attachments: 1
Last Name: Stewart	
Email: jstewart@advantage.tech	
Phone: 304-342-0796	

	Department of Administration **Purchasing Division** **2019 Washington Street East** **Post Office Box 50130** **Charleston, WV 25305-0130**	**State of West Virginia** **Solicitation Response**

Proc Folder:	1587922
Solicitation Description:	Server and Networking Equipment
Proc Type:	Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2025-05-06 13:30	SR 0323 ESR05062500000006763	1

VENDOR
000000223571 ADVANTAGE TECHNOLOGY LLC

Solicitation Number:	CRFQ 0323 WWV2500000005

Total Bid:	0	**Response Date:**	2025-05-06	**Response Time:**	11:37:15

Comments:

FOR INFORMATION CONTACT THE BUYER
Brandon L Barr
304-558-2652
brandon.l.barr@wv.gov

Vendor
Signature X   **FEIN#**   **DATE**
All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Server and Networking Equipment	0.00000	LS	358964.000000	0.00

Comm Code	Manufacturer	Specification	Model #
43222600			

Commodity Line Comments:

Extended Description:

Please see Exhibit A pricing page

Proc Folder:	1587922	**Reason for Modification:**
Doc Description:	Server and Networking Equipment	Addendum No. 1 published to provide answers to vendor questions and correct errors with the specifications
Proc Type:	Central Purchase Order	

Date Issued	Solicitation Closes	Solicitation No	Version
2025-04-25	2025-05-06 13:30	CRFQ 0323 WWV2500000005	2

BID RECEIVING LOCATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON   WV   25305

US

VENDOR

Vendor Customer Code: 000000223571

Vendor Name : Advantage Technology

Address :

Street : 950 Kanawha Blvd East Ste 100

City : Charleston

State : WV   **Country :** USA   **Zip :** 25301

Principal Contact : James Stewart

Vendor Contact Phone: 304-941-4272   **Extension:** N/A

FOR INFORMATION CONTACT THE BUYER
Brandon L Barr
304-558-2652
brandon.l.barr@wv.gov

Vendor Signature X *James Stewart*   **FEIN#** 74-3077314   **DATE** 05.06.2025

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

The West Virginia Purchasing Division is soliciting bids on behalf of WorkForce West Virginia, herein referred to as the "Agency" to establish a contract for a qualified vendor to provide Server and Networking Equipment per the attached documentation.

INVOICE TO	SHIP TO
WORKFORCE WEST VIRGINIA	WORKFORCE WEST VIRGINIA
1900 KANAWHA BLVD, EAST	1900 KANAWHA BLVD E
BLDG 3, 3RD FLOOR, SUITE 300	BLDG 3, 8TH FLOOR
CHARLESTON WV	CHARLESTON WV
US	US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Server and Networking Equipment	0.00000	LS	$358,964.00 /	$358,964.00

Comm Code	Manufacturer	Specification	Model #
43222600			

Extended Description:
Please see Exhibit A pricing page

SCHEDULE OF EVENTS

Line	Event	Event Date
1	Questions due by April 24th	2025-04-24

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFQ WWV25*05

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[X] Addendum No. 1	[ ] Addendum No. 6
[ ] Addendum No. 2	[ ] Addendum No. 7
[ ] Addendum No. 3	[ ] Addendum No. 8
[ ] Addendum No. 4	[ ] Addendum No. 9
[ ] Addendum No. 5	[ ] Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Advantage Technology
_____
Company

James Stewart
_____
Authorized Signature

05.06.2025
_____
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012

Exhibit A - Pricing Page (REVISED)

Server and Networking Equipment

Item #	Description		Unit of Measure	Quantity *	Unit Price	Extended Amount
3.1.1	Servers for Virtual Hosts	Dell R7715	Each	6	$40,213.00	$241,278.00
3.1.2	Servers for AI	Dell R7615	Each	1	$76,238.00	$76,238.00
3.1.3	Switches for Storage Network	Extreme Networks	Each	2	$16,686.00	$33,372.00
3.1.4	Switches for Host Network	Extreme Networks	Each	2	$4,038.00	$8,076.00
				Overall Total Cost		$358,964.00

Vendor must complete the Price Page in full as failure to complete the Pricing Page in its entirety may result in Vendor's bid being disqualified. A no bid will result in Vendor's bid being disqualified.

James Stewart
_____
Vendor Signature

Advantage Technology
950 Kanawha Blvd East Ste 100
Charleston, WV 25301
Phone: 304-941-4272
Email: jstewart@advantage.tech

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

James Stewart, Sales Engineer
_____
(Printed Name and Title)
950 Kanawha Blvd East Ste 100 Charleston, WV 25301
_____
(Address)
304-973-9537 / NA
_____
(Phone Number) / (Fax Number)
jstewart@advantage.tech
_____
(E-mail address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through *wvOASIS*, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; ; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the Vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

Advantage Technology
_____
(Company)

James Stewart
_____
(Signature of Authorized Representative)

James Stewart, Sales Engineer
_____
(Printed Name and Title of Authorized Representative)

05.06.2025
_____
(Date)

304-973-9537 / NA
_____
(Phone Number) (Fax Number)

Revised 8/24/2023

STATE OF WEST VIRGINIA
PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §15A-3-14, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: __Advantage Technology__
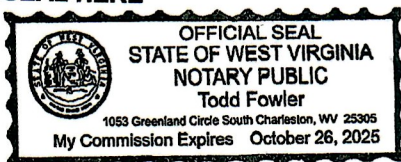
Authorized Signature: _James Stewart_ Date: __05.06.2025__

State of __West Virginia__

County of __Kanawha__, to-wit:

Taken, subscribed, and sworn to before me this 6th day of __May__, 20_25_.

My Commission expires __October 26__, 20_25_

AFFIX SEAL HERE

NOTARY PUBLIC _____

```
OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Todd Fowler
1053 Greenland Circle South Charleston, WV 25305
My Commission Expires   October 26, 2025
```

Purchasing Affidavit (Revised 03/09/2019)

Exhibit A - Pricing Page

Server and Networking Equipment

Item #	Description	Unit of Measure	Quantity *	Unit Price	Extended Amount
3.1.1	Servers for Virtual Hosts	Each	8	$0.00	$0.00
3.1.2	Servers for AI	Each	2	$0.00	$0.00
3.1.3	Switches for Storage Network	Each	2	$0.00	$0.00
3.1.4	Switches for Host Network	Each	2	$0.00	$0.00
			Overall Total Cost		$0.00

Vendor must complete the Price Page in full as failure to complete the Pricing Page in its entirety may result in Vendor's bid being disqualified. A no bid will result in Vendor's bid being disqualified.

_____

Vendor Signature

ACORD® CERTIFICATE OF LIABILITY INSURANCE

	DATE (MM/DD/YYYY)
	04/21/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Jennifer Drake		
Mountain State Insurance Agency	PHONE (A/C, No, Ext): (304) 720-2000		FAX (A/C, No): (304) 720-2002
1206 Kanawha Blvd. E.	E-MAIL ADDRESS: jdrake@mountainstateinsurance.com		
Suite 100			
Charleston WV 25301-2949	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A : Charter Oak Fire Ins Co		25615
INSURED	INSURER B : St. Paul Protective Insurance Company		19224
Advantage Technology, LLC	INSURER C : Travelers Property Casualty of America		25674
950 Kanawha Blvd. E	INSURER D : Farmington Casualty Company		41483
	INSURER E :		
Charleston WV 25301	INSURER F :		

COVERAGES CERTIFICATE NUMBER: 24 25 Liab REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	**COMMERCIAL GENERAL LIABILITY** [X] CLAIMS-MADE [ ] OCCUR [X] GEN'L AGGREGATE LIMIT APPLIES PER: POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:			ZLP16P96504	11/01/2024	11/01/2025	EACH OCCURRENCE	$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 1,000,000
							MED EXP (Any one person)	$ 10,000
							PERSONAL & ADV INJURY	$ 1,000,000
							GENERAL AGGREGATE	$ 2,000,000
							PRODUCTS - COMP/OP AGG	$ 2,000,000
								$
B	**AUTOMOBILE LIABILITY** [X] ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [ ] HIRED AUTOS ONLY [ ] NON-OWNED AUTOS ONLY			BA9X277890	11/01/2024	11/01/2025	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
							BODILY INJURY (Per person)	$
							BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
								$
C	[X] **UMBRELLA LIAB** [X] OCCUR [ ] **EXCESS LIAB** [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $			CUPA1368310	11/01/2024	11/01/2025	EACH OCCURRENCE	$ 5,000,000
							AGGREGATE	$ 5,000,000
								$
D	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N [ ] (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		UBA1367872	11/01/2024	11/01/2025	[X] PER STATUTE [X] OTHER WV Code 23-4-2	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
C	Professional Liability Cyber Liability			ZPL91N85217	11/01/2024	11/01/2025	General Aggregate	$2,000,000
							Each Occurrence	$2,000,000
							Technology Errors and Omissions Liability	$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER	CANCELLATION
Workforce WV 1900 Kanawha Blvd East Bldg 3, 8th Floor Charleston WV 25305	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE

STATE OF WEST VIRGINIA
PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §15A-3-14, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

> **EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

> **DEFINITIONS:**

> **"Debt"** means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

> **"Employer default"** means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

> **"Related party"** means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: __Advantage Technology__

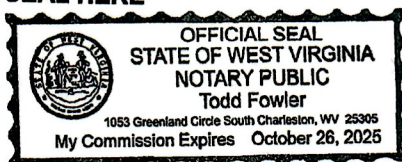Authorized Signature: _James Stewart_ Date: __05.06.2025__

State of __West Virginia__

County of __Kanawha__, to-wit:

Taken, subscribed, and sworn to before me this _6th_ day of ___May___, 20_25_.

My Commission expires _October 26_, 20_25_

AFFIX SEAL HERE

NOTARY PUBLIC _____

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Todd Fowler
1053 Greenland Circle South Charleston, WV 25305
My Commission Expires October 26, 2025

Purchasing Affidavit (Revised 03/09/2019)

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

James Stewart, Sales Engineer
_____
(Printed Name and Title)
950 Kanawha Blvd East Ste 100 Charleston, WV 25301
_____
(Address)
 304-973-9537 / NA
_____
(Phone Number) / (Fax Number)
 jstewart@advantage.tech
_____
(E-mail address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through _wvOASIS_, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; ; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the Vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

 Advantage Technology
_____
(Company)

James Stewart
_____
(Signature of Authorized Representative)

James Stewart, Sales Engineer
_____
(Printed Name and Title of Authorized Representative)
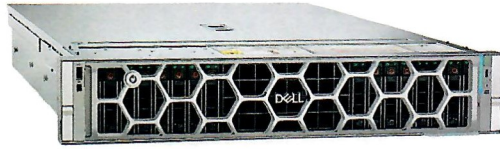
05.06.2025
_____
(Date)

304-973-9537 / NA
_____
(Phone Number) (Fax Number)

Revised 8/24/2023

PowerEdge R7715

Versatility meets performance

Invest in a future-proof server for the data center that scales dynamically to push the limits of demanding applications, driving a faster return on investment.

Faster return when investing in the future of your business

The PowerEdge R7715 server is a single-socket optimized solution designed to deliver high performance, flexibility, and efficiency for a variety of applications. It is powered by 5th generation AMD EPYC™ processors and offers cutting-edge features that dynamically scale to push the upper limits of application performance

Next level compute in your data center

Our partnership with AMD allows us to provide customers with a powerful 2U server that can handle a variety of multi-core workloads.

- The 5th generation AMD EPYC™ processor in the PowerEdge R7715 offers up to two-times better performance compared to previous generations
- With dual OCP and DDR5 memory support, efficiently address I/O and richer storage needs in a single-socket design

New configuration options for targeted workloads

The PowerEdge R7715 offers great flexibility with multiple configuration options to suit diverse customer needs.

- With support for up to 8 PCIe slots in a generous 2U form factor, it can easily adapt to different workload requirements.
- An ideal choice for businesses looking for a versatile server that can grow with their evolving needs.

Efficiency plus greater rate of consolidation

Lower your total cost of ownership while reducing energy use and make the best use of existing data center space.

- SmartCooling allows most configurations to be air-cooled.
- Improved heat sinks for better thermal performance.

Cyber Resilient Architecture for Zero Trust IT environment & operations

Security is integrated into every phase of the PowerEdge lifecycle, including protected supply chain and factory-to-site integrity assurance. The Silicon-based root of trust anchors end-to-end boot resilience while Multi-Factor Authentication (MFA) and role-based access controls safeguard trusted operations.

Increase efficiency and accelerate operations with autonomous collaboration

The Dell OpenManage systems management portfolio tames the complexity of managing and securing IT infrastructure. Using Dell Technologies' intuitive end-to-end tools you can build a secure, integrated experience by reducing process and information silos and focus on growing the business. The Dell OpenManage portfolio is the key to your innovation engine, unlocking the tools and automation that help you scale, manage, and protect your technology environment.

Sustainability

From recycled materials in our products and packaging, to thoughtful, innovative options for energy efficiency, the PowerEdge portfolio is designed to make, deliver, and recycle products to help reduce the carbon footprint and lower your operation costs. We even make it easy to retire legacy systems responsibly with Dell Technologies.

PowerEdge R7715

Highest density per core ideal for:

- Virtualization lower licensing costs
- Hyper-Converged Infrastructure (HCI)

Rest easier with Dell Technologies Services

Maximize your PowerEdge Servers with comprehensive services designed to meet you wherever you are. Accelerate time to value in achieving high AI use cases with Professional Services for AI, choose from tailored deployment options with the ProDeploy Suite, receive proactive and predictive support with our ProSupport Suite, and so much more with our services available across 170 locations and backed by our 60K+ employees and partners.

*Expected to be available in the first half of 2025. Planned Offerings are subject to change and may not be released as originally designed.

**Expected to be available in the second half of 2025. Planned Offerings are subject to change and may not be released as originally designed.

Feature	Technical Specifications
Processor	One 5th Generation AMD EPYC 9005 Series processor with up to 160 cores per processor
Memory	• 24 DDR5 DIMM slots, supports RDIMM 6 TB max*, speeds up to 5200 MT/s • Supports registered ECC DDR5 DIMMs only
Storage controllers	• Internal Controllers (RAID): PERC H365i, H965i, H975i* • Internal Boot: Boot Optimized Storage Subsystem (BOSS-N1 DC-MHS) • External HBAs (non-RAID): HBA465e*
Drive Bays	Front bays: • 2 x U.2 • 12 x 3.5-inch SAS/SATA* • 8 x 2.5 Universal/ 16 x 2.5-inch SAS/SATA / 24 x 2.5-inch SAS/SATA* • 16 x 2.5-inchSAS/SATA SSD + 8 x U.2 NVMe drives • 8 x EDSFF E3.S / 16 x EDSFF E3.S / 32 x EDSFF E3.S / 40 x EDSFF E3.S*
Power Supplies	• Platinum 800W, 1100W • Titanium: 800W, 1100W, 1500W, 1500W 277Vac & HVDC**, 1800W**, 2400W**, 3200W, 3200W 277Vac & HVDC** • Telco: 1400W -48VDC*
Cooling Options	Air cooling, Direct Liquid Cooling (DLC)
Fans	• Up to six hot plug fans
Dimensions	• Height – 86.8 mm (3.41 inches) • Width – 482.0 mm (18.97 inches) • Depth – 802.4 mm (31.59 inches) with bezel 801.51 mm (31.55 inches) without bezel
Form Factor	2U rack server
Embedded Management	• iDRAC 10 • iDRAC Direct • iDRAC RESTful API with Redfish • Racadm CLI
Bezel	Optional metal bezel
OpenManage Consoles	• OpenManage Enterprise (OME) • OME Power Manager • OME Services • OME Update Manager • OME APEX AIOps Observability • OME Integration for VMware vCenter (with VMware Aria Operations) • OpenManage Integration for Microsoft System Center • OpenManage Integration for Windows Admin Center
Mobility	N/A
Tools	IPMI
OpenManage Integrations	• RedHat Ansible Collections • Terraform Providers
Change Management	• Dell Repository Manager • Dell System Update • Enterprise Catalogs • Server Update Utility (SUU)
Security	• AMD Secure Encrypted Virtualization (SEV) • AMD Secure Memory Encryption (SME) • Cryptographically signed firmware • Data at Rest Encryption (SEDs with local or external key mgmt) • Secure Boot • Secured Component Verification (Hardware integrity check) • Secure Erase • Silicon Root of Trust • System Lockdown • TPM 2.0 FIPS, CC-TCG certified • Chassis Intrusion Detection
GPU Options	Up to 3x 400W DW; Up to 6x 75W SW

Feature	Technical Specifications		
Ports	**Front Ports** • 1 x USB 2.0 Type-A (optional LCP KVM) • 1 x USB 2.0 Type-C (HOST/BMC Direct) • 1 x Mini DisplayPort (optional LCP KVM)		**Rear Ports** • 1 x 1 Gb Dedicated BMC Ethernet port • 2 x USB 3.1 Type-A • 1 x VGA
	Internal Port • 1 x USB 3.1 Type-A		
PCIe	Up to eight PCIe slots (x16 connectors) • Slot 1: 1 x16 Gen5 Full Height • Slot 2: 1 x16 Gen5 Full Height or 1 x16 Dual Width Full Length • Slot 3: 1 x16 Gen5 Full Height or Low Profile • Slot 4: 1 x16 Gen5 Full Height or 1 x16 Dual Width Full Length or 1 x16 OCP3.0 • Slot 5: 1 x16 Gen5 Full Height • Slot 7: 1 x16 Gen5 Full Height or 1 x16 Dual Width Full Length • Slot 8: 1 x16 Gen5 Full Height • Slot 9: 1 x16 Gen5 Full Height or Low Profile		
Gen5 PCIe slots:	Up to 8		
OCP network options	2 x OCP NIC 3.0 card (optional) and 1GbE, 10GbE, 25GbE, 100GbE and 400GbE • Slot 4: 1 x16 Gen5 OCP3.0 • Slot 10: 1 x16 Gen5 OCP3.0		
Embedded NIC	• 1 Gb dedicated BMC Ethernet port		
PCIe Add-in Card (AIC) NIC	• 100 GbE and 400GbE; NDR VPI (400GbE); FC 32		
Operating System and Hypervisors	• Canonical Ubuntu Server LTS • Microsoft Windows Server with Hyper-V • RedHat Enterprise Linux • VMware ESXi • SUSE Linux Enterprise Server For specifications and interoperability details, see **Dell.com/OSsupport**.		
OEM-ready version available	From bezel to BIOS to packaging, your servers can look and feel as if they were designed and built by you. For more information, visit **Dell.com/OEM**.		

Note: From bezel to BIOS to packaging, your servers can look and feel as if they were designed and built by you with our OEMR platforms, while XL platforms provide extended transitions and stability for OEM Solutions customers. For more information, visit Dell.com -> Solutions -> OEM Solutions.

APEX on Demand

APEX Flex on Demand Acquire the technology you need to support your changing business with payments that scale to match actual usage. For more information, visit **www.delltechnologies.com/en-us/payment-solutions/flexible-consumption/flex-on-demand.htm**

Discover more about PowerEdge servers

Learn more about services for PowerEdge servers

Learn more about our systems management solutions

Search our Resource Library

Follow PowerEdge servers on X (formerly Twitter)

Contact a Dell Technologies Expert for **Sales or Support**

March 2025

DELLTechnologies

PowerEdge R7615

Powerful performance per investment dollar

The new Dell PowerEdge R7615 is a 2U, single-socket rack server. Designed to be the best investment per dollar for your data center, this server provides performance and flexible, low-latency storage options in an air or Direct Liquid Cooling (DLC) configuration.

Stay ahead of the curve

Delivering breakthrough innovation for traditional and emerging workloads, including software-defined storage, data analytics,and virtualization using the latest performance and density with optional acceleration.

Invest wisely in a platform that grows with your business

- Using AMD EPYC 4th generation processor to deliver up to 50% more core count per single socket platform in an innovative air-cooled chassis.
- Enables DDR5 at 4800 MT/s memory and PCIe Gen5 with double the speed of previous Gen4 for faster access and transport of data optimizing application output.
- Optional DLC is available to more efficiently cool high-performance processors.

