Extreme networks

Data Sheet

4000 Series

Highlights

- Cloud-managed switching* that simplifies deployment, operation, and management
- Automate and streamline switch provisioning and day-to-day operations with cloud-based instant actions
- Mobile app to easily onboard, provision, and troubleshoot your switches
- Automated, maintenance-free feature and security updates delivered via the cloud
- ExtremeCloud™ IQ and/or ExtremeCloud IQ Site Engine for powerful and secure public cloud or on-premises management

Switch Featues

- 12-port, 24-port, and 48-port models with Gigabit and multi-Gigabit Ethernet access port options
- 4 x 1/10Gb uplink/stacking ports on all 4220 models
- 4 x 1/10/25Gb uplink ports plus 2 x 100Gb uplink/stacking ports on 4120 models
- 30W, 60W, 90W PoE options for powered connection of edge devices
- 8-port 1/10Gb SFP+ fiber model (4220)
- Silent operation up to 35°C on 12-port PoE, multi-gigabit and non-PoE models (4220)
- Non-blocking, wire-speed design

Cloud-Managed Switching Made Easy

The 4000 Series are ExtremeCloud IQ managed* Layer 2 switches that simplify network operations while delivering all the power and flexibility of a traditional enterprise access switch. As a fully cloud-managed solution, the 4000 Series is ideal for enterprises looking for easy-to-manage, cost-effective Ethernet connectivity for their campus, branch or distributed sites.

4000 Series cloud management combines instant actions along with centralized visibility that simplify switch deployment, provisioning, and troubleshooting. Machine learning tools help quickly isolate issues, continuous cloud-delivery ensures latest management feature updates, and zero-touch provisioning allows rapid deployment across sites.

With 90W PoE, multi-gigabit access, stacking and policy services, the 4000 Series is a switch platform capable of addressing the evolving connectivity requirements of today's and tomorrow's wired networks.

The 4000 Series consists of **4120** and **4220** model families:

The **4120** family includes a 24-port and a 48-port model, with multi-gigabit (1/2.5Gb) and 90W PoE support across all access ports, and high-speed 4 x 10/25Gb uplink plus 2 x 100Gb uplink/stack ports, making it ideal as a wired concentrator for high-density Wi-Fi/IoT environments.

The **4220** family includes 8, 12, 24, and 48-port models with gigabit and multi-gigabit (1/2.5/5Gb) access ports, up to 90W PoE, and 4 x SFP+ uplink/stack ports and is a highly flexible enterprise Layer 2 wired access solution.

* The 4000 Series is solely managed by ExtremeCloud IQ and/or ExtremeCloud IQ Site Engine and each switch requires an ExtremeCloud IQ Pilot SaaS Subscription.

4000 Series Cloud Management

The 4000 Series has been designed for easy-to-use cloud management that simplifies deployment, provisioning and troubleshooting. 4000 Series switches can be managed either by ExtremeCloud IQ or ExtremeCloud IQ Site Engine for comprehensive, unified management with a consolidated view of users, devices, and applications across wired and wireless networks. As a wholly cloud-managed solution, 4000 Series switches avoid the need for complex on-switch provisioning via direct console interface, making it easier for users to set up and manage their entire 4000 Series wired network.

ExtremeCloud IQ for the 4000 Series

ExtremeCloud IQ provides a native cloud management option for the 4000 Series. With a rich set of automated onboarding, provisioning and visibility features, ExtremeCloud IQ eases the day-to-day task of managing the 4000 Series through the following unique cloud-native features.

Instant Onboarding

4000 Series onboarding to the cloud is a hands-off operation using zero-touch provisioning. Simply unpack the 4000 Series switch, connect it to the network, and it automatically finds its connection to the cloud, ready to be provisioned. The ExtremeCloud Companion mobile app makes onboarding even easier with on-site cloud set-up and switch troubleshooting capabilities.

Instant Port

Instant Port automates adds, moves or changes across 4000 Series switch ports, eliminating the need for manual port configuration. The 4000 Series automatically detects the connected device type and applies the correct port parameters. The result is significant time savings when adding or moving devices across the 4000 Series wired network. A simple cloud interface allows Instant Port definitions of customer designated device types which can then be applied across a single switch, a stack, or even all 4000 Series switches in the network.

