# Products At a Glance

Make Your Network Mobile



# It's time to redefine mobility.

Mobility is no longer just about the movement of people and their devices. New mobility requires a network that automatically adapts to many conditions, personalizes the user experience, and rises to meet ever-increasing expectations. Extreme Networks is helping make this new vision of mobility a reality with networks designed for mobility.

Customers deploying our technology know who or what is using the network, what resources they are requesting and where they are located, and can provide personalized access to approved resources and content. Our networks know when an application moves in the virtualized data center and can follow it with a rich suite of network services. And they enable granular visibility and control, so traffic flows are continuous, mobile resources are more secure, and troubleshooting is a snap.

IT now has the capability to deliver an end-user experience with pervasive, high-quality and uninterrupted access to content and applications. The tangible benefits can include an increase in end-user satisfaction and IT efficiency, both of which drive business agility—a top priority for CIOs the world over.



# Extreme Innovation

POWERED BY ExtremeXOS™

## ExtremeXOS

The new vision of mobility requires a flexible, powerful and extensible foundation. The ExtremeXOS® network operating system adds intelligence to the network to help optimize the Quality of User Experience. The power of ExtremeXOS guarantees predictability from the edge to the core, spanning enterprise/campus, data center, service provider and Ethernet mobile backhaul. It offers access to new types of configuration and management technologies that enable more innovative, creative, and extensible solutions.

The modular ExtremeXOS operating system stands out as a real alternative to closed, proprietary products that limit choice and compromise performance.

ExtremeXOS is a highly available and extensible software foundation for the new network mobility. ExtremeXOS raises the bar for availability, which is critical when offering carrier-grade voice and video services over IP and for supporting mission-critical business applications such as CRM. A more available mobile network can also lower operational costs by reducing emergency maintenance. ExtremeXOS allows you to extend the capabilities of your network via dynamic loading of applications, XML APIs and CLI scripting. It allows you to integrate specialized application appliances such as security and VoIP monitoring devices into your network via XML, as well as automatically configuring edge ports for security and VoIP using its Universal Port event-based activation of scripts. Applications such as Identity Manager, XNV™ (ExtremeXOS Network Virtualization) and Direct Attach™ address issues of security, VM mobility and hierarchical layers.

The ExtremeXOS operating system from edge to core simplifies the administration of your network, which can result in lower costs and streamlined resource management, saving your team time and hassle during routine maintenance and upgrades. ExtremeXOS high availability architecture and Ethernet Automatic Protection Switching (EAPS) protocol help reduce network downtime for business continuity and access to mission-critical applications such as CRM, data warehouses and VoIP for carrier and voice-grade networks. Its extensible functionality integrates best-of-breed security and VoIP monitoring appliances to your network with an open, yet secure XML-based Application Programming Interface (API), providing insight and control. Via its dynamic application loading capability, it is capable of integrating Extreme Networks and third party-developed software. Its scripting capability helps facilitate automating regular management tasks and applying these to multiple switches.

# BlackDiamond Family



## BlackDiamond X Series*

BlackDiamond® X series switches simplify enterprise and cloud data center networks with the highest throughput performance in the industry.

- Industry's highest-density 40 GbE and 10 GbE switch for enterprise core and cloud-based data centers
- 192 wire speed 40 Gigabit Ethernet or 768 10 Gigabit Ethernet ports in one third of a rack, 576 40 Gigabit Ethernet or 2,304 10 Gigabit Ethernet ports per rack
- More than 20 terabit switching capacity with bidirectional 1.28 terabit per second switching bandwidth per slot with N+1 lossless switching fabric design
- Lowest power consumption at 5 watts per 10 Gigabit Ethernet with pure front-to-back data center optimized cooling and high efficiency, digital power supplies



## BlackDiamond 8K Series

For small to large enterprise network edge/aggregation/core, metro service providers and data centers.

- High-density gigabit, 10 Gigabit Ethernet (GbE) or 40 Gigabit Ethernet switch for aggregation/core, high-performance cluster computing (HPCC) and data center deployments
- Supports MPLS/H-VPLS and highly scalable Layer 2 and Layer 3 switching with up to 512k MAC addresses or up to 512k IPv4 routes
- Scales from 24G per slot to 160G per slot switching bandwidth
- Cost-effective edge switch for the wiring closet with high-density PoE support for campus enterprises

* Future availability

# Summit Family

## Summit Advanced Series

### Summit Advanced Switch Common Features

- Universal Port dynamic port configuration for IP Telephony and security
- IPv4/IPv6 unicast and multicast routing and intelligent Layer 2 switching
- ExtremeXOS operating system
- ExtremeXOS scripting capability to automate switch configuration



### Summit X670 Series

High density, low latency 10 Gigabit Ethernet stackable switches with optional 40 Gigabit Ethernet uplinks.