Experience more virtual machine density to support the most demanding applications

- Deliver more virtual machines per physical host using increased core count and higher memory footprint than previous generations.
- Improve responsiveness or reduce app load time for power users with up to 6 x single-wide full-length GPUs or 3 x double-wide full-length GPUs.

Expect increased expandability by storing more data in one server, saving space in your datacenter

- Deliver more memory density with DDR5 (up to 3 TB of RAM) providing greater memory capacity per socket.
- Support lower latency higher performance NVMe SSD in a hardware RAID solution helps maximize compute performance.

Cyber Resilient Architecture for Zero Trust IT environment & operations

Security is integrated into every phase of the PowerEdge lifecycle, including protected supply chain and factory-to-site integrity assurance. Silicon-based root of trust anchors end-to-end boot resilience while Multi-Factor Authentication (MFA) and role-based access controls ensure trusted operations.

Increase efficiency and accelerate operations with autonomous collaboration

The Dell OpenManage™ systems management portfolio delivers a secure, efficient, and comprehensive solution for PowerEdge servers. Simplify, automate and centralize one-to-many management with the OpenManage Enterprise console and iDRAC.

Sustainability

From recycled materials in our products and packaging, to thoughtful, innovative options for energy efficiency, the PowerEdge portfolio is designed to make, deliver, and recycle products to help reduce the carbon footprint and lower your operation costs. We even make it easy to retire legacy systems responsibly with Dell Technologies Services.

Rest easier with Dell Technologies Services

Maximize your PowerEdge Servers with comprehensive services ranging from Consulting, to ProDeploy and ProSupport suites, Data Migration and more – available across 170 locations and backed by our 60K+ employees and partners.

PowerEdge R7615

The Dell PowerEdge R7615 Rack Server is a highly scalable Single-socket 2U rack server that delivers performance and outstanding TCO. It is ideal for the following workloads and applications:

- Software-Defined Storage (SDS)
- Virtualization
- Data Analytics

Feature	Technical Specifications
Processor	One 4th Generation AMD EPYC 9004 Series processor with up to 128 cores per processor
Memory	• 12 DDR5 DIMM slots, supports RDIMM 3 TB max, speeds up to 4800 MT/s • Supports registered ECC DDR5 DIMMs only
Storage controllers	• Internal Controllers: PERC H965i, PERC H755, PERC H755N, PERC H355, HBA355i • Internal Boot: Boot Optimized Storage Subsystem (BOSS-N1): HWRAID 2 x M.2 NVMe SSDs or USB • External HBA (non-RAID): HBA355e • Software RAID: S160
Drive Bays	Front bays: • Up to 8 x 3.5-inch SAS/SATA (HDD/SSD) max 160 TB • Up to 12 x 3.5-inch SAS/SATA (HDD/SSD) max 240 TB • Up to 8 x 2.5-inch SAS/SATA/NVMe (HDD/SSD) max 122.88 TB • Up to 16 x 2.5-inch SAS/SATA/NVMe (HDD/SSD) max 245.76 TB • Up to 24 x 2.5-inch SAS/SATA/NVMe (HDD/SSD) max 368.64 TB • Up to 8 x EDSFF E3.S Gen5 NVMe (SSD) max 61.44 TB • Up to 16 x EDSFF E3.S Gen5 NVMe (SSD) max 122.88 TB • Up to 32 x EDSFF E3.S Gen5 NVMe (SSD) max 245.76 TB Rear bays: • Up to 2 x 2.5-inch SAS/SATA/NVMe (HDD/SSD) max 30.72 TB • Up to 4 x 2.5-inch SAS/SATA/NVMe (HDD/SSD) max 61.44 TB • Up to 4 x EDSFF E3.S Gen5 NVMe (SSD) max 30.72 TB
Power Supplies	• 2400 W Platinum 100—240 VAC or 240 HVDC, hot swap redundant • 1800 W Titanium 200—240 VAC or 240 HVDC, hot swap redundant • 1400 W Platinum 100—240 VAC or 240 HVDC, hot swap redundant • 1400 W Titanium 277 VAC or 336 HVDC, hot swap redundant • 1100 W Titanium 100—240 VAC or 240 HVDC, hot swap redundant • 1100 W LVDC -48 — -60 VDC, hot swap redundant • 800 W Platinum 100—240 VAC or 240 HVDC, hot swap redundant • 700 W Titanium 200—240 VAC or 240 HVDC, hot swap redundant
Cooling Options	• Air cooling • Optional Direct Liquid Cooling (DLC) Note: DLC is a rack solution and requires rack manifolds and a cooling distribution unit (CDU) to operate.
Fans	• High performance Silver (HPR) fans/ High performance Gold (VHP) fans • Up to 6 hot plug fans
Dimensions	• Height – 86.8 mm (3.41 inches) • Width – 482 mm (18.97 inches) • Depth – 772.13 mm (30.39 inches) with bezel 758.29 mm (29.85 inches) without bezel
Form Factor	2U rack server
Embedded Management	• iDRAC9 • iDRAC Direct • iDRAC RESTful API with Redfish • iDRAC Service Module • Quick Sync 2 wireless module
Bezel	Optional LCD bezel or security bezel
OpenManage Software	• CloudIQ for PowerEdge plug in • OpenManage Enterprise • OpenManage Enterprise Integration for VMware vCenter • OpenManage Integration for Microsoft System Center • OpenManage Integration with Windows Admin Center • OpenManage Power Manager plugin • OpenManage Service plugin • OpenManage Update Manager plugin
Mobility	OpenManage Mobile
OpenManage Integrations	• BMC Truesight • Microsoft System Center • OpenManage Integration with ServiceNow • Red Hat Ansible Modules • Terraform Providers • VMware vCenter and vRealize Operations Manager
Security	• AMD Secure Memory Encryption (SME) • AMD Secure Encrypted Virtualization (SEV) • Cryptographically signed firmware • Data at Rest Encryption (SEDs with local or external key mgmt) • Secure Boot • Secure Erase • Secured Component Verification (Hardware integrity check) • Silicon Root of Trust • System Lockdown (requires iDRAC9 Enterprise or Datacenter) • TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ
Embedded NIC	2 x 1 GbE LOM card (optional)

Feature	Technical Specifications	
Network options	1 x OCP card 3.0 (optional) Note: The system allows either LOM card or an OCP card or both to be installed in the system.	
GPU Options	Up to 3 x 300 W DW or 6 x 75 W SW	
Ports	**Front Ports** • 1 x iDRAC Direct (Micro-AB USB) port • 1 x USB 2.0 • 1 x VGA	**Rear Ports** • 1 x Dedicated iDRAC Ethernet port • 1 x USB 2.0 • 1 x USB 3.0 • 1 x VGA • 1 x Serial (optional) • 1 x VGA (optional for Direct Liquid Cooling configuration)
	Internal Ports • 1 x USB 3.0 (optional)	
PCIe	Up to eight PCIe slots: • Slot 1: 1 x8 Gen5 Full height, Half length • Slot 2: 1 x8/1 x16 Gen5 Full height, Half length or 1 x16 Gen5 Full height, Full length • Slot 3: 1 x16 Gen5 or 1 x8/1 x16 Gen4 Low profile, Half length • Slot 4: 1 x8 Gen4 Full height, half length • Slot 5: 1 x8/1 x16 Gen4 Full height, Half length or 1 x16 Gen4 Full height, Full length • Slot 6: 1 x8/1 x16 Gen4 Low Profile, Half length • Slot 7: 1 x8/1 x16 Gen5 or 1 x16 Gen4 Full height, Half length or 1 x16 Gen5 Full height, Full length • Slot 8: 1 x8/1 x16 Gen5 Full height, Half length	
Operating System and Hypervisors	• Canonical Ubuntu Server LTS • Microsoft Windows Server with Hyper-V • Red Hat Enterprise Linux • SUSE Linux Enterprise Server • VMware ESXi For specifications and interoperability details, see Dell.com/OSsupport.	
OEM-ready version available	From bezel to BIOS to packaging, your servers can look and feel as if they were designed and built by you. For more information, visit Dell.com > Solutions > OEM Solutions.	

APEX Flex on Demand

Acquire the technology you need to support your changing business with payments that scale to match actual usage. For more information, visit https://www.delltechnologies.com/en-us/payment-solutions/flexible-consumption/flex-on-demand.htm.

Discover more about PowerEdge servers

Learn more about services for PowerEdge servers

Learn more about our systems management solutions

Search our Resource Library

Follow PowerEdge servers on Twitter

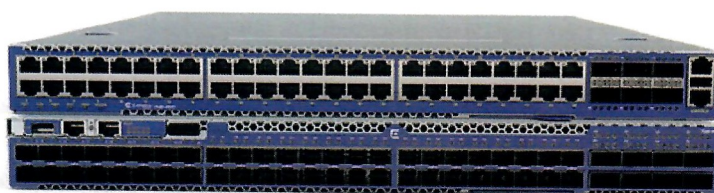Contact a Dell Technologies Expert for Sales or Support

DELLTechnologies

Extreme 7520

Highlights

- High-performance, fixed-form switches for leaf, spine, aggregation, or core applications
- Universal dual-persona hardware allows user choice of switch operating systems
- ExtremeCloud™ IQ and ExtremeCloud IQ - Site Engine for powerful, secure and easy to use cloud-based network management.
- Fabric Connect for automated network operations, simplified network provisioning and enhanced security

Key Hardware Features

- Three models – two models with no MACsec and one model with MACsec in a fixed 1U form factor
- AC and DC power options
- Back-to-front and front-to-back airflow options
- Up to 8-unit stacking
- Integrated Application Hosting enables 3rd-party applications without impacting switch performance
- Non-blocking, wire-speed design

Universal Aggregation/Core Switch Platform

The Extreme 7520 are purpose-built 48-port 10Gb and 48-port 25Gb switches designed for high-performance aggregation and core applications. As a universal hardware platform, the 7520 provides end-to-end secure network segmentation, in addition to advanced policy capabilities, with a user-selectable choice of Extreme's flagship switch operating systems. This makes the 7520 a uniquely flexible platform that can be deployed in a variety of aggregation and core environments.

The Extreme 7520 network hardware platform enables organizations to design networks that accommodate a variety of applications and east-west traffic patterns. With its high-density scale-out architecture, leading power efficiency, and airflow options, the 7520 platform delivers a cost-effective solution that optimizes power, cooling, and equipment room space, wherever your network operating center might be.

Three models of the 7520 are available.

7520-48XT-6C

48 x 1Gb/10Gb 10GBaseT copper ports (no MACsec)
6 x 40Gb/100Gb QSFP28 fiber ports (no MACsec)

7520-48Y-8C

48 x 1Gb/10Gb/25Gb SFP28 fiber ports (no MACsec)
8 x 40Gb/100Gb QSFP28 fiber ports (no MACsec)

7520-48YE-8CE

48 x 10/25Gb SFP28 fiber ports with MACsec support
8 x 100Gb QSFP28 fiber ports with MACsec support
Note: This model does not support stacking

Universal Hardware Platform

The 7520 Series comes with a dual-persona capability allowing user choice of the switch operating system (OS). Either the Switch Engine (EXOS) or Fabric Engine (VOSS) persona can be enabled on 7520 hardware models. The desired persona can be selected at start-up or changed at a later stage. Once selected, the 7520 assumes the features/capabilities of the selected OS.

7520 persona activation can be done manually at boot-up, including via the system CLI. Or, it can be automated by pre-provisioning the 7520 persona in ExtremeCloud IQ. When first booted, the 7520 automatically connects to ExtremeCloud IQ to find its persona. The pre-provisioned OS persona is then remotely enabled on the 7520 system – eliminating the need for manual selection.

Ethernet Fabric Services

The 7520 supports a variety of Ethernet Fabric services, including Extreme's Fabric Connect when running Fabric Engine (VOSS) and Extreme's IP Fabric when running Switch Engine (EXOS). It also supports Fabric Attach for automated connection to either Layer 2 or Layer 3 fabric services. Extreme's Fabric Connect and IP Fabric on the 7520 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

Two of the 7520's QSFP28 uplink ports can be used for high-speed 400Gb stacking when running Switch Engine (EXOS). Up to eight systems can be stacked using qualified direct attach cables and/or optical transceivers. (Note: Stacking is not supported on the 7520-48YE -8CE model or when running Fabric Engine (VOSS)).

Management

The 7520 can be managed by ExtremeCloud IQ and ExtremeCloud IQ-Site Engine for comprehensive unified management with a consolidated view of users, devices and applications across wired and wireless networks.

Zero-touch provisioning from ExtremeCloud IQ lets one quickly bring new 7520 switches online as well as enable the selection of the operating system (OS) persona. Alternatively, 7520 on-box management can be done manually via a web-based GUI or generic CLI.

Switch Specifications

Model	7520-48Y-8C 7520-48YE-8CE	7520-48XT-6C
Ports	• 48 x 1/10/25GbE SFP28 ports (48Y/8C) • 48 x 10/25GbE SFP28 ports (48YE-8CE) • 8 x 40/100GbE QSFP28 ports • 1 x Serial console port RJ-45 • 1 x 10/100/1000BASE-T out-of-band management port • USB Type A storage port	• 48 x 1/10GbE 10GBaseT ports • 6 x 40/100GbE QSFP28 ports • 1 x Serial console port RJ-45 • 1 x 10/100/1000BASE-T out-of-band management port • USB Type A storage port
Power Supplies	• Modular 800W AC power supply (up to two PSUs) • Modular 800W DC power supply (up to two PSUs) • Front to Back and Back to Front airflow option	• Modular 800W AC power supply (up to two PSUs) • Modular 800W DC power supply (up to two PSUs) • Front to Back and Back to Front airflow options
Fan Modules	• 6 fan modules • Front-Back and Back-Front airflow options	• 6 fan modules • Front-Back and Back-Front airflow options
Dimensions	• 17.3in W/21.24in D/1.7in H (44.0cm/53.95cm/4.3cm) (48Y-8C) • 17.31in W/21.69in D/1.71in H (44.0cm/53.95cm/4.3cm) (48YE-8CE)	• 17.3in W/20.9in D/1.7in H (44.0cm/53.2cm/4.3cm)
Weight	• 16.71 lb (7.58 kg) empty chassis (48Y-8C) • 22.29 lb (10.11 kg) with two AC PSUs (-F and -R models) (48Y-8C) • 20.35 lb (9.23 kg) empty chassis (48YE-8CE) • 26.23 lb (11.90 kg) with two AC PSUs (-F and -R models) (48YE-8CE)	• 16.34 lb (7.41 kg) no PSU • 20.88 lb (9.47 kg) with two AC PSUs (-F and -R models)
Performance	• Line rate 4 Tbps Switching Capacity (2 Tbps ingress, 2 Tbps egress) • Typical Latency: 800 ns • Forwarding rate: 1000 Mpps	• Line rate 2.16 Tbps Switching Capacity (1.08 Tbps ingress, 1.08 Tbps egress) • Typical Latency: 2,400 ns • Forwarding rate: 1000 Mpps
CPU/Memory	• 8-core Processor • 16GB DDR4 ECC memory • 128GB SSD memory	• 8-core Processor • 16GB DDR4 ECC memory • 128GB SSD memory
Packet Buffers	32MB	32MB
Environmental Operating Conditions	AC/DC, one fan failed, front-to-back: • 0°C (32°F) to 50°C (122°F) at sea level; • 0°C (32°F) to 40°C (104°F) up to 3000 m (10,000 ft) AC/DC, one fan failed, back-to-front: • 0°C (32°F) to 45°C (113°F) at sea level; • 0°C (32°F) to 40°C (104°F) up to 3000 m (10,000 ft)	AC/DC, one fan failed, front-to-back: • 0°C (32°F) to 50°C (122°F) at sea level; • 0°C (32°F) to 40°C (104°F) up to 3000 m (10,000 ft) AC/DC, one fan failed, back-to-front: • 0°C (32°F) to 45°C (113°F) at sea level; • 0°C (32°F) to 40°C (104°F) up to 3000 m (10,000 ft)

7520 Software Scaling Values

Switch Engine

MAC Table: 294,000
IPv4 ARP Table: 184,000

IPv4 Route Table: 256,000
IPv4 Multicast Entries (S,G,V): 104,000
IPv6 Neighbor Table: 57,000
IPv6 Route Table: 131,000
ACLs (Ingress/Egress): 8,192/1,024

QoS Egress Queues per port: 8
VLANs: 4,094
Routed VLANs: 2,048

One Policy Scaling
Policy Profiles: 63
Unique Permit/Deny Rules per switch: 16,312

Fabric Engine
MAC Table: 160,000
IPv4 ARP Table: 40,000 with SPB
IPv4 Route Table: 15,000
IP Multicast Entries (S,G,V): 6,000

IPv6 Neighbor Table: 32,000
IPv6 Route Table: Up to 7,000
ACLs (Ingress/Egress): 512/254 for non-IPv6
QoS Egress Queues per port: 8
VLANs: 4,059
IP Interfaces (Routed VLANs): 1,000

Fabric Connect Scaling
Fabric Adjacencies per switch: 255
BEB Nodes per VSN: 2,000
L2 VSNs: 4,000
L3 VSNs: 256

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) (Fans high, all ports 100% traffic)	Maximum Power Consumption (W) (Fans high, all ports 100% traffic)
7520-48XT-6C	407.48	119.42	1359.06	398.30
7520-48Y-8C	326.71	95.75	1307.36	383.15
7520-48YE-8CE	596.58	174.84	1638.51	480.20

Power Supply Specifications

	800W AC PSU XN-ACPWR-800W-F/R	800WDC PSU XN-DCPWR-800W-F/R
Dimensions	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 (8.0 cm x 4.0 cm x 20.6 cm)
Weight	1.79 lb (0.81kg)	1.85 lb (0.85kg)
Voltage Input Range	100VAC-140 VAC/200VAC-240 VAC	-48VDC to -60VDC
Line Frequency Range	50Hz– 60Hz	N/A
PSU Input Socket	IEC320 C14	Terminal Block
PSU Output Cord	IEC320 C13	N/A
Operating Conditions	0°C–55°C operation	0°C–55°C operation

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) 98m/s2 (10G), 11ms, 18 shocks

Random vibration: 3Hz to 500Hz 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: 5Hz to 62Hz at velocity 5 mm/s, 62Hz to 500Hz at 0.2 G

Packaged Random Vibration: 5Hz to 20Hz at 1.0 ASD w/–3 dB/oct. from 20Hz 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 62368-1

UL/CuL62368-1 Listed

CAN/CSA-C22.2 No 60950-1-07 Incl. AM1 (2011) and AM2 (2014)

CAN/CSA C22.2 No. 62368-1:19

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

CDRH Letter of Approval (US FDA Approval)

European ITE

EN 60950-1 2nd Edition

EN62368-1

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 62368.1:2022 (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 55035

EN 55011

EN 61000-3-2,2014 (Harmonics)

EN 61000-3-3 2013 (Flicker)

EN 61000-6-2

EN 61000-6-4

EN 300 386 (EMC Telecommunications) 2014/30/EU EMC Directive

International EMC Certifications

CISPR 32, Class A (International Emissions) AS/NZSCISPR32

CISPR24 Class A (International Immunity)

IEC 61000-4-2/EN 61000-4-2 Electrostatic Discharge, 8 kV 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

IEC61000-4-6 Conducted Immunity, 0.15-80MHz, 10V/rms, 80%AM (1kHz), Criteria A

IEC/EN61000-4-11 Power Dips & Interruptions, >30%, 25 periods, Criteria C

Country Specific

VCCI Class A (Japan Emissions)

ACMA RCM (Australia Emissions)

CQC Mark (China)

KCC Mark, EMC Approval (Korea)

BSMI (Taiwan)

Anatel (Brazil)

NoM (Mexico)

EAC (Russia, Belarus, Kazakhstan)

NRCS (South Africa)

TEC (India)

IEEE 802.3 Media Access Standards

IEEE 802.3ab 1000BASE-T

IEEE 802.3ae 10GBASE-X

IEEE 802.3 10GBASE-T (up to 100m using Cat6a cabling or better)

IEE 802.3by-2016 25Gb/s Operation

IEEE 802.3ba/802.3bm 40 GBASE-X and 100 GBASE-X

Ordering Notes

Customers ordering an AC-bundled version of the 7520 Series switch receive the hardware switch along with a Base software license, integrated power supply, fan modules, and rack-mount kit.

Customers ordering a non-bundled version of the 7520 Series switch customers will only receive the hardware switch, Base software license, and rackmount kit. Customers in this case, must order Power Supply Units (PSU) and fan modules separately.

At least one Power Supply Unit (PSU) is required for 7520 operations. Additional power supplies, transceiver/optics, power cords, as well as Premier license, must be ordered separately.

Base Software and Optional Premier License

The Base software included with each 7520 unit supports most available software features. Certain features, however, require a Premier License to operate:

For Switch Engine, a Premier License is required for:

5 or more OSPF interfaces
PIM DM/PIM SSM
Anycast RP (Rendezvous Point)
MultiSource Discovery Protocol (MSDP)
IS-IS/BGP4/MBGP*
GRE Tunneling
Ethernet VPN (EVPN)

* Up to 2 BGP interfaces included in Base software

For Fabric Engine, a Premier License is required for :

Layer 3 Virtual Services Networks (VSNs)
Distributed Virtual Routing Controller

VXLAN Gateway
5 or more active OSPF interfaces
17 or more BGP peers
Insight Architecture/Integrated Application Hosting (IAH)

Power Supplies for Use with Your Switch

Each 7520 Series switch runs with two replaceable internal power supply modules that provide all of the power needed for the switch to operate. You can remove one power supply module without interrupting the switch's operation. Supported power supply configurations include two 800W AC power supply modules, two 800W DC power supply modules, or one 800W AC and one 800W DC power supply module. Power supply modules have integrated cooling fans that operate independently of the switch fans and are available with front-to-back or back-to-front airflow. The direction of the airflow in both power supply modules must be in the same direction and must also be in the same direction of the airflow in the fan modules.

Ordering Information

Part Number	Product Name	Description
7520-48XT-6C	7520-48XT Base System	Extreme 7520-48XT Switch - Ships with two empty power supply slots, six empty fan slots, one 4-post rack mount kit. Supports 48 x 1G/10G copper ports and 6 x 40G/100G fiber ports
7520-48XT-6C-AC-F	7520-48XT with front-to-back airflow	Extreme 7520-48XT Switch - Ships with two AC front-to-back airflow power supplies, six front- to-back airflow fans, one 4-post rack mount kit. Supports 48 x 1G/10G copper ports and 6 x 40G/100G fiber ports
7520-48XT-6C-AC-R	7520-48XT with back-to-front airflow	Extreme 7520-48XT Switch - Ships with two AC back-to-front airflow power supplies, six back- to-front airflow fans, one 4-post rack mount kit. Supports 48 x 1G/10G copper ports and 6 x 40G/100G fiber ports
7520-48Y-8C*	7520-48Y Base System	Extreme 7520-48Y Switch with two empty power supply slots, six empty fan slots, Ships with one 4-post rack mount kit. Supports 48 x 1G/10G/25G fiber ports and 8 x 40G/100G fiber ports
7520-48YE-8CE*	7520-48YE Base System	Extreme 7520-48YE Switch with two empty power supply slots, six empty fan slots, Ships with one 4-post rack mount kit. Supports 48 x 10G/25G fiber ports and 8 x 40G/100G fiber ports. Includes embedded MACsec capabilities.
7520-48Y-8C-AC-F*	7520-48Y with front- to-back airflow	Extreme 7520-48Y Switch - Ships with two AC front-to-back airflow power supplies, six front- to-back airflow fans, one 4-post rack mount kit. Supports 48 x 1G/10G/25G fiber ports and 8 x 40G/100G fiber ports
7520-48YE-8CE-AC-F*	7520-48YE with front-to-back airflow	Extreme 7520-48YE Switch - Ships with two AC front-to-back airflow power supplies, six front- to-back airflow fans, one 4-post rack mount kit. Supports 48 x 10G/25G fiber ports and 8 x 40G/100G fiber ports. Includes embedded MACsec capabilities.

Part Number	Product Name	Description
7520-48Y-8C-AC-R*	7520-48Y with back- to-front airflow	Extreme 7520-48Y Switch - Ships with two AC back-to-front airflow power supplies, six back- to-front airflow fans, one 4-post rack mount kit. Supports 48 x 1G/10G/25G fiber ports and 8 x 40G/100G fiber ports
7520-48YE-8CE-AC-R*	7520-48YE-8CE- AC-R with back-to- front airflow	Extreme 7520-48YE Switch - Ships with two AC back-to-front airflow power supplies, six back- to-front airflow fans, one 4-post rack mount kit. Supports 48 x 10G/25G fiber ports and 8 x 40G/100G fiber ports. Includes embedded MACsec capabilities.

* When running Fabric Engine on the 7520, 2 of the 7520 uplink ports are blocked in support of Ethernet Fabric Connect (SPB) functionality.

Accessories

Part Number	Product Name	Description
XN-ACPWR-800W-F	800W AC PSU (Front-to-Back)	AC800W PSU, Front to Back Airflow for use in 7520, 7720
XN-ACPWR-800W-R	800W AC PSU (Back-to-Front)	AC800W PSU, Back to Front Airflow for use in 7520, 7720
XN-DCPWR-800W-F	800W DC PSU (Front-to-Back)	DC800W PSU, Front to Back Airflow for use in 7520, 7720
XN-DCPWR-800W-R	800W DC PSU (Back-to-Front)	DC800W PSU, Back to Front Airflow for use in 7520, 7720
XN-FAN-001-F	Fan Module (Front-to-Back)	Single fan module Front to Back Airflow (also used in X695, VSP 7400, SLX 9150, SLX 9250, 7720, 8520, and 8720)
XN-FAN-001-R	Fan Module (Back-to-Front)	Single fan module Back to Front Airflow (also used in X695, VSP 7400, SLX 9150, SLX 9250, 7720, 8520, and 8720)
XN-2P-RKMT299	Two-post rack mount kit	Two-post rack mount kit for 7520 and 7720 switches
XN-4P-RKMT298	Four-post rack mount kit	Four-post rack mount kit for 7520-48Y, 7520-48XT, and 7720 switches
XN-4P-RKMT302	Four-post rack mount kit	Four-post rack mount kit for 7520-48YE switches

Software Licenses

Part Number	Product Name	Description
7000-PRMR-LIC-P	Premier License for 7000 Series	Perpetual Premier License for Extreme 7000 series (Includes Integrated Application Hosting)
7000-MACSEC-LIC-P	MACsec License for 7000 Series	Perpetual MACsec License for Extreme 7000 series

Warranty

All 7520 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 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 our ExtremeWorks Maintenance Services page for more information.

Optics/Transceivers

For a list of the optics/transceivers supported on the 7520 Series, refer to our Extreme Optics Compatibility Tool.

Power Cords

In support of Extreme Networks green initiatives, power cords are not included with the 7520 but can be ordered separately. They should be specified at time of ordering.
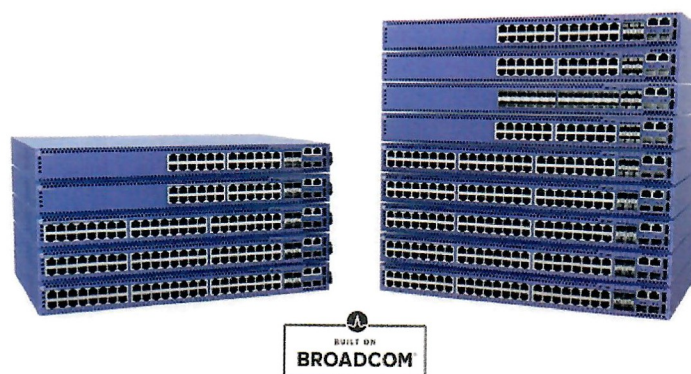
5420 Series

Highlights

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

Key Hardware Features

- Fixed 24 and 48-port models with gigabit and multi-gigabit support
- 30W, 60W, and 90W PoE (Power over Ethernet) support for powering connected devices
- 4 x 1/10Gb SFP+ or 4 x 1/10/25Gb built-in uplink ports
- 80Gb per unit stacking of up to eight switches
- Secure link encryption with MACsec across both access and uplink ports
- Non-blocking wire speed design

Universal Edge Switch Platform

The 5420 Series is a family of high-performance, feature-rich, stackable edge switches designed for the next-generation digital enterprise. Available in 24 and 48-port models, the 5420 features both gigabit and multi-gigabit (1/2.5G) versions with up to 90W PoE enabling it to be deployed across a range of edge and wiring-closet environments. As a universal hardware platform, the 5420 also offers a user-selectable choice of Extreme's flagship switch operating systems for a uniquely flexible platform.

The 5420 Series consists of 5420M and 5420F families to address a variety of end-user needs and price points. 5420M models offer field-replaceable power supplies and fans as well as four 1/10/25Gb built-in uplink ports, while 5420F models offer fixed power supply (with support for a second field-replaceable power supply), fixed fans, and four 1/10Gb built-in uplink ports. All models provide 30/60/90W PoE capabilities making them an ideal wired back end for wireless APs or in support of Next Gen powered Ethernet devices, such as digital signage, pan-tilt-zoom cameras, smart lighting, or point-of-sale terminals.

Universal Hardware Platform

The 5420 comes with a dual-persona capability, allowing you to choose your OS. Either the Switch Engine (EXOS)[1] or Fabric Engine (VOSS)[2] OS can be selected at switch start-up or changed at a later stage. When selected, the switch assumes the features and capabilities of that OS.

5420 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.

[1] Switch 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.

Ethernet Fabric Services

The 5420 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.

Power over Ethernet (PoE)

All 5420 models support 30W, 60W, and 90W PoE that conforms with IEEE 802.3bt. This enables the 5420 to address the needs of powered edge devices, while eliminating the need for additional electrical cabling and circuits. In addition, 5420 PoE models support perpetual and fast PoE for even more efficient and reliable powered edge device operation

MACsec Link Encryption

IEEE 802.1AE MACsec* is supported on 5420 access and built-in uplink ports, enabling the encryption and decryption of packets between connected switches or devices. As a link-only encryption, 5420 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 5420 provides the most secure link encryption.

* Supported on specific hardware revisions; please refer to the 5420 Hardware Installation Guide for details.

High-Performance Stacking

The 5420 Series supports high-speed stacking when running Switch Engine via its two built-in SFP-DD 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.

Audio Video Bridging

The 5420 Series supports IEEE 802.1 Audio Video Bridging (AVB) when running Switch Engine OS . This allows 5420 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.

Cloud-Based Network Management

The 5420 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 5420 switches online as well as select the OS persona.

Alternatively, 5420 on-box management can be done manually via a web-based GUI or generic command-line interface (CLI).

External Interfaces

Switch Model	Interfaces
5420F-24T-4XE	24 x 10/100/1000BASE-T ports • Full / Half-Duplex(autosensing) • MACsec-capable 4 x 1/10Gb SFP+ uplink ports(unpopulated) • MACsec-capable 2 x Stacking/SFP-DD 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
5420F-24P-4XE	24 x 10/100/1000BASE-T 802.3at (30W) ports • Full / Half-Duplex(autosensing) • MACsec-capable 4 x 1/10Gb SFP+ uplink ports(unpopulated) • MACsec-capable 2 x Stacking/SFP-DD 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
5420F-24S-4XE	24 x 100/1000BASE-X (SFP) ports (unpopulated) • MACsec-capable 4 x 1/10Gb SFP+ uplink ports(unpopulated) • MACsec-capable 2 x Stacking/SFP-DD 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
5420F-48T-4XE	48 x 10/100/1000BASE-T ports • Full / Half-Duplex(autosensing) • MACsec-capable 4 x 1/10Gb SFP+ uplink ports(unpopulated) • MACsec-capable 2 x Stacking/SFP-DD 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

Switch Model	Interfaces

5420F-48P-4XE	48 x 10/100/1000BASE-T 802.3at (30W) ports
	  · Full / Half-Duplex(autosensing)
	  · MACsec-capable
	4 x 1/10Gb SFP+ uplink ports(unpopulated)
	  · MACsec-capable
	2 x Stacking/SFP-DD 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

5420F-48P-4XL	48 x 10/100/1000BASE-T 802.3at (30W) ports
	  · Full / Half-Duplex(autosensing)
	  · MACsec-capable
	4 x 1/10Gb SFP+ uplink ports(unpopulated)
	  · MACsec-capable
	  · LRM-capable
	2 x Stacking/SFP-DD 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

5420F-8W-16P-4XE	8 x 10/100/1000BASE-T 802.3bt (90W) ports
	  · Full / Half-Duplex(autosensing)
	  · MACsec-capable
	16 x 10/100/1000BASE-T 802.3at (30W) ports
	  · Full/Half-Duplex(autosensing)
	  · MACsec-capable
	4 x 1/10Gb SFP+ uplink ports (unpopulated)
	  · MACsec-capable
	2 x Stacking/SFP-DD 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

5420F-16W-32P-4XE	16 x 10/100/1000BASE-T 802.3bt (90W) ports
	  · Full / Half-Duplex(autosensing)
	  · MACsec-capable
	32 x 10/100/1000BASE-T 802.3at (30W) ports
	  · Full / Half-Duplex(autosensing)
	  · MACsec-capable
	4 x 1/10Gb SFP+ uplink ports(unpopulated)
	  · MACsec-capable
	2 x Stacking/SFP-DD 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

Switch Model	Interfaces
5420F-16MW-32P-4XE	16 x 100M/1G/2.5GBASE-T 802.3bt (90W) ports · MACsec-capable 32 x 10/100/1000BASE-T 802.3at (30W) ports · Full / Half-Duplex(autosensing) · MACsec-capable 4 x 1/10Gb SFP+ uplink ports(unpopulated) · MACsec-capable 2 x Stacking/SFP-DD 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
5420M-24T-4YE	24 x 10/100/1000BASE-T ports · Full / Half-Duplex(autosensing) · MACsec-capable 4 x 1/10/25Gb SFP28 uplink ports (unpopulated) · MACsec-capable 2 x Stacking/SFP-DD 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
5420M-24W-4YE	24 x 10/100/1000BASE-T 802.3bt (90W) ports · Full / Half-Duplex(autosensing) · MACsec-capable 4 x 1/10/25Gb SFP28 uplink ports (unpopulated) · MACsec-capable 2 x Stacking/SFP-DD 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
5420M-48T-4YE	48 x 10/100/1000BASE-T ports · Full / Half-Duplex(autosensing) · MACsec-capable 4 x 1/10/25Gb SFP28 uplink ports (unpopulated) · MACsec-capable 2 x Stacking/SFP-DD 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

Switch Model	Interfaces
5420M-48W-4YE	48 x 10/100/1000BASE-T 802.3bt (90W) ports · Full / Half-Duplex(autosensing) · MACsec-capable 4 x 1/10/25Gb SFP28 uplink ports (unpopulated) · MACsec-capable 2 x Stacking/SFP-DD 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
5420M-16MW-32P-4YE	16 x 100M/1G/2.5GBASE-T 802.3bt (90W) ports · MACsec-capable 32 x 10/100/1000BASE-T 802.3at (30W) ports · Full / Half-Duplex(autosensing) · MACsec-capable 4 x 1/10/25Gb SFP28 uplink ports (unpopulated) · MACsec-capable 2 x Stacking/SFP-DD 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

* Notes on use of the 2 x Stacking/SFP-DD ports

1. With Switch Engine, the 2 x SFP-DD ports can used either for stacking or as Ethernet uplink ports (when not stacking).
2. With Fabric Engine, the 2 x SFP-DD ports can be used as Ethernet uplinks when in non-Fabric mode.
3. SFP-DD ports support either 10Gb or 20Gb data rates with the use of appropriate transceivers/cables.
4. When used as uplinks, 5420M models support up to 2 x 10Gb channels on each SFP-DD port
5. When used as uplinks, 5420F models support a single 10Gb channel on each SFP-DD port.

Performance and Scale

5420F Performance and Scale

Switch Model	Max Active 10/100/1000Mb Ports	Max Active 100Mb/1Gb/ 2.5Gb Ports	Max Active 100Mb/1Gb SFP Ports	Max Active 1Gb/10Gb SFP+ Ports	Max Active 1Gb/10Gb/ 25Gb SFP28 Ports	Max Active 20Gb Stacking Ports***	Aggregated Switch Bandwidth	Frame Forwarding Rate
5420F-24T-4XE	24	0	0	6*	0	2	208Gbps	154.8Mpps
5420F-24P-4XE	24	0	0	6*	0	2	208Gbps	154.8Mpps
5420F-24S-4XE	0	0	24	6*	0	2	208Gbps	154.8Mpps
5420F-48T-4XE	48	0	0	6*	0	2	256Gbps	190.5Mpps
5420F-48P-4XE	48	0	0	6*	0	2	256Gbps	190.5Mpps
5420F-48P-4XL	48	0	0	6*	0	2	256Gbps	190.5Mpps
5420F-8W-16P-4XE	24	0	0	6*	0	2	208Gbps	154.8Mpps

Switch Model	Max Active 10/100/1000Mb Ports	Max Active 100Mb/1Gb/2.5Gb Ports	Max Active 100Mb/1Gb SFP Ports	Max Active 1Gb/10Gb SFP+ Ports	Max Active 1Gb/10Gb/25Gb SFP28 Ports	Max Active 20Gb Stacking Ports***	Aggregated Switch Bandwidth	Frame Forwarding Rate
5420F-16W-32P-4XE	48	0	0	6*	0	2	256Gbps	190.5Mpps
5420F-16MW-32P-4XE	32	16	0	6*	0	2	304Gbps	226.2Mpps

5420M Performance and Scale

Switch Model	Max Active 10/100/1000Mb Ports	Max Active 100Mb/1Gb/2.5Gb Ports	Max Active 100Mb/1Gb SFP Ports	Max Active 1Gb/10Gb SFP+ Ports	Max Active 1Gb/10Gb/25Gb SFP28 Ports	Max Active 20Gb Stacking Ports***	Aggregated Switch Bandwidth	Frame Forwarding Rate
5420M-24T-4YE	24	0	0	8**	4	2	328Gbps	244.0Mpps
5420M-24W-4YE	24	0	0	8**	4	2	328Gbps	244.0Mpps
5420M-48T-4YE	48	0	0	8**	4	2	376Gbps	279.7Mpps
5420M-48W-4YE	48	0	0	8**	4	2	376Gbps	279.7Mpps
5420M-16MW-32P-4YE	32	16	0	8**	4	2	424Gbps	315.5Mpps

* Includes 2 x 1 /10G ports available using the SFP-DD ports when these ports are not used for stacking with Switch Engine, or when in non-Fabric mode with Fabric Engine

** Includes 4 x 1 /10Gb ports available through channelization of the 2 x SFP-DD ports when these ports are not used for stacking with Switch Engine, or when in non-Fabric mode with Fabric Engine. It also includes the 4 x SFP28 uplink ports when run at 1/10Gb

*** Switch Engine only: 20Gb stacking requires SFP-DD transceivers/cables; 10Gb stacking supported using SFP+ transceivers/cables

Software Scaling

5420F Series with Switch Engine
- MAC Table: 32,000
- IPv4 ARP Table: 16,000
- IPv4 Route Table: 12,000
- IP Multicast Entries (S,G,V): 6,000
- IPv6 Route Table: 6,000
- IPv6 Neighbor Table 6,000
- ACL (Ingress/Egress): 8,000/1,024
- QoS Egress Queues/Port: 8
- VLANs: 4,094
- IP Interfaces (aka Routed VLANs): 1,533

One Policy Scaling
- Policy Profiles: 63
- Unique Permit/deny rules per switch: 4,024

5420M Series with Switch Engine
- MAC Table: 64,000
- IPv4 ARP Table: 24,000
- IPv4 Route Table: 12,000
- IP Multicast Entries (S,G,V): 12,000
- IPv6 Route Table: 6,000
- IPv6 Neighbor Table 12,000
- ACL (Ingress/Egress): 18,000/1,024
- QoS Egress Queues/Port: 8
- VLANs: 4,094
- IP Interfaces (aka Routed VLANs): 1,533

One Policy Scaling
- Policy Profiles: 63
- Unique Permit/deny rules per switch: 8,120

5420F Series with Fabric Engine

- MAC Table: 16,000 (32,000 non-Fabric)
- IPv4 ARP Table: 8,000
- IPv4 Route Table: 11,750
- IP Multicast Entries (S,G,V): 4,000
- IPv6 Route Table: 5,750
- IPv6 Neighbor Table 8,000
- ACL (Ingress/Egress): 1,024/336
- QoS Egress Queues/Port: 8
- VLANs: 4,059
- IP Interfaces (aka Routed VLANs): 248

Fabric Connect Scaling

- Fabric Adjacencies per switch: 50
- BEB Nodes per VSN (I-SID): 500

- L2 VSNs: 512
- L3 VSNs: 64

5420M Series with Fabric Engine

- MAC Table: 32,000 (64,000 non-Fabric)
- IPv4 ARP Table: 24,000
- IPv4 Route Table: 11,750
- IP Multicast Entries (S,G,V): 4,000
- IPv6 Route Table: 5,750
- IPv6 Neighbor Table 16,000
- ACL (Ingress/Egress): 1,024/336
- QoS Egress Queues/Port: 8
- VLANs: 4,059
- IP Interfaces (aka Routed VLANs): 248

Fabric Connect Scaling

- Fabric Adjacencies per switch: 50
- BEB Nodes per VSN (I-SID): 500
- L2 VSNs: 512
- L3 VSNs: 64

Weights and Dimensions

Switch Model	Weight*	Physical Dimensions
5420F-24T-4XE	4.10 kg (9.03 lb.)	Height: 43.2 mm (1.7 in.) Width: 442.0 mm (17.4 in.) Depth: 287.02 mm (11.3 in.)
5420F-24P-4XE	4.64 kg (10.23 lb.)	
5420F-24S-4XE	4.12 kg (9.08 lb.)	
5420F-8W-16P-4XE	4.64 kg (10.23 lb.)	
5420F-48T-4XE	4.64 kg (10.23 lb.)	
5420F-48P-4XE	5.28 kg (11.64 lb.)	Height: 43.2 mm (1.7 in.) Width: 442.0 mm (17.4 in.) Depth: 330.20 mm (13.0 in.)
5420F-48P-4XL	5.28 kg (11.64 lb.)	
5420F-16W-32P-4XE	5.36 kg (11.82 lb.)	
5420F-16MW-32P-4XE	5.30 kg (11.68 lb.)	
5420M-24T-4YE	4.18 kg (9.22 lb.)	
5420M-24W-4YE	4.40 kg (9.70 lb.)	
5420M-48T-4YE	4.39 kg (9.68 lb.)	
5420M-48W-4YE	4.73 kg (10.43 lb.)	
5420M-16MW-32P-4YE	5.30 kg (11.68 lb.)	

* Measured weight includes fan (XN-FAN-000) and PSU cover(s), but does not include optional power supply unit(s).

Optional Power Supply Unit Specifications

	XN-ACPWR-150W XN-ACPWR-150W-FB	XN-ACPWR-600W XN-ACPWR-600W-FB	XN-ACPWR-920W	XN-ACPWR-1200W* XN-ACPWR-1200W-FB	XN-ACPWR-2000W** XN-ACPWR-2000-FB-A
Voltage Input Range (Nominal)	100-127/200-240 VAC	100-127/200-240 VAC	100-127/200-240 VAC	100-127/200-240 VAC	100-127/200-240 VAC
Line Frequency Range	47Hz to 63Hz	47Hz to 63Hz	47Hz to 63Hz	47Hz to 63Hz	47Hz to 63Hz
Power Supply Input Socket	IEC/EN60320 C14	IEC/EN60320 C14	IEC/EN60320 C14	IEC/EN60320 C16 IEC/EN 60320 C14 (for -FB)	IEC/EN60320 C16 IEC/EN 60320 C14 (for -FB-A)
Power Cord Input Plug	IEC/EN60320 C13	IEC/EN60320 C13	IEC/EN60320 C13	IEC/EN60320 C15 IEC/EN 60320 C13 (for -FB)	IEC/EN60320 C15 IEC/EN 60320 C13 (for -FB-A)
Operating Temperature	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 50°C (32°F to 122°F) Normal Operation	0°C to 50°C (32°F to 122°F) Normal Operation	0°C to 45°C (32°F to 113°F)***

* 200-240VAC is required to achieve full 1200W output. If run at 100-120 VAC, output is limited to 860W

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

*** At sea-level, 0°C to 40°C (32°F to 104°F) at 1500 m; 0°C to 35°C (32°F to 95°F) at 3000 m

5420F Internal Fixed and Secondary Power Supply Options

Model	Internal Fixed Power Supply Unit (PSU)*	Secondary Power Supply Unit (PSU)**
5420F-24T-4XE	120W AC PSU	XN-ACPWR-150W or XN-ACPWR-150W-FB
5420F-24P-4XE	660W AC PSU	XN-ACPWR-600W or XN-ACPWR-600W-FB
5420F-24S-4XE	150W AC PSU	XN-ACPWR-150W or XN-ACPWR-150W-FB
5420F-48T-4XE	120W AC PSU	XN-ACPWR-150W or XN-ACPWR-150W-FB
5420F-48P-4XE	860W AC PSU	XN-ACPWR-920W or XN-ACPWR-1200W-FB
5420F-48P-4XL	860W AC PSU	XN-ACPWR-920W or XN-ACPWR-1200W-FB
5420F-8W-16P-4XE	660W AC PSU	XN-ACPWR-600W or XN-ACPWR-600W-FB
5420F-16W-32P-4XE	1200W AC PSU	XN-ACPWR-1200W or XN-ACPWR-1200W-FB
5420F-16MW-32P-4XE	1200W AC PSU	XN-ACPWR-1200W or XN-ACPWR-1200W-FB

* Internal Fixed PSU is non-orderable and comes pre-installed with each 5420F model

** Secondary PSU provides power redundancy in 5420F non-PoE models and enables maximum PoE Power Budget in 5420F PoE models (see table below). Model/PSU combinations other than those listed above are blocked physically or in software.

Note: Refer to the Hardware Installation Guide for minimum software versions needed on the switch for supported power supply units.

5420F PoE Power Budget

Model	PoE Budget with Single Internal Fixed PSU	PoE Budget with Recommended Secondary PSU
5420F-24P-4XE	380W	720W
5420F-48P-4XE	740W	1440W
5420F-48P-4XL	740W	1440W
5420F-8W-16P-4XE	480W	960W
5420F-16W-32P-4XE	872W*/960W**	1437W*/1874W**
5420F-16MW-32P-4XE	860W*/960W**	1425W*/1862W**

* @ 100-120 VAC

** @ 200-240 VAC

5420M Primary and Secondary Power Supply Options

Model	Primary Power Supply Unit (PSU)*	Secondary Power Supply Unit (PSU)*
5420M-24T-4YE	XN-ACPWR-150W or XN-ACPWR-150W-FB	XN-ACPWR-150W or XN-ACPWR-150W-FB
5420M-24W-4YE	XN-ACPWR-920W or XN-ACPWR-1200W-FB	XN-ACPWR-920W or XN-ACPWR-1200W-FB
5420M-48T-4YE	XN-ACPWR-150W or XN-ACPWR-150W-FB	XN-ACPWR-150W or XN-ACPWR-150W-FB
5420M-48W-4YE	XN-ACPWR-920W, XN-ACPWR-2000W, or XN-ACPWR-1200W-FB	XN-ACPWR-920W, XN-ACPWR-2000W, or XN-ACPWR-1200W-FB, XN-ACPWR-2000W-FB-A
5420M-16MW-32P-4YE	XN-ACPWR-920W, XN-ACPWR-2000W, or XN-ACPWR-1200W-FB	XN-ACPWR-920W, XN-ACPWR-2000W, or XN-ACPWR-1200W-FB, XN-ACPWR-2000W-FB-A

* Primary PSU is required; Secondary PSU provides power redundancy and enables maximum PoE Budget in 5420M PoE models (see table below). Model/PSU combinations other than those listed above are blocked physically or in software.

Note: Refer to the Hardware Installation Guide for minimum software versions needed on the switch for supported power supply units.

5420M PoE Power Budget

Model	Power Supply	PoE Budget with Single Primary PSU	PoE Budget with Optional Secondary PSU
5420M-24W-4YE	XN-ACPWR-920W XN-ACPWR-1200W-FB	720W	1440W
5420M-48W-4YE	XN-ACPWR-920W XN-ACPWR-1200W-FB	804W	1558W
	XN-ACPWR-2000W XN-ACPWR-2000W-FB-A	884W*/1440W**	1704W*/2880W**
5420M-16MW-32P-4YE	XN-ACPWR-920W XN-ACPWR-1200W-FB	787W	1541W
	XN-ACPWR-2000W XN-ACPWR-2000W-FB-A	884W*/1440W**	1687W*/2400W**

* @ 100-120 VAC

** @ 200-240 VAC

Minimum/Maximum Power Consumption and Heat Dissipation

5420F Switches

Switch Model	Minimum Power Consumption (W)	Minimum Heat Dissipation (BTU/hr)	Maximum Power Consumption (W)*	Maximum Heat Dissipation (BTU/hr)**
5420F-24T-4XE	24	81	62	211
5420F-24P-4XE	37	127	833	387
5420F-24S-4XE	35	119	114	388
5420F-48T-4XE	31	106	75	255
5420F-48P-4XE	48	164	1674	663
5420F-48P-4XL	49	168	1657	604
5420F-8W-16P-4XE	37	127	1092	452
5420F-16W-32P-4XE	46	156	2150	785
5420F-16MW-32P-4XE	50	172	2152	790

* Includes maximum PoE load (W) through the switch

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

5420M Switches

Switch Model	Minimum Power Consumption (W)	Minimum Heat Dissipation (BTU/hr)	Maximum Power Consumption (W)*	Maximum Heat Dissipation (BTU/hr)**
5420M-24T-4YE	28	95	57	194
5420M-24W-4YE	43	148	1601	551
5420M-48T-4YE	34	117	68	232
5420M-48W-4YE	72	245	3090	716
5420M-16MW-32P-4YE	69	234	2564	560