Instant Secure Port

Instant Secure Port leverages ExtremeCloud Universal ZTNA (UZTNA) for authentication and zero-trust policy enforcement across 4000 Series switch ports, while providing the same add, move, and change automation features of Instant Port. It simplifies 4000 Series security by using UZTNA's cloud-based security capabilities, including RADIUS authentication, unified visibility and reporting, as well as policy enforced locally on 4000 Series ports. In doing so, it delivers a consistent and frictionless security experience for any user or device connecting through the 4000 Series switch. (NOTE: ExtremeCloud UZTNA requires a separate license.)

Instant Stack

Instant Stack simplifies cloud-based stack provisioning, enabling the entire switch stack to be set-up through a single push-button operation. Real-world stack information, including each switch model and their stack order, is captured and replicated in the cloud. Once set up, the entire stack is then ready to be cloud-provisioned.

360° Views

Cloud-based 360° network topology and switch views enable drill down to the 4000 Series switch, port and connected clients for quick status, including historical trends. Aggregated 4000 Switch Health scores further offer a way to easily monitor an individual 4000 Series switch or all 4000 Series switches in the network, to quickly isolate and troubleshoot issues. Furthermore, unified views of the entire Extreme wired/wireless infrastructure are also available within ExtremeCloud IQ.

Continuous Cloud Feature Delivery

The 4000 Series benefits from continuous feature delivery with each new ExtremeCloud IQ update. It's an automated way to get maintenance-free cloud-feature and security updates delivered to every 4000 Series switch in the network. And if there is a need to update 4000 Series firmware, this can also be centrally done from the cloud.

ExtremeCloud IQ Site Engine for the 4000 Series

4000 Series switches can also be managed from ExtremeCloud IQ Site Engine as an on-premises cloud management option. ExtremeCloud IQ Site Engine supports complete end-to-end management and monitoring of wired, wireless and 3rd-party devices, with in-depth visibility and control of users, devices and applications. 4000 Series management features available using ExtremeCloud IQ Site Engine include zero-touch provisioning, device configuration, alarms and events, scripts and workflows, as well as inventory management including backup and restore functions. Also available are ExtremeAnalytics for 4000 Series telemetry reporting and ExtremeControl for OnePolicy configuration/support.

Universal Hardware

4220 models support a dual-persona capability allowing user choice of the switch operating system (OS). Either the Switch Engine or Fabric Engine persona can be enabled on 4220 hardware models. The desired persona can be selected at start-up or changed at a later stage. Once selected, the 4220 assumes the features/capabilities of the selected OS.

Notes:

1. 4120 models support the Switch Engine OS only.
2. On the 4220, Switch Engine OS is supported at General Availability (GA) with the Fabric Engine OS becoming available in a post-GA firmware release.

Flexible PoE

The 4000 Series offers models that include standards-based IEEE 802.3at 30W on 1 gigabit access ports and IEEE 802.3bt 30/60/90W on multi-gigabit ports. This includes 90W PoE support across all 24 or 48 ports of the 4120 hardware. PoE eliminates the need for additional electrical cabling and circuits otherwise needed to power edge devices, such as IP phones or wireless APs.

Multi-Gigabit Support

The 4120 supports 1/2.5Gb multi-gigabit operation across all its access ports. This includes 24 x 1/2.5Gb ports on the 4120-24MW-4Y and 48 x 1/2.5Gb ports on the 4120-48MW-4Y.

The 4220 includes multi-gigabit PoE models with ports that operate at 1/2.5/5Gb. The 4220-4MW-8P-4X and 4220-4MW-20P-4X models support 4 multi-gigabit ports and the 4220-8MW-40P-4X supports 8 multi-gigabit ports. This enables the connection of APs or other powered devices requiring more than 1 Gigabit of bandwidth.

Extreme Fabric Services

Fabric capabilities on the 4000 Series help automate the connection to Extreme's end-to-end Fabric solution. Fabric Attach services provide zero-touch edge provisioning and allow the 4000 Series to take advantage of the virtualized services and inherent security capabilities of the Extreme Fabric infrastructure.

Quiet (Fan-Off) Operation

Quiet (fan-off) mode operation at temperatures up to 35°C is supported on 4220 12-port PoE, non-PoE, and multi-gigabit models. This makes these models ideal for classrooms, hospitality suites, retail sites, or other noise-sensitive environments, especially outside of the wiring closet environment.

High-Performance Stacking

4120 models support 200Gb stacking via two built-in QSFP28 ports. Up to eight systems can be stacked using qualified 50Gb direct-attach cables and optical transceivers.

4220 models support 40Gb stacking via two built-in SFP+ uplink ports. Up to eight systems can be stacked using qualified 10Gb direct attach-cables and optical transceivers.

Notes:

1. Cross-stacking between 4120 and 4220 models is not supported.
2. Stacking is not supported when running Fabric Engine.

External Interfaces

4120 Systems

Switch Model	Interfaces
4120-24MW-4Y	• 24 x 10M/100M/1G/2.5GBase-T ports • 4 x 1/10/25Gb SFP28 ports (unpopulated) • 2 x Stacking/QSFP28 ports (unpopulated) • 1 x 100/1000BASE-T out-of-band management port • 1x Serial console port (RJ-45) • 2 x USB A port • 1 x USB Micro-B console port
4120-48MW-4Y	• 48 x 10M/100M/1G/2.5GBase-T ports • 4 x 1/10/25Gb SFP28 ports (unpopulated) • 2 x Stacking/QSFP28 ports (unpopulated) • 1 x 100/1000BASE-T out-of-band management port • 1 x Serial console port (RJ-45) • 2 x USB A port • 1 x USB Micro-B console port

4220 Systems

Switch Model	Interfaces
4220-12T-4X	• 12 x 10/100/1000Base-T ports • 4 x 1/10Gb SFP+ uplink/stacking ports (unpopulated) • 1 x 10/100/1000BASE-T out-of-band management port • 1 x Serial console port (RJ-45) • 1 x USB A port • 1 x USB Micro-B console port
4220-12P-4X	• 12 x 10/100/1000Base-T 802.3at (30W) PoE ports • 4 x 1/10Gb SFP+ uplink/stacking ports (unpopulated) • 1 x 10/100/1000BASE-T out-of-band management port • 1 x Serial console port (RJ-45) • 1 x USB A ports • 1 x USB Micro-B console port
4220-24T-4X	• 24 x 10/100/1000Base-T ports • 4 x 1/10Gb SFP+ uplink/stacking ports (unpopulated) • 1 x 10/100/1000BASE-T out-of-band management port • 1 x Serial console port (RJ-45) • 1 x USB A ports • 1 x USB Micro-B console port
4220-24P-4X	• 24 x 10/100/1000Base-T 802.3at (30W) PoE ports • 4 x 1/10Gb uplink/stacking ports (unpopulated) • 1 x 10/100/1000BASE-T out-of-band management port • 1 x Serial console port (RJ-45) • 1 x USB A ports • 1 x USB Micro-B console port

Switch Model	Interfaces
4220-48T-4X	• 48 x 10/100/1000Base-T ports • 4 x 1/10Gb SFP+ uplink/stacking ports (unpopulated) • 1 x 10/100/1000BASE-T out-of-band management port • 1 x Serial console port (RJ-45) • 1 x USB A ports • 1 x USB Micro-B console port
4220-48P-4X	• 48 x 10/100/1000Base-T 802.3at (30W) PoE ports • 4 x 1/10Gb uplink/stacking ports (unpopulated) • 1 x 10/100/1000BASE-T out-of-band management port • 1 x Serial console port (RJ-45) • 1 x USB A ports • 1 x USB Micro-B console port
4220-4MW-8P-4X	• 4 x 1G/2.5G/5GBaseT 802.3bt (90W) PoE ports • 8 x 10/100/1000Base-T 802.3at (30W) PoE ports • 4 x 1/10Gb SFP+ uplink/stacking ports (unpopulated) • 1 x 10/100/1000BASE-T out-of-band management port • 1 x Serial console port (RJ-45) • 1 x USB A ports • 1 x USB Micro-B console port
4220-4MW-20P-4X	• 4 x 1G/2.5G/5GBaseT 802.3bt (90W) PoE ports • 20 x 10/100/1000Base-T 802.3at (30W) PoE ports • 4 x 1/10Gb SFP+ uplink/stacking ports (unpopulated) • 1 x 10/100/1000BASE-T out-of-band management port • 1 x Serial console port (RJ-45) • 1 x USB A ports • 1 x USB Micro-B console port
4220-8MW-40P-4X	• 8 x 1G/2.5G/5GBaseT 802.3bt (90W) PoE ports • 40 x 10/100/1000Base-T 802.3at (30W) PoE ports • 4 x 1/10Gb SFP+ uplink/stacking ports (unpopulated) • 1 x 10/100/1000BASE-T out-of-band management port • 1 x Serial console port (RJ-45) • 1 x USB A ports • 1 x USB Micro-B console port
4220-8X	• 8 x 1/10Gb SFP+ ports (unpopulated) • 1 x Serial console port (RJ-45) • 1 x 10/100/1000BASE-T out-of-band management port • 1 x USB A ports • 1 x USB Micro-B console port

Performance and Scaling

4120 Systems

Switch Model	Max Active 10Mb/ 100Mb/1Gb ports	Max Active 10Mb/100Mb/ 1Gb/ 2.5Gb ports	Max Active 1Gb/2.5Gb/ 5Gb ports	Max Active 1Gb/10Gb SFP+ ports	Max Active 1/10/25Gb SFP28 ports	Max Active 100Gb QSFP28 ports*	Aggregated Switch Bandwidth	Frame Forwarding Rate
4120-24MW-4Y	0	24	0	0	4	2	720 Gbps	535.7 Mpps
4120-48MW-4Y	0	48	0	0	4	2	840 Gbps	625.0 Mpps

* Operate at 100Gb as uplinks; 50Gb as stacking ports

4220 Systems

Switch Model	Max Active 10Mb/ 100Mb/1Gb ports	Max Active 10Mb/ 100Mb/ 1Gb/ 2.5Gb ports	Max Active 1Gb/2.5Gb/ 5Gb ports	Max Active 1Gb/10Gb SFP+ ports	Max Active 1/10/25Gb SFP28 ports	Max Active 100Gb QSFP28 ports*	Aggregated Switch Bandwidth	Frame Forwarding Rate
4220-12T-4X	12	0	0	4	0	0	104 Gbps	77.4 Mpps
4220-12P-4X	12	0	0	4	0	0	104 Gbps	77.4 Mpps
4220-24T-4X	24	0	0	4	0	0	128 Gbps	95.2 Mpps
4220-24P-4X	24	0	0	4	0	0	128 Gbps	95.2 Mpps
4220-48T-4X	48	0	0	4	0	0	176 Gbps	130.9 Mpps
4220-48P-4X	48	0	0	4	0	0	176 Gbps	130.9 Mpps
4220-4MW-8P-4X	8	0	4	4	0	0	136 Gbps	101.2 Mpps
4220-4MW-20P-4X	20	0	4	4	0	0	160 Gbps	119.0 Mpps
4220-8MW-40P-4X	40	0	8	4	0	0	240 Gbps	178.6 Mpps
4220-8X	0	0	0	8	0	0	160 Gbps	119.0 Mpps

* Operate at 100Gb as uplinks; 50Gb as stacking ports

Weights and Dimensions

4120 Systems

Part Number	Weight	Physical Dimensions
4120-24MW-4Y	11.9 lb / 5.42 kg	17.4 in W / 1.7 in H / 13.0 in D 441 mm / 44 mm / 330 mm
4120-48MW-4Y	12.4 lb / 5.62 kg	

4120 Power Supplies

Part Number	Weight	Physical Dimensions
XN-ACPWR-920W-FB-U	2.6 lb / 1.20 kg	2.9 in W / 1.6 in H / 7.6 in D 73 mm / 40 mm / 194 mm
XN-ACPWR-1200W-FB-U	2.7 lb / 1.23 kg	
XN-ACPWR-2000W-FB-U	2.8 lb / 1.25 kg	