- Up to 1.28 Tbps switching performance with 48 10 Gigabit Ethernet ports all running at wire rate
- Optional 4-port 40 GbE module (Summit® X670V), configurable as 16-port 10 GbE, all running at wire rate
- High-performance SummitStack™-V160*/V80* (Summit X670V with optional VIM) or SummitStack-V (both models) stacking support for virtualized chassis configuration supporting mix and match with Gigabit Ethernet switches
- Sub one microsecond low latency for Layer 2 and Layer 3 switching
- Green design with very low power consumption and high efficiency AC/DC power supply



### Summit X650 Series

Ten gigabit top-of-rack switch for service virtualization and aggregation and high-performance access switch for Carrier Ethernet Transport.

- 24-port 10 GbE with 10GBASE-T or SFP+ support in one rack unit with additional 8-port 10 GbE option module
- Optional 4-port 40 GbE module supporting 4 x 40 GbE or 2 x 40 GbE and SummitStack-V160*/V80*
- Optional 256 Gbps or 512 Gbps stacking
- 40 Gbps SummitStack stacking, or SummitStack-V for 10 Gbps, longer distance stacking
- AC or DC dual and hot-swappable power supply

* Future availability



### Summit X480 Series

High-performance gigabit switch for data center virtualization, enterprise aggregation, and Carrier Ethernet Transport.

- High-performance switching and routing with 48-port Gigabit Ethernet or 24-port gigabit and 2-port 10 Gigabit Ethernet
- 40 Gbps SummitStack stacking
- Optional VIM2 slot to support 4-port 10 Gigabit Ethernet, SummitStack 40 Gbps stacking, SummitStack128 for 128 Gbps stacking, or SummitStack V-80 80 Gbps stacking
- Supports MPLS/H-VPLS and highly scalable Layer 2 and Layer 3 switching with up to 512k MAC addresses or up to 512k IPv4 routes
- Tunable DWDM support reduces the need for additional fiber runs and XFP sparing



### Summit X460 Series

Versatile, high-end Gigabit Ethernet switch for data center, enterprise aggregation, and Ethernet access or access aggregation for Carrier Ethernet Transport.

- 52-port, 48-port or 28-port GbE connectivity in a 1RU form factor
- Optional two-port 10 GbE to provide 20 Gbps uplinks
- SummitStack-V80 80 Gbps high-speed stacking or SummitStack-V for 10 Gbps, longer distance stacking
- Flexible IEEE 802.3at Power over Ethernet Plus (PoE-plus) to help meet the growing demand of converged network applications
- Advanced Layer 2/Layer 3 switching and MPLS/H-VPLS



## Summit X450a/X450e Series

Gigabit fiber, copper, or PoE Layer 2/Layer 3 intelligent switching for advanced IP services at aggregation and the edge.

- Flexible fiber and copper Gigabit Ethernet with optional 10 Gigabit Ethernet
- Flexible 10/100/1000 PoE with optional 10 Gigabit Ethernet
- 40 Gbps SummitStack stacking or SummitStack-V for 10 Gbps, longer distance stacking
- AC or DC (X450a only) power supply with external redundancy options



## Summit X250e Series

For 10/100 Layer 2/Layer 3 intelligent switching for advanced IP services at the edge.

- Flexible fiber and copper Fast Ethernet connectivity with PoE and gigabit uplinks
- 40 Gbps SummitStack stacking
- AC or DC power supply with external redundancy options

# Summit Value Series

## Summit Value Switch Common Features

- ExtremeXOS operating system
- ExtremeXOS scripting capability to automate switch configuration



## Summit X350/X150 Series

Intelligent Layer 2 switching for simple enterprise edge solutions.

- External redundant AC power supply options
- Flexible 10/100/1000BASE-T standalone switches
- 10/100BASE-TX with and without PoE standalone switches

# E4G Family



## E4G-200 Cell Site Router*

Provides a seamless migration path from TDM circuits to Ethernet services for mobile operators.

- Compact 1RU size and extended temperature range of operation
- Industry-standard pseudowires (up to 16 ports) and up to 12 Gigabit Ethernet ports
- Certified synchