



PRODUCT CATALOG

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**EXTREMEAPPLICATIONS** 



EXTREME**WIRELESS** 







EXTREMEROUTING



## ExtremeCloud IQ



### **Extreme Management Center**



#### ExtremeManagement



DESCRIPTION	DESCRIPTION	DESCRIPTION
Centralized cloud-management for the Extreme portfolio	Single pane of glass management, control and analytics	Comprehensive network management and assurance
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
- Delivers network automation, insights and assurance	- Consistent security, visibility and automation that	- Single pane of glass management from the edge to the
- Available as a public, private or on-premise solution	extends from the wired/wireless edge to the Data Center to the Cloud	Data Center
- Powerful artificial intelligence and machine	- Provides a true 360 view of the users, devices, applications	<ul> <li>Zero touch provisioning to enable quick deployment of new infrastructure</li> </ul>
learning capabilities	and the network	- Comprehensive Fabric Connect visibility and provisioning
<ul> <li>Continuous delivery of updates and features</li> </ul>	<ul> <li>Offers a single datastore with information sharing across the toolsets to deliver important context to its users.</li> </ul>	capabilities
		- Intuitive integrated workflows for fast onboarding of SLX/
	<ul> <li>Rich APIs with integrations with major enterprise</li> </ul>	MLX products

Rich APIs with integrations with major enterprise software vendors

MLX products

## **Extreme Workflow Composer**



#### DESCRIPTION

Workflow automation across domains

- Full life cycle automation including provisioning, configuration, validation and troubleshooting
- Cross-domain, multi-vendor IT automation, enabling full integration of compute, storage, security and network resources
- Turnkey, customizable or do-it-yourself workflows
- DevOps inspired; powered by StackStorm



## **ExtremeAnalytics**



#### DESCRIPTION

Real-time network and application insights

#### PRODUCT POSITIONING

- Collect consistent data from the edge to the data center (physical and virtual) and into the multi-cloud
- Gain insights into your application usage, users and devices across all locations
- Improve security by blocking shadow IT, unapproved applications and unusual traffic
- Proactive monitoring of application performance to avoid disruption

## **Extreme Virtual Packet Broker**



## ExtremeLocation



#### DESCRIPTION

Cloud-based location and analytics solution

#### **PRODUCT POSITIONING**

- Highly scalable, multi-tier location services - Integrates WiFi, BLE and geo-fencing technologies to track
- both people and assets Real-time and historical location analytics including site, zone and associate analytics
- Integrated contextual engagement engine to provide customers with special offers
- **Extreme Session Director**



## **Extreme Visibility Manager**



DESCRIPTION	DESCRIPTION	DESCRIPTION
Scalable visibility and monitoring for virtual networks	Session-based intelligence for mobile operators	Centralized management of MLX/SLX packet brokers
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
<ul> <li>Comprehensive visibility to secure, monitor and optimize virtualized networks</li> </ul>	- Works with Extreme Packet Brokers to deliver subscriber- aware traffic load balancing, filtering and sampling	<ul> <li>Automates the discovery, configuration back ups and software upgrades for Packet Brokers</li> </ul>

- Analyzes traffic between application VMs; forwarding to specialized tools as required
- Continuously adjusts to changes in traffic volume and flow patterns
- Supports traffic interception, filtering and optimization to maximize productivity of network monitoring and analytic tools
- Makes session-aware forwarding decisions that are enforced by the MLX/SLX Packet Brokers.
- Enables cost effective scaling of the monitoring infrastructure by off-loading resource intensive functions
- Isolates voice traffic in the mobile network so that it can be forwarded to specialized voice analytics platforms

# - Granular configuration control at the device and port levels - Intuitive point and click GUI interface to reduce errors

- Simple integration with third party management applications via APIs

## **Extreme Physical Packet Broker**



#### DESCRIPTION

High capacity traffic monitoring

- High-density traffic monitoring for the most demanding networks
- NEBS Level 3-certified, highly scalable nodes that curate traffic for network monitoring tools
- Enables wire-speed traffic aggregation, regeneration, optimization and load balancing to optimize tool performance
- Programmability through APIs



### ExtremeCloud A3



#### ExtremeControl



DESCRIPTION

#### ExtremeCompliance



Automated network configuration

- Automated network configuration compliance for HIPAA, PCI, and GDPR

Automated compliance reporting for devices and network configurations

- Maintains compliance baseline and analyzes compliance with scheduled assessments

PRODUCT POSITIONING

DESCRIPTION

compliance solution

#### DESCRIPTION Cloud-managed network access control (NAC)

#### PRODUCT POSITIONING

- Vendor-agnostic NAC solution for wireless/wired clients
   Device onboarding, guest management, automated device
- provisioning, device profiling and access control - Creation and administration of granular network policies
- Comprehensive authentication toolset with built in RADIUS server

## - Ability to roll out consistent polices from the edge to the data center and into the multi-cloud

Granular policy-based control

PRODUCT POSITIONING

- Secure guest, BYOD and IoT management

- Centralized role-based network access control

- Device profiling; agent-based and agentless security

## ExtremeGuest



### **Extreme AirDefense**



## **Extreme Defender for IoT**



DESCRIPTION	DESCRIPTION	DESCRIPTION
Guest access and analytics	Wireless intrusion prevention system	Secures mission critical and/or vulnerable IoT devices
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
- Easy guest self-registration through social, email and/or SMS	<ul> <li>- 24x7x365 detection of wireless vulnerabilities and unusual network activity</li> </ul>	<ul> <li>Provides unique in-line security for wired/wireless IoT devices over any type of network infrastructure</li> </ul>
- Analytics that give deep insight into demographics and	- Real-time detection and termination of rouge access points	- Applies and enforces whitelist profiles and controls IoT
behaviors of the visitor/ shopper population	- Instant notification and response for policy violations	network access
<ul> <li>Ability to easily create custom captive portals tailored to your audience</li> </ul>	- Industry-leading threat detection library	<ul> <li>Isolates groups of IoT devices into end-to-end secure segments using Fabric Connect hyper-segments or IPSec tunnels</li> </ul>
<ul> <li>Comprehensive dashboards and reporting</li> </ul>		- Enables non-technical staff to manage their own IoT secu

– Enables non-technical staff to manage their own IoT security and asset location tracking



## AP305C/AP305XC

## AP310i/e









DESCRIPTION	DESCRIPTION	DESCRIPTION
Wi-Fi 6 (802.11ax) cloud managed 2x2 dual software defined radio indoor access point	Wi-Fi 6 (802.11ax) 2x2 dual software defined radio indoor access point	Wi-Fi 6 (802.11ax) 4x4 tri- radio indoor access point
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
- Software Defined Radios - Dual 5GHz capable	- Software Defined Radios - Dual 5GHz capable	- TriRadio design - 5GHz, 2.4GHz and dual band sensor
- Fully functional with 802.3af PoE	- POE Out	- Dedicated threat sensor for uncompromising security
	- Integrated BLE, Zigbee and USB for IOT requirements	- 1 Gig and 2.5 GE ports for flexible backhaul connectivity

## AP410C



## AP505



## AP510i/e



DESCRIPTION	DESCRIPTION	DESCRIPTION
Wi-Fi 6 (802.11ax) cloud managed 4x4 tri-radio indoor access point	Wi-Fi 6 (802.11ax) 4x4 dual radio indoor access point	Wi-Fi 6 (802.11ax) 4x4, 4x4 dual software defined radio indoor access point
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
- Tri-Radio design - 5GHz, 2.4GHz and dual band sensor	- Dual Radio (dual band concurrent)	- Software Defined Radios - Dual 5GHz capable
- Software Selectable Radio (SSR) - dual 5GHz capable	- Multi-rate GE port (2.5)	- Multi-rate GE port (2.5/5)
- Dedicated threat sensor for uncompromising security	- IoT Radio: BLE & IEEE 802.15.4 USB	- Redundant PoE w/Failover
		- IoT Radio: BLE and IEEE 802.15.4 USB

## AP510C/AP510XC



DESCRIPTION Wi-Fi 6 (802.11ax) cloud managed 4x4, 4x4 dual software defined radio indoor access point PRODUCT POSITIONING

- Software Defined Radios - Dual 5GHz capable

- 1 Gig and 2.5 GE ports for flexible backhaul connectivity

- Integrated BLE, Zigbee and USB for IoT requirements



## AP360i/e

### AP460i/e







AP560i/h

DESCRIPTION	DESCRIPTION
Wi-Fi 6 (802.11ax) 2x2 dual software defined radio outdoor access point	Wi-Fi 6 (802.11ax) 4x4 tri-ra access point
PRODUCT POSITIONING	PRODUCT POSITIONING
- Software Defined Radios - Dual 5GHz capable	- Tri-Radio design - 5GHz, 2.4GHz a

- IP67 outdoor-rated

- Integrated BLE and USP for IoT and guest engagement

adio outdoor IG and dual band sensor - Dedicated threat sensor for uncompromising security

- 1 Gig and 2.5 GE ports for flexible back-haul connectivity



DESCRIPTION
Wi-Fi 6 (802.11ax) 4x4 dual software defined radio outdoor access point
PRODUCT POSITIONING

- Outdoor IP67 Rated

- Software Defined Radios Dual 5GHz capable
- Integrated and External Antennas
- 1 Gig and 5Gig Uplink ports



## AP3912i

## AP3915i/e





## AP3916i



**PRODUCT POSITIONING** 

The first HD camera integrated into 802.11ac W2

- Save time and money by eliminating separate cable and/or

AP: ideal for classrooms and smart buildings

- One product delivers secure Wi-Fi service and video surveillance for physical security

DESCRIPTION

power runs for camera

#### DESCRIPTION 802.11ac Wave 2 wall-plate dual radio access point, integrated BTLE/802.15.4 radio PRODUCT POSITIONING

- Dual radio 2x2:2 wall plate access point with integrated Bluetooth and 4 Ethernet ports
- Ideal for service areas such as residence halls, patient rooms, or conference rooms
- Fast deployments leveraging existing wall plate cabling
- PoE Pass-thru port to power additional device

## DESCRIPTION High-performance AP at a mid-market price

## PRODUCT POSITIONING

- Ideal for state and local, K12, community colleges.
- Flow based architecture for greater performance
- Two variants, internal or external antennas for different applications
- AP3915e has extended temperature range for more demanding environments

## AP8533



## AP8432



## WiNG AP7632i/e



DESCRIPTION	DESCRIPTION	DESCRIPTION
802.11ac Wave 2 with tri-radios for high-density and security	802.11ac Wave 2 for high-density, security, and Internet of Things (IoT)	High-performance at a mid-market price
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
<ul> <li>Specifically designed for high density applications, RF security and guest engagement</li> </ul>	<ul> <li>Specifically designed for high density applications, RF security, guest engagement and IoT</li> </ul>	<ul> <li>Ideal for mid-market applications in retail, hospitality, manufacturing</li> </ul>
- Tri-radios, triple sensor technology	- Integrated Bluetooth and BLE for guest engagement	- High performance access points with MU-MIMO
- Integrated Bluetooth and BLE for guest engagement	- Enables Internet of Things with PoE pass-through	technology to serve multiple clients simultaneously in dens user environments
		Two variants with internal and outernal antennas for differe

#### - Two variants with internal and external antennas for different applications

AP 7632e external also has extended temperature range for more demanding environments

## **WING AP7622**



## **AP245X**



### **AP250**



- Dual 1 GigE uplink port

DESCRIPTION	DESCRIPTION	DESCRIPTION
Purpose-built for massive distributed branch solutions	Enterprise-grade 3x3, 802.11Acw2 access points for high-density environments	11ac wave2 3x3 dual software defined radio outdoor access point
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
- Price and performance balance meets needs of massive	- Dual radio access point with integrated Bluetooth	- Dual software defined radio access point, supports Dual 5
SOHO or branch deployments.	- External antennas	- Internal antennas
<ul> <li>Configurable RF and performance flexibility to tune to specific needs</li> </ul>	– TPM Security Chip	– TPM Security Chip

Simple deployments, choice of standalone, simple autonomous networks or NOC/cloud solutions

- Dual 1 GigE uplink port



## AP3935i/e



#### DESCRIPTION

Enterprise-grade, ultra-high performance for demanding high-density deployments PRODUCT POSITIONING

- Designed for high-density mission critical environments such as schools, indoor arenas hospitals, conference centers
- Feature rich 802.11ac Wave 2 technology delivering performance and security
- Support transparent power transition (POE Hot-swap). In-case of power interruption on one port automatic transition with no reboot or state interruption

## AP3965i/e



#### DESCRIPTION

High-performance industrial grade outdoor access points for high-density/harsh environments **PRODUCT POSITIONING** 

- Extends high performance Wi-Fi access outdoors. uses the same policy and single pane of glass management as the indoor APs
- Perfect for stadiums and other outdoor venues, such as warehouses, mines, and manufacturing plants
- 802.11ac Wave 2 technology supports high-density of users

### AP3865e



## **WiNG AP7562**



## WiNG AP7662i/e

AP3917i/e

-

DESCRIPTION

Outdoor AP engineered for the harshest

- Extends Wi-Fi access outdoors for campus applications - Uses the same policy and single pane of glass management as the indoor APs

- Perfect for venues, such as K12 and higher ed campuses, hospitals, warehouses and manufacturing plants

environments; sub-zero temperature

PRODUCT POSITIONING



DESCRIPTION	DESCRIPTION	DESCRIPTION
Industrial grade outdoor access points designed to operate in harsh environments	Rugged, industrial-grade for the most demanding applications	Designed for harsh environments; sub-zero temperature
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
- Extends Wi-Fi beyond the building extending Wi-Fi access	- Engineered, inside and out for outdoor applications	- Offered with internal and external antenna options
outdoors. uses the same policy and single pane of glass management as the indoor APs	<ul> <li>Specially designed outdoor IP67-RATED diecast aluminum enclosure</li> </ul>	<ul> <li>Perfect for retail inventory, hospitality, transportation and logistics and warehouses</li> </ul>
<ul> <li>Perfect for stadiums and other outdoor venues, such as warehouses, mines, and manufacturing plants</li> </ul>	<ul> <li>Built to meet industrial applications with M12 version certified for subway and railroads</li> </ul>	<ul> <li>Operates in harsh and extreme conditions of manufacturing plants, warehouse freezers, outdoor parks and sports</li> </ul>
	Mahirla Masumbad Maslama ambian	fields, shipyards

- Vehicle Mounted Modem option



## WiNG AP7602

### WiNG AP7612







- PoE Pass-thru port to power additional device

DESCRIPTION	DESCRIPTION	DESCRIPTION
Specifically designed for in-room	Specifically designed for in-room h	Enterprise-grade, wallplate, 802.11Acw 2 3x3:3
hospitality applications	ospitality applications	access point and switch
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
- Singleband 2x2 or Dualband 1x1	- Dual Radio 2x2:2	- Dual radio wall plate access point with integrated Bluetooth
- Purpose built wall plate access point with integrated BLE and Ethernet ports	<ul> <li>Purpose built 802.11acW2 wall plate access point with integrated BLE and Ethernet ports</li> </ul>	and 4 Ethernet ports - Ideal for service areas such as residence halls, patient rooms,
<ul> <li>Slim and trim, the AP hides in plain sight for clean room aesthetics</li> </ul>	<ul> <li>Slim and trim, the AP hides in plain sight for clean room aesthetics</li> </ul>	or conference rooms - Fast deployments leveraging existing wall plate cabling

- Quick install, less than 2 minutes with secured mounting

WI-FI 5 APs (802.11AC WAVE 2 APs) - PLUGGABLE

- Quick install, less than 2 minutes with secured mounting



#### **AP30**



#### DESCRIPTION

The first enterprise pluggable access point

- Automated out-of-the-box provisioning
- Full-featured enterprise access point in new compact design
- Multiple operating modes for instant network access and sensor services
- Replace or augment traditional ceiling and wall-mounted access points



#### WiNG AP7532/AP7522

#### AP122 /AP122X





**AP130** 

DESCRIPTION	DESCRIPTION	DESCRIPTION
High-performance, cost-effective 802.11ac Wave I technology	Enterprise-grade 2x2, 802.11N/ac access points for medium-density environments	Enterprise-grade 2x2, 802.11N/ac access points for medium-density environments
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
<ul> <li>Mid-tier, high performance Wave 1 access points for cost sensitive applications</li> <li>Dual radio, supporting 2.4 GHz and 5 GHz and 802.11 a/b/g/n/ac devices</li> </ul>	- Dual radio access point with integrated Bluetooth	- Dual radio access point with integrated Bluetooth
	- Internal and External antenna option	- Internal and External antenna option
	- TPM Security Chip	- TPM Security Chip
	– 1 GigE uplink port	– 1 GigE uplink port

#### AP1130



#### DESCRIPTION

Enterprise-grade 2x2, 802.11N/ac outdoor access point

#### PRODUCT POSITIONING

- Dual software defined radio access point, supports Dual 5

- Internal antennas
- TPM Security Chip
- Dual 1 GigE uplink port

#### WIRELESS CONTROLLERS



## V2110, C35, C5210, C5215 Physical and Virtual Appliances



## NX5500, NX7500, NX9600, VX9000 WiNG Controllers



#### **ExtremeCloud Appliance**



DESCRIPTION

private cloud, and IoT

#### DESCRIPTION

Virtual or physical appliances provide role-based controls for Wi-Fi users, devices, and apps

#### PRODUCT POSITIONING

- Flexibility to simultaneously control all APs allow APs to run independent of appliance

- Supports centralized as well as geographically distributed APS

- Built in high availability, with sub-one second failover

## DESCRIPTION

Virtual or physical appliances provide comprehensive cloud-ready wireless services from a single point of control for any size PRODUCT POSITIONING

- Unprecedented scalability, for largest deployments or specific needs of the branch
- Hierarchical software allows uses of various size controllers, as well as controller-less branches to be managed

# Unified management for on-premises Consistent customer-driven experience Artificial intelligence for RF management

PRODUCT POSITIONING

Wired and wireless orchestration for campus,

 Purpose built with a unique model that scales to address the growth of mobility and IoT



#### X440-G2



X450-G2	Х	4	5	0	- (	G	2
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DESCRIPTION	DESCRIPTION	DESCR
Cost-effective edge and access switch	Advanced edge and access switch	Scalable
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODU
<ul> <li>- 12, 24 and 48-port Gigabit ExtremeXOS stackable switches for wiring closet and edge applications</li> </ul>	<ul> <li>- 24 and 48-port Gigabit ExtremeXOS stackable switches for wiring closet and edge applications</li> </ul>	- 24 and 48 wiring clo
- Fabric Attach enabled PoE (30W) and non-PoE models with 1/10GbE uplink options	- Fabric Attach enabled 30W PoE and non-PoE models and 1/10GbE uplink options	- Fabric At 1/10/40G
<ul> <li>Fixed power supplies and fans; external redundant power options</li> </ul>	- Modular hot-swappable fans and power supplies	- 1Gb/2.5G multi-rate

- Up to 8 units in a stack with up to 84GbE virtual bandwidth/ heterogeneous stacking