4220 Systems

Part Number	Weight	Physical Dimensions
4220-12T-4X	5.5 lb / 2.52 kg	12.0 in W / 1.7 in H / 10.3 in D 305 mm / 44 mm / 261 mm
4220-12P-4X	6.8 lb / 3.11 kg	
4220-24T-4X	7.0 lb / 3.16 kg	17.36 in W / 1.7 in H / 10.0 in D 441 mm / 44 mm / 254 mm
4220-24P-4X	9.6 lb / 4.37 kg	17.4 in W / 1.7 in H / 13.0 in D 441 mm / 44 mm / 330 mm
4220-48T-4X	10.0 lb / 4.53 kg	
4220-48P-4X	11.2 lb / 5.09 kg	
4220-4MW-8P-4X	7.1 lb / 3.23 kg	12.0 in W / 1.7 in H / 10.3 in D 305 mm / 44 mm / 261 mm
4220-4MW-20P-4X	10.6 lb / 4.83 kg	17.4 in W / 1.7 in H / 13.0 in D 441 mm / 44 mm / 330 mm
4220-8MW-40P-4X	11.9 lb / 5.41 kg	
4220-8X	5.2 lb / 2.37 kg	12.0 in W / 1.7 in H / 10.3 in D 305 mm / 44 mm / 261 mm

4220 Redundant Power Supplies

Part Number	Weight	Physical Dimensions
RPS-550	5.0 lb / 2.26 kg	12.6 in W / 1.7 in H / 7.9 in D 320 mm / 43.5 mm / 200 mm
RPS-950	5.4 lb / 2.43 kg	

4120 Internal Fixed and Secondary Power Supply Options

Switch Model	Internal Fixed PSU - Max Power	Secondary PSU
4120-24MW-4Y	860W ACPSU	XN-ACPWR-920W-FB-U
		XN-ACPWR-1200W-FB-U
4120-48MW-4Y	1200W ACPSU	XN-ACPWR-1200W-FB-U
		XN-ACPWR-2000W-FB-U

4220 Internal Fixed and Optional External Redundant Power Supply

Switch Model	Internal Fixed PSU - Max Power	Secondary PSU
4220-12T-4X	65W	–
4220-12P-4X	370W	–
4220-24T-4X	65W	–
4220-24P-4X	370W	–
4220-48T-4X	150W	–
4220-48P-4X	550W	–
4220-4MW-8P-4X	370W	–
4220-4MW-20P-4X	550W	RPS-550W
4220-8MW-40P-4X	950W	RPS-950W
4220-8X	65W	–

4120 Max PoE Power Budget

Switch Model	With Internal Fixed PSU	With Internal Fixed PSU + 920W PSU	With Internal Fixed PSU + 1200W PSU	With Internal Fixed PSU + 2000W PSU
4120-24MW-4Y (100-120VAC)	680W	1440W	1380W	Not Supported
4120-48MW-4Y (100-120VAC)	640W	Not Supported	1340W	1230W
4120-24MW-4Y (200-240VAC)	680W	1440W	1540W	Not Supported
4120-48MW-4Y (200-240VAC)	980W	Not Supported	1780W	2180W

4220 Max PoE Power Budget

Switch Model	PoE Budget
4220-12P-4X	124W
4220-24P-4X	195W
4220-48P-4X	370W
4220-4MW-8P-4X	240W
4220-4MW-20P-4X	370W
4220-8MW-40P-4X	740W

4220 Minimum/Maximum Power Consumption and Heat Dissipation

Switch Model	Minimum Power Consumption (W)	Minimum Heat Dissipation (BTU/hr)	Maximum Power Consumption (W)*	Maximum Heat Dissipation (BTU/hr)**
4220-12T-4X	12.0	41.1	25.9	88.5
4220-12P-4X	17.0	57.9	165.4	141.2
4220-24T-4X	14.5	49.4	30.5	103.9
4220-24P-4X	19.9	67.8	252.1	194.9
4220-48T-4X	28.0	95.7	51.8	176.6
4220-48P-4X	30.2	103.1	470.0	339.9
4220-4MW-8P-4X	18.7	63.9	304.2	218.9
4220-4MW-20P-4X	21.4	72.9	458.0	1562.9
4220-8MW-40P-4X	34.4	117.4	898.8	541.9
4220-8X	11.0	37.5	30.0	102.4

* Includes maximum PoE load (W) through the switch

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

4000 Series Software Features

The 4000 Series offers comprehensive Layer 2 as well as key Layer 3 routing features. It also includes support for role-based policy, bi-directional access control lists (ACLs), and 802.1X authentication services as described below.

Layer 2 Switching

- VLANs: Port-based, tagging, MAC-based, private, VLAN translation
- Multi-VLAN Registration Protocol (MVRP)
- Spanning Tree Protocol (STP), including:
  - IEEE 802.1D STP
  - IEEE 802.1w Rapid Spanning Tree Protocol
  - IEEE 802.1s Multiple Spanning Tree Protocol
  - Per VLAN Spanning Tree (PVST+)
- Link Layer Discovery Protocol (LLDP) IEEE 802.1ab, including LLDP-MED
- Internet Group Management Protocol (IGMP) static membership with support for IGMP v1/v2/v3 snooping (IPv4)
- Link Access Groups (LAG) IEEE 802.3ad
- Jumbo frame support
- SFlow sampling for traffic monitoring

Layer 3 Services

- IPv4/IPv6 Static Routing
- Dynamic Host Configuration Protocol (DHCP) including DHCP server, client, relay, smart relay for IPv4 and IPv6
- Multicast Listener Discovery (MLD) static membership with support for MDLD v1/v2 snooping (IPv6)

Security/Policy

- Access Control Lists (ACLs) on ingress and egress ports (IPv4/IPv6)
- Access Control Lists, ingress and egress meters
- Policy Based Routing (PBR) for IPv4/IPv6
- IEEE 802.1X authentication
- MAC-based port security, lockdown
- Extreme ONEPolicy

4000 Series Software Scaling

4120 with Switch Engine

MAC Table: 16,000

IPv4 ARP Table: 400

IPv4 Route Table: 64

IP Multicast Entries (S,G,V): 150

IPv6 Neighbor Table: 200

IPv6 Route Table: 16

ACLs (Ingress/Egress): 1,024/256

VLANs: 4,094

Routed VLANs: 125

One Policy Scaling:

Policy Profiles: 63

Unique Permit/Deny Rules per switch: 440/184

4220 with Switch Engine

MAC Table: 32,000

IPv4 ARP Table: 4,000

IPv4 Route Table: 1,000

IP Multicast Entries (S,G,V): 1,500

IPv6 Neighbor Table 1,000

IPv6 Route Table: 500

ACLs (Ingress/Egress): 2,048/512

VLANs: 4,094

Routed VLANs: 509

One Policy Scaling:

Policy Profiles: 63

Unique Permit/deny rules per switch: 952/440

Environmental

Environmental Specifications

EN/ETSI 300 019-2-1 v2.1.2 - Class 1.2 Storage

EN/ETSI 300 019-2-2 v2.3.1 - 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 Gms

Environmental Operating Conditions

Temperature: 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): 30 m/s2 (3G), 11 ms, 60 shocks

Random vibration: 3 to 500 Hz at 1.5 G rms

Environmental Compliance

EU RoHS - 2011/65/EU and amendments

EU WEEE - 2012/19/EU

EU REACH – Regulation (EC) No 1907/2006 Reporting

China RoHS - GB/T 26572-2011

Taiwan RoHS - CNS 15663(2013.7)

Packaging and Storage Specifications

Temp: -40°C to 70°C (-40°F to 158°F)

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

Packaged Shock (half sine): 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 500Hz

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 62368-1

EN 60825-1 Class 1 (Lasers Safety)

2014/35/ EU Low Voltage Directive

International ITE

CB Report & Certificate per IEC 60950-1

CB Report & Certificate IEC 62368-1

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

EMI/EMC Standards

North American EMC for ITE

FCC CFR 47 part 15 Class A (USA)

ICES-003 Class A (Canada)

European EMC Standards

EN 55032 Class A

EN 55035

EN 61000-3-2 (Harmonics)

EN 61000-3-3 (Flicker)

EN 300 386 (EMC Telecommunications)

2014/30/EU EMC Directive

International EMC Certifications

CISPR 32, Class A (International Emissions)

AS/NZS CISPR32

IEC 61000-4-2 / EN 61000-4-2: Electrostatic Discharge, 8kV Contact, 15kV Air, Criteria B

IEC 61000-4-3 / EN 61000-4-3 Radiated Immunity 3V/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 / EN 61000-4-6 Conducted Immunity, 0.15-80 MHz, 3Vrms, 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)
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 802.3bz 2.5G/5GBASE-T
IEEE 802.3at PoE
IEEE 802.3bt Type 4 PoE
IEEE 802.3ae 10GBASE-X
IEEE 802.3by 25GBASE-X
IEEE 802.3az Energy Efficient Ethernet

Ordering Notes

The 4000 Series is solely managed by ExtremeCloud IQ and/or ExtremeCloud IQ Site Engine, and each switch requires an ExtremeCloud IQ Pilot SaaS subscription.

Ordering Information

4220 Gigabit Models

Part Number	Product Name	Description
4220-12T-4X	12-Port Switch 12T-4X	4220 12-port cloud-managed stackable switch with 12x10/100/1000BaseT ports, 4x1G/10G SFP+ ports. Includes Fans (Quiet fan-off mode up to 35°C), 1 Fixed AC PSU, Rack-Mount Kit, Base software
4220-12P-4X	12-Port PoE+ Switch 12P-4X	4220 12-port cloud-managed stackable switch (124W PoE) with 12x10/100/1000BaseT 30W PoE ports, 4x1G/10G SFP+ ports. Includes Fans (Quiet fan-off mode up to 35°C), 1 Fixed AC PSU, Rack-Mount Kit, Base software
4220-24T-4X	24-Port Switch 24T-4X	4220 24-port cloud-managed stackable switch with 24x10/100/1000BaseT ports, 4x1G/10G SFP+ ports. Includes Fans, 1 Fixed AC PSU, Rack-Mount Kit, Base software
4220-24P-4X	24-Port PoE+ Switch 24P-4X	4220 24-port cloud-managed stackable switch (195W PoE) with 24x10/100/1000BaseT 30W PoE ports, 4x1G/10G SFP+ ports. Includes Fans, 1 Fixed AC PSU, Rack-Mount Kit, Base software
4220-48T-4X	48-Port Switch 48T-4X	4220 48-port cloud-managed stackable switch with 48x10/100/1000BaseT ports, 4x1G/10G SFP+ ports. Includes Fans, 1 Fixed AC PSU, Rack-Mount Kit, Base software
4220-48P-4X	48-Port PoE+ Switch 48P-4X	4220 48-port cloud-managed stackable switch (370W PoE) with 48x10/100/1000BaseT 30W PoE ports, 4x1G/10G SFP+ ports. Includes Fans, 1 Fixed AC PSU, Rack-Mount Kit, Base software

4220 Multi-Gigabit Models

Part Number	Product Name	Description
4220-4MW-8P-4X	12-Port Multi-Gig Switch 4MW-8P-4X	4220 12-port cloud-managed stackable multi-gigabit switch (240W PoE) with 4x1G/2.5G/5GBaseT 90W PoE ports, 8x10/100/1000BaseT 30W PoE ports, 4x1G/10G SFP+ ports. Includes Fans (Quiet fan-off mode up to 35°C), 1 Fixed AC PSU, Rack-Mount Kit, Base software
4220-4MW-20P-4X	24-Port Multi-Gig Switch 4MW-20P-4X	4220 24-port cloud-managed stackable multi-gigabit switch (370W PoE) with 4x1G/2.5G/5GBaseT 90W PoE ports, 20x10/100/1000BaseT 30W PoE ports, 4x1G/10G SFP+ ports. Includes Fans, 1 Fixed AC PSU with option to add external redundant PSU, Rack-Mount Kit, Base software
4220-8MW-40P-4X	48-Port Multi-Gig Switch 8MW-40P-4X	4220 48-port cloud-managed stackable multi-gigabit switch (740W PoE) with 8x1G/2.5G/5GBaseT 90W PoE ports, 40x10/100/1000BaseT 30W PoE ports, 4x1G/10G SFP+ ports. Includes Fans, 1 Fixed AC PSU with option to add external redundant PSU, Rack-Mount Kit, Base software