* Includes maximum PoE load (W) through the switch

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

Acoustic Noise

Switch Model	Bystander Sound Pressure – dB(A)*		Declared Sound Power – Bels*	
	1 PSU	2 PSUs	1 PSU	2 PSUs
5420F-24T-4XE	35.50	36.20	4.83	4.93
5420F-24P-4XE	39.60	39.90	5.16	5.24
5420F-24S-4XE	39.70	39.60	5.21	5.22
5420F-48T-4XE	35.30	34.90	4.78	4.77
5420F-48P-4XE	41.30	42.00	5.42	5.48
5420F-48P-4XL	44.00	42.60	5.67	5.57
5420F-8W-16P-4XE	42.30	43.20	5.52	5.63
5420F-16W-32P-4XE	44.30	54.10	5.72	6.62
5420F-16MW-32P-4XE	45.30	54.40	5.77	6.64
5420M-24T-4YE	33.50	33.00	4.59	4.65
5420M-24W-4YE	33.00	42.80	5.02	5.51
5420M-48T-4YE	33.40	33.00	4.56	4.59
5420M-48W-4YE**	52.70	59.80	6.42	6.97
5420M-16MW-32P-4YE**	51.70	50.50	6.30	6.25

* Noise measurements are based on operational tests conducted at 25°C (77°F) in compliance with ISO 7779

** 5420M-48W-4YE and 5420M-16MW-32P-4YE results using 2000 W PSUs (XN-ACPWR-2000W)

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: 5% 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: 5% 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 60825-1Class 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/5GBASE-T
IEEE 802.3bt Type4 PoE
IEEE 802.3ae 10GBASE-X
IEEE 802.3aq 10GBASE-LRM
IEEE 802.3by 25GBASE-X
IEEE 802.3az Energy Efficient Ethernet

Ordering Notes

Customers ordering a 5420F Series switch receive the hardware switch along with Base software license, integrated power supply, fan modules and rack-mount kit. 5420M Series switch customers receive the same components, except for power supplies which are not included with the unit.

At least one Power Supply Unit (PSU) is required for 5420M operation. Additional power supplies (either for 5420For 5420M switches), transceiver/optics, power cords, as well as Premier and/or MACsec licenses must be ordered separately.

Base Software and Optional Premier License

The Base software included with each 5420 unit supports most available software features. Certain features, however, require a Premier License to operate.

For Switch Engine, a Premier License is required for:

5 or more OSPF interfaces

PIMDM/PIM SSM

Anycast RP (Rendezvous Point)

MultiSource Discovery Protocol (MSDP)

IS-IS/BGP4/MBGP*

GRE Tunneling

Ethernet VPN (EVPN)

For Fabric Engine, a Premier License is required for:

5 or more OSPF active interfaces

3 or more BGP Peers

Layer 3 Virtual Service Networks (L3 VSNs)

Ordering Information

Part Number	Product Name	Description
5420F-24T-4XE	5420F 24-port Switch	5420 Universal Switch with 24 x 10/100/1000BASE-T Full / Half-Duplex ports, includes 4 x 1/10Gb SFP+ uplink ports,2 x Stacking/SFP-DD ports, 1 internal fixed PSU, one unpopulated PSU slot, fixed fan module, Base software license.
5420F-24P-4XE	5420F 24-port 30W PoE Switch	5420 Universal Switch with 24 x 10/100/1000BASE-T Full / Half-Duplex 802.3at 30W PoE ports, includes 4 x 1/10Gb SFP+ uplink ports, 2 x Stacking/SFP-DD ports, 1 internal fixed PSU, one unpopulated PSU slot, fixed fan module, Base software license.
5420F-24S-4XE	5420F 24-port SFP Switch	5420 Universal Switch with 24 x 100M/1Gb SFP ports, includes 4 x 1/10Gb SFP+ uplink ports, 2 x Stacking/SFP-DD ports, 1 internal fixed PSU, one unpopulated PSU slot, fixed fan module, Base software license.
5420F-48T-4XE	5420F 48-port Switch	5420 Universal Switch with 48 x 10/100/1000BASE-T Full / Half-Duplex ports, includes 4 x 1/10Gb SFP+ uplink ports,2 x Stacking/SFP-DD ports, 1 internal fixed PSU, one unpopulated PSU slot, fixed fan module, Base software license.
5420F-48P-4XE	5420F 48-port 30W PoE Switch	5420 Universal Switch with 48 x 10/100/1000BASE-T Full / Half-Duplex 802.3at 30W PoE ports, includes 4 x 1/10Gb SFP+ uplink ports, 2 x Stacking/SFP-DD ports, 1 internal fixed PSU, one unpopulated PSU slot, fixed fan module, Base software license

Part Number	Product Name	Description
5420F-48P-4XL	5420F 48-port 30W PoE Switch with LRM	5420 Universal Switch with 48 x 10/100/1000BASE-T Full / Half-Duplex 802.3at 30W PoE ports, includes 4 x 1/10Gb SFP+ LRM and uplink ports, 2 x Stacking/SFP-DD ports, 1 internal fixed PSU, one unpopulated PSU slot, fixed fan module, Base software license.
5420F-8W-16P-4XE	5420F 24-port Switch with 8 ports 90W and 16 ports 30W PoE	5420 Universal Switch with 8 x 10/100/1000BASE-T Full / Half-Duplex 802.3bt 90W PoE ports and 16 x10/100/1000BASE-T Full / Half-Duplex 802.3at 30W PoE ports, includes 4 x 1/10Gb SFP+ uplink ports, 2 x Stacking/SFP-DD ports, 1 internal fixed PSU, one unpopulated PSU slot, fixed fan module, Base software license.
5420F-16W-32P-4XE	5420F 48-port Switch with 16 ports 90W and 32 ports 30W PoE	5420 Universal Switch with 16 x 10/100/1000BASE-T Full / Half-Duplex 802.3bt 90W PoE ports and 32 x10/100/1000BASE-T Full / Half-Duplex 802.3at 30W PoE ports, includes 4 x 1/10Gb SFP+ uplink ports, 2 x Stacking/SFP-DD ports, 1 internal fixed PSU, one unpopulated PSU slot, fixed fan module, Base software license.
5420F-16MW-32P-4XE	5420F 48-port Switch with 16 ports 90W multi-rate and 32 ports 30W PoE	5420 Universal Switch with 16 x 100Mb/1Gb/2.5Gb 802.3bt 90W PoE ports plus 32 x 10/100/1000BASE-T Full / Half-Duplex 30W PoE ports, includes 4x 1/10Gb SFP+ uplink ports, 2 x Stacking/SFP-DD ports, 1 internal fixed PSU, one unpopulated PSU slot, fixed fan module, Base software license.
5420M-24T-4YE	5420M 24-port Switch	5420 Universal Switch with 24 x 10/100/1000BASE-T Full / Half-Duplex ports, includes 4 x 1/10/25Gb SFP28 uplink ports, 2 x Stacking/SFP-DD ports, two unpopulated PSU slots, modular fan module, Base software license.
5420M-24W-4YE	5420M 24-port 90W PoE Switch	5420 Universal Switch with 24 x 10/100/1000BASE-T 802.3bt 90W PoE Full / Half-Duplex ports, includes 4 x 1/10/25GbSFP28 uplink ports, 2 x Stacking/SFP-DD ports, two unpopulated PSU slots, modular fan module, Base software license.
5420M-48T-4YE	5420M 48-port Switch	5420 Universal Switch with 48 x 10/100/1000BASE-T Full / Half-Duplex ports, includes 4 x 1/10/25Gb SFP28 uplink ports, 2 x Stacking/SFP-DD ports, two unpopulated PSU slots, modular fan module, Base software license.
5420M-48W-4YE	5420M 48-port 90W PoE Switch	5420 Universal Switch with 48 x 10/100/1000BASE-T 802.3bt 90W PoE Full / Half-Duplex ports, includes 4 x 1/10/25GbSFP28 uplink ports, 2 x Stacking/SFP-DD ports, two unpopulated PSU slots, modular fan module, Base software license.
5420M-16MW-32P-4YE	5420M 48-port Switch with 16 ports 90W multi-rate and 32 ports PoE	5420 Universal Switch with 16 x 100Mb/1Gb/2.5Gb 802.3bt 90W PoE ports plus 32 x 10/100/1000BASE-T Full / Half-Duplex 30W PoE ports, includes 4 x 1/10/25Gb SFP28 uplink ports, 2 x Stacking/SFP-DD ports, two unpopulated PSU slots,modular fan module, Base software license.

Accessories

Part Number	Product Name	Description
XN-ACPWR-150W	150W AC PSU FB	150W AC PSU, Front to Back Airflow
XN-ACPWR-150W-FB	150W AC PSU FB	150W AC PSU, Front to Back Airflow
XN-ACPWR-600W	600W AC PSU FB	600W AC PSU, Front to Back Airflow
XN-ACPWR-600W-FB	600W AC PSU FB	600W AC PSU, Front to Back Airflow
XN-ACPWR-920W	920W AC PSU FB	920W AC PSU, Front to Back Airflow
XN-ACPWR-1200W	1200W AC PSU FB	1200W AC PSU, Front to Back Airflow
XN-ACPWR-1200W-FB	1200W AC PSU FB	1200W AC PSU, Front to Back Airflow
XN-ACPWR-2000W	2000W AC PSU FB	2000W AC PSU, Front to Back Airflow

Part Number	Product Name	Description
XN-ACPWR-2000W-FB-A	2000W AC PSU FB	2000W AC PSU, Front to Back Airflow
XN-FAN-000	Spare Fan Module FB	Spare Fan Module for 5420 Series, Front to Back Airflow

Software Licenses

Part Number	Product Name	Description
5000-PRMR-LIC-P	Premier License for 5000 Series	Perpetual Premier License for 5000 Series switches
5000-MACSEC-LIC-P	MACsec License for 5000 Series	Perpetual MACsec license for 5000 Series switches

Warranty

All 5420 Series models are covered under Extreme's Universal LLW policy. For warranty details, visit our Policies and Warranties page.

Optics/Transceivers

For a list of the optics and transceivers supported on the 5420 Series hardware, refer to our Extreme Optics Compatibility Tool.

Power Cords

Power cords are not included with the 5420 in support of our green initiatives but can be ordered separately.

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.

Certifications

For information on Industry, Security, and Government certifications for 5420 Series models, contact your Sales Representative.

Extreme networks

www.extremenetworks.com