RIPTION

e edge/aggregation switch

#### UCT POSITIONING

- 48-port Gigabit ExtremeXOS stackable switches for loset, aggregation and edge applications
- ttach enabled PoE (30W) and non-PoE models with GbE modular uplink options
- Gb multi-rate model supporting up to 16 multi-rate ports
- Up to 8 units in a stack with up to 160GbE virtual bandwidth/ heterogeneous stacking

## X465

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Up to 8 units in a stack with up to 40GbE virtual bandwidth/ heterogeneous stacking

X480



## X590



DESCRIPTION	DESCRIPTION	DESCRIPTION
Premium stackable edge and aggregation switch	Stackable intelligent edge switch	24-port 10GbE Aggregation Switch
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
- 24 and 48-port ExtremeXOS stackable switches for next-gen edge and aggregation applications	<ul> <li>- 24 and 48-port Gigabit ExtremeXOS stackable switches with 10/40GbE uplinks</li> </ul>	<ul> <li>Fixed-form ExtremeXOS stackable switches for aggregation and leaf deployments</li> </ul>
- Fabric Attach enabled Gigabit/Multi-rate models with	- Up to 512K routing table size for high-capacity L3 routing	- Available in copper and fiber model versions each with 24 x
30W/60W/90W PoE, MACsec and modular 10/25/40GbE uplink options	- Designed to meet NEBS requirements/optional DC power	10GbE ports and 2 x 100GbE uplinks

- Up to 8 units in stack with up to 320 GbE of virtual

bandwidth/heterogeneous stacking

- Extended Edge Switching aggregation node supporting up to 48 x V400 edge devices
- Up to 8 units in a stack with up to 400GbE virtual bandwidth/heterogeneous stacking with X870 and X690

#### X620



for customer-defined applications

48 x V300 edge devices

### X670-G2



#### X690



#### DESCRIPTION

Compact 10GbE edge switch

#### PRODUCT POSITIONING

- 10 and 16-port 10GbE ExtremeXOS switches for high-performance workgroups and 10GbE edge applications

- Extreme Insight Architecture supporting up to 2 Guest VMs

- Extreme Edge Switching aggregation node supporting up to

- Copper and fiber SFP+ 10GbE models for flexible deployment
- Multi-rate, PoE++ model with 1/2.5/5/10GbE and 30W/60W PoE ports
- Up to 8 units in a stack with up to 40GbE of virtual bandwidth/heterogeneous stacking with X440-G2, X450-G2, X460-G2, X670-G2 and X770
- Fixed-form ExtremeXOS stackable switches for aggregation and top-of-rack deployments
- Two models with 48 x 10GbE and 72 x 10GbE fiber SFP+ ports, respectively

48- and 72-port 10GbE aggregation switch

- Extended Edge Switching aggregation node supporting up to 48 x V400 edge devices
- Up to 8 unit stacking with up to 320GbE virtual bandwidth/ heterogeneous stacking with X440-G2, X450-G2, X460-G2, X620 and X770

#### DESCRIPTION

#### 48-port 10GbE aggregation switch

- Fixed-form stackable ExtremeXOS switches for aggregation, leaf and top-of-rack deployments
- Available in copper and fiber models each with 48 x 10GbE ports and 4 x 100GbE uplinks
- Extended Edge Switching aggregation node supporting up to 48 x V400 edge devices
- Up to 8 unit stacking with up to 400GbE virtual bandwidth/ heterogeneous stacking with X870 and X590



#### X770

X870





DESCRIPTION	DECODIDITION
DESCRIPTION	DESCRIPTION
40/10GbE core/aggregation Switch	100/40GbE core/aggregation switch
PRODUCT POSITIONING	PRODUCT POSITIONING
<ul> <li>Fixed-form stackable ExtremeXOS switch for spine, leaf and top-of-rack deployments</li> </ul>	<ul> <li>Fixed-form 100/50/40/25/10 Gb ExtremeXOS switches for spine, leaf and top-of-rack deployments</li> </ul>
- 32 x 40GbE ports with ability to channelize up to 104 x 10GbE ports	- 32 x 100Gb/40Gb ports with ability to channelize up to 128 x 25GbE/10GbE ports or 64 x 50GbE ports
- 2.56 Terabits of switching bandwidth in a 1RU form factor	- 6.4 Terabits of switching bandwidth in a 1RU form factor
<ul> <li>Up to 8 unit stacking with up to 160GbE bandwidth/ heterogeneous stacking with X440-G2, X450-G2, X460-G2, X620 and X670-G2</li> </ul>	<ul> <li>Up to 8 units in a stack with 400GbE bandwidth/ heterogeneous stacking with X690/X590</li> </ul>

#### **EXTREME EXTENDED EDGE SWITCHES**



#### **V300 Series**

#### V400 Series





DESCRIPTION	DESCRIPTION
Simplified edge switch centrally powered by ExtremeXOS	Simplified edge switch centrally powered by ExtremeXOS
PRODUCT POSITIONING	PRODUCT POSITIONING
<ul> <li>8-port Gigabit PoE switch that seamlessly runs services on a central ExtremeXOS switch</li> </ul>	<ul> <li>- 24 and 48-port Gigabit switches that seamlessly run services on a central ExtremeXOS switch</li> </ul>
<ul> <li>Edge component of Extreme's Extended Edge Switching solution</li> </ul>	<ul> <li>- 30W PoE and non-PoE models with 10GbE uplinks comprising the edge component of Extreme's Extended Edge Switching solution</li> </ul>
Connects to X46E aggregation switch not only for	

Connects to X465 aggregation switch not only for centralized management and services, but also for PoE power draw - eliminating need for a separate PSU

Plug and play set-up, single point of control reduces complexity and operational cost

- Connects to X690, X670-G2, X590 or X465 aggregation switch for centralized management and services
- Plug and play set-up, single point of control reduces complexity and operational cost



## ERS 3000

## ERS 4900

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### ERS 5900

DESCRIPTION	DESCRIPTION	DESCRIPTION
I/10 GbE wiring closet stackable switches for small to mid-sized businesses	1/10 GbE wiring closet stackable switches with optional PoE+ support	Multi-rate wiring closet stackable switches with optional PoE++ support
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
- Fabric Attach enabled stackable wiring closet switches	- Fabric Connect enabled stackable wiring closet switches	- Fabric Connect enabled stackable wiring closet switches
- 10/24/48-port models supporting GbE copper ports with optional PoE and PoE+ support and 2 ports of 1/10 GbE for	<ul> <li>- 26 and 50 port models supporting 24/48 GbE copper ports with 2 ports of 10 GbE SFP+ for uplink connectivity</li> </ul>	<ul> <li>- 24, 48 and 96 port GbE models supporting 1/2.5/10 GbE connectivity</li> </ul>
uplink connectivity	- Optional PoE and PoE+ support	- Optional PoE, PoE+ and PoE++ (60w) support
Optional fan-free 10-port model for silent operation	- Up to 8 units in a stack delivering over 400 Gbps of virtual backplane connectivity	- Up to 8 units in a stack delivering over a Terabit of virtual
Up to 8 units in a stack delivering over 80 Gbps of virtual backplane connectivity		backplane connectivity

## ExtremeAccess Platform







## VSP 4000



DESCRIPTION	DESCRIPTION	DESCRIPTION
Compact WAN access devices for distributed networks	Compact fixed form aggregation, metro edge or wan access switches	Compact modular aggregation, metro edge or wan access switches
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
<ul> <li>Fabric Connect-enabled devices that enable secure fabric service extension to branch offices over MPLS WANs or Internet connections</li> </ul>	<ul> <li>Fabric Connect enabled switches for campus aggregation, metro edge and WAN access deployments</li> </ul>	<ul> <li>Fabric Connect enabled switches for metro, edge and WAN access deployments</li> </ul>
- Enables security and micro-segmentation end to end from     central site to branch offices.	<ul> <li>Fixed-form variants with native support for Fabric Extend and MACsec link encryption in a 1RU form factor</li> </ul>	- Modular variants that support flexible port speeds including 1/10/25/40 GbE in a compact 1RU form factor
<ul> <li>Offers native support for Fabric Extend or supports IPSec encryption for WAN extension</li> </ul>	<ul> <li>Initial model with 48 GbE PoE ports and flexible 10/25/40GbE modular uplinks; more models to follow</li> </ul>	

- Two models with 6 ports of 1 GbE copper ports, along with 2 ports of 1/10 GbE SFP+ ports.

**VSP 7400** 

## VSP 8200



**VSP 7200** 





DESCRIPTION	DESCRIPTION	DESCRIPTION
Compact fixed form 10/40 gigabit core/ aggregation switches	Compact fixed form 25/100 gigabit core/ aggregation switches	Compact fixed form 10/40 gigabit aggregation switch
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
– Fabric Connect enabled switch for campus core/ aggregation, spine-leaf, or top-of-rack deployments	<ul> <li>Fabric Connect enabled switch for campus core/ aggregation, spine-leaf, or top-of-rack deployments</li> </ul>	<ul> <li>Fabric Connect enabled switch for campus core, spine-leaf, or top-of-rack deployments</li> </ul>
- Five model variants that support flexible port speeds	/10/40 GbE in a compact 1RU form factors GbE data path – Suppor	- 2.56 Terabits of switching capacity in a 2RU form factor
· · · ·		- Support for up to 80 ports of 10 GbE and 4 ports of 40 GbE
<ul> <li>Scalable to 48 ports of 10GbE connectivity and 6 ports of 40 GbE</li> </ul>	<ul> <li>VSP 7400-32C: core or spine switch with 32x100GbE QSFP ports that can be optionally channelized to 10/25/40 GbE</li> </ul>	
	<ul> <li>VSP 7400-48Y-8C: aggregation or leaf switch with 48 ports of 25GbE SFP 28 ports and 8 ports or 100Gb QSF28 uplink ports that can be optionally channelized to 1/10 and 25 GbE</li> </ul>	