4220 10 Gigabit Fiber Model

Part Number	Product Name	Description
4220-8X	8-Port Switch 8X	4220 8-port cloud-managed stackable switch 8x1G/10G SFP+ ports. Includes Fans, 1 Fixed AC PSU, Rack-Mount Kit, Base software

4120 Multi-Gigabit Models

Part Number	Product Name	Description
4120-24MW-4Y	24-port Multi-Gig 90W PoE switch 24MW-4Y	4120 24-port cloud-managed stackable Multi-Gig switch with 24x10M/100M/1G/2.5GBaseT 90W PoE ports, 2x100G QSFP28 Universal/Stack ports, 4x25G SFP28 ports, fixed fans, 1 internal fixed AC PSU, 1 unpopulated modular PSU slot, Base Software
4120-48MW-4Y	48-port Multi-Gig 90W PoE switch 48MW-4Y	4120 48-port cloud-managed stackable Multi-Gig switch with 48x10M/100M/1G/2.5GBaseT 90W PoE ports, 2x100G QSFP28 Universal/Stack ports, 4x25G SFP28 ports, fixed fans, 1 internal fixed AC PSU, 1 unpopulated modular PSU slot, Base Software

4120 Power Supplies

Part Number	Product Name	Description
XN-ACPWR-920W-FB-U	920W AC PSU	920W AC PSU for 4120 24-port model (4120-24MW-4Y)
XN-ACPWR-1200W-FB-U	1200W AC PSU	1200W AC PSU for 4120 24- or 48-port (4120-24MW-4Y or 4120-48MW-4Y)
XN-ACPWR-2000W-FB-U	2000W AC PSU	2000W AC PSU for 4120 48-port (4120-48MW-4Y)

4220 Redundant Power Supplies

Part Number	Product Name	Description
RPS-550W	550W External Redundant Power Supply	550W (370W PoE) external redundant power supply (for use with 4220-4MW-20P-4X), includes Rack-Mount Kit
RPS-950W	950W External Redundant Power Supply	950W (740W PoE) external redundant power supply (for use with 4220-8MW-40P-4X), includes Rack-Mount Kit
RPS-CBL-1M	1-meter cable for use with External Redundant Power Supply	1-meter RPS cable for use with 550W & 950W external RPS for 4220

Accessories

Part Number	Product Name	Description
16573	Wall Mount for 4220 12-port switches	Wall Mount option for 4220 12-port switches
XN-2P-RMKIT-002	2P Rack-Mount Kit for RPS-550W/950W	Spare two-post rack mount kit for RPS-550W and RPS-950W external redundant power supplies
XN-2P-RMKIT-008	2P Rack-Mount Kit for 4120 and 4220 24/48-port switches	Spare two-post rack mount kit for 4120 and 4220 24 & 48 port switches. Includes brackets for front or mid-mount of chassis in a two-post or four-post rack
XN-2P-RMKIT-009	2P Rack-Mount Kit for 4220 12-port switches	Spare two post rack mount kit for 4220 12-port switches. Includes brackets for front or mid-mount of chassis in a two-post or four-post rack

Software Licenses

Part Number	Product Name	Description
XIQ-PIL-S-C-EW	XIQ Pilot SAAS Subscription and EW support (1 device)	ExtremeCloud IQ Pilot SaaS Subscription and EW SaaS support for one (1) device
XIQ-PIL-S-C-PWP	XIQ Pilot SAAS Subscription and PWP support (1 device)	ExtremeCloud IQ Pilot SaaS Subscription and PWP SaaS support for one (1) device

Warranty

The 4000 Series is covered under Extreme's Universal LLW policy. For warranty details, visit https://www.extremenetworks.com/support/policies.

Power Cords

In support of the Extreme Networks green initiatives, power cords can be ordered separately but need to be specified at time of ordering.

Optics/Transceivers

For a list of the optics and transceivers supported on the 4000 Series hardware, refer to our Extreme Optics Compatibility Tool at https://optics.extremenetworks.com.

Maintenance Services

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

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