#### **VSP 8400**







DESCRIPTION	DESCRIPTION
Compact modular 10/40/100 gigabit aggregation switch	High-density chassis-based modular ethernet switch
PRODUCT POSITIONING	PRODUCT POSITIONING
<ul> <li>Fabric Connect enabled switch for campus core, spine-leaf, or top-of-rack deployments</li> </ul>	<ul> <li>Fabric Connect enabled campus core/aggregation switch or end or middle of row data center switch.</li> </ul>
- Support for 1/10/25/40/100 GbE through a range of I/O modules	- Support for 1/10/25/40/100 GbE through a range of I/O modules
- 2.56 Terabits of switching capacity in a 2RU form factor	- Over 21 Terabits of switching capacity in a 7RU
- Scales to 96 ports of 10 GbE, up to 24 ports of 40 GbE, or up	chassis design
to 8 ports of 100 GbE	<ul> <li>Scales to 192 ports of 10 GbE, 128 ports of 40 GbE or 48 ports of 100 GbE interfaces</li> </ul>

#### **EXTREME SWITCHES FOR SMALL BUSINESS AND INDUSTRIAL DEPLOYMENTS**



#### 200 Series



## SR2200 and SR2300 Series



### **ISW Series Industrial Switches**



#### DESCRIPTION Economical Gigabit Access Switch for Enterprise and SMB

#### PRODUCT POSITIONING

- 12, 24 and 48-port Gigabit access switches ideal for small to medium businesses or distributed enterprises
- 30W PoE and non-PoE models with 1 and 10GbE uplink options
- Flexible management via cloud, web GUI or industrystandard CLI
- Up to 4 units in a stack with comprehensive Layer 2 features along with static & dynamic routing

#### DESCRIPTION **Enterprise Cloud-managed access switches**

## PRODUCT POSITIONING

- Deliver fast, reliable, and secure unified wired and wireless connectivity
- Provide energy-efficient gigabit Layer 3-Lite capabilities with flexible PoE, as well as wealth of port density options
- Provide zero-touch provisioning, cloud switch stacking, unified policies, and a powerful QoS engine

### DESCRIPTION

Hardened switch for industrial deployments

- 4 and 8-port Gigabit PoE switches designed for industrial environments
- Ruggedized enclosure with extended temperature (-40°C 75°C) support, DIN Rail and wall mounting, and Dual DC power input
- Support for redundant ring topology for fault-tolerant high-availability networking



## SLX 9030











DESCRIPTION	DESCRIPTION	DESCRIPTION
Compact fixed form leaf switches	Compact fixed form leaf switch	Compact fixed form spine switch
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
Data Center Fabric enabled switch for enterprise and service provider, spine-leaf, or top-of-rack deployments	<ul> <li>Data Center Fabric enabled switch for enterprise and service provider, spine-leaf, or top-of-rack deployments</li> </ul>	- Fixed 10/40/100 GbE that supports 24MB of shared packet buffer
- Copper ports support 10GbE, 1GbE and 100 Mbit/s and fiber support for 10GbE and 1GbE	<ul> <li>Supports 1/10/25/40/100 GbE connectivity that supports 24MB of shared packet buffer</li> </ul>	- Ability to split 32 x 100/40GbE to 128 x 25/10 GbE with a break out cable
- 1.76 Terabits (880 Gigabits in and 880 Gigabits out) of switching capacity in a 1 RU form factor	- 3.6 Terabits (1.8 Tbps in and 1.8 Tbps out) of switching capacity in a 1 RU form factor	<ul> <li>- 6.4 Tbps (3.2 Tbps in and 3.2 Tbps out) of switching capacity in a 1 RU form factor</li> </ul>
<ul> <li>Full featured SLX operating system with advances features, supporting switching, IP Fabrics, BGP-EVPN and VXLAN</li> </ul>	– Extreme Insight Architecture and Guest VM with direct 10 GbE data path	- Guest VM
SLX 9150	SLX 9250	VDX 6740

## SLX 9150







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DESCRIPTION	DESCRIPTION	DESCRIPTION	
Compact fixed form leaf switch	Compact fixed form spine switch	Compact fixed form leaf switch	
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING	
<ul> <li>Purpose-built high density 1/10/25/40/100GbE switches with 32MB of packet buffer</li> </ul>	- Purpose-built 32 x 100/40GbE switch with 32MB of packet	- Simplified Fabric with Virtual Cluster Switching (VCS)	
	buffer - SLX-OS supports full IPv4/v6 switching, OSPF, BGP and	<ul> <li>Multiple 1/10/40 GbE configurations for deployment flexibility</li> </ul>	
- Integrated Extreme Fabric Automation	BGP-EVPN VXLAN overlav		
<ul> <li>SLX-OS supports full IPv4/v6 switching, OSPF, BGP and BGP-EVPN VXLAN overlay</li> </ul>	- Integrated Extreme Fabric Automation	- Delivers line-rate throughput for all ports and packet sizes	
		<ul> <li>Integration with VMware vCenter and NSX</li> </ul>	
– Guest VM with Extreme Insight Architecture with direct 10 GbE data path	<ul> <li>Guest VM with Extreme Insight Architecture with direct 10 GbE data path</li> </ul>		

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## VDX 6940



## VDX 8770



DESCRIPTION	DESCRIPTION	
Compact fixed form leaf and spine switches	High-density chassis-based modular ethernet switch	
PRODUCT POSITIONING	PRODUCT POSITIONING	
- Simplified Fabric with Virtual Cluster Switching (VCS)	- Simplified Fabric with Virtual Cluster Switching (VCS)	
<ul> <li>Multiple 1/10/40/100 GbE 1 RU and 2RU configurations for deployment flexibility</li> </ul>	- Delivers 1/10/40/100 GbE options for flexibility and scale	
	- 1.2 Tbps (600Gbps in and 600 Gbps out) per slot line-rate	
<ul> <li>Delivers line-rate throughput for all ports and packet sizes</li> </ul>	design for substantial capacity and headroom	
<ul> <li>Integration with VMware vCenter and NSX</li> </ul>	- Delivers line-rate throughput for all ports and packet sizes	



#### SLX 9640







#### **SLX 9850**



DESCRIPTION	DESCRIPTION	DESCRIPTION
High performance compact fixed form router for WAN edge and border routing	Compact fixed form WAN edge router for WAN edge and border routing	High-density chassis-based modular data center spine, super spine and WAN edge router
PRODUCT POSITIONING	PRODUCT POSITIONING	PRODUCT POSITIONING
- SLX-OS supports full IPv4/v6 switching, MPLS, VPLS, VLL, OSPF, BGP and BGP-EVPN VXLAN overlay	<ul> <li>Multiple 1/10/40/100 GbE configurations for deployment flexibility as a router or as a switch</li> </ul>	- Industry's most powerful IPv4, IPv6, MPLS/Multi-VRF and BGP-EVPN data center router
<ul> <li>Ideal for Internet peering applications or as a data center or enterprise border router with up to 5.7M IPv4 and 1.4M IPv6 (with Optional environmentation)</li> </ul>	<ul> <li>Ultra-deep buffers for lossless forwarding in demanding data center and WAN applications</li> </ul>	<ul> <li>Innovative 1.5 RU interface module design maximizes por density and scale across multiple generations of forward silicon for best in class investment protection</li> </ul>
(with Optiscale routing) - Guest VM with Extreme Insight Architecture with direct 10	<ul> <li>Advanced forwarding — including IPv4, IPv6, MPLS/ VPLS, BGP-EVPN, and OpenFlow</li> </ul>	- Up to 230 Tbps non-blocking system switching capacity
GbE data path - 900 Gigabits of switching capacity in a 1 RU form factor	- Guest VM with Extreme Insight Architecture with direct 10 GbE data path	- Guest VM with Extreme Insight Architecture with direct 10 GbE data path

#### **MLXe**



#### DESCRIPTION

High-density chassis-based modular multiservice wan edge router and network packet broker

#### PRODUCT POSITIONING

- Scalable, multiservice IP/MPLS Routers in 4,8, 16 and 32-slot chassis options
- Fully distributed, non-blocking 15.36 Tbps data capacity
- Up to 64 100 GbE, 768 10 GbE, and 1,536 1GbE ports in a single router
- Wire speed forwarding performance for all software features, incl. Ethernet, VLAN, IPv4, IPv6, MPLS, VPLS, IPSec, MACsec, and OpenFlow forwarding

#### **BRANCH ROUTING/SD-WAN**



## CER



#### **SD-WAN XR200P Branch Router**



## SD-WAN XR600P Branch Router



#### DESCRIPTION DESCRIPTION DESCRIPTION Compact fixed form multi-service carrier Cloud-managed small-to-mid enterprise Cloud-managed mid-enterprise SD-WAN router ethernet router SD-WAN router PRODUCT POSITIONING **PRODUCT POSITIONING** PRODUCT POSITIONING - Compact 1U, IP/MPLS, NEBS Level 3-certified router, built for - Gigabit PoE+ ethernet for branches and remote sites with - Gigabit PoE+ ethernet for branches with demanding high-performance edge routing applications demanding throughput requirements throughput requirements - IPv4 routing: RIP, OSPF, IS-IS, and BGP - Helps reduce operational costs and increase performance. - Helps reduce operational costs and increase performance. provides contextualized security and performance optimization, and supports cloud-managed assurance, intelligence, and simplicity provides contextualized security and performance optimization, and supports cloud-managed assurance, intelligence, and simplicity - IPv6 routing: RIPng, OSPFv3, IS-IS for IPv6, and BGP-MP for IPv6

- MPLS-based Layer 2 (VLL and VPLS) and Layer 3 (BGP VPNs) VPNs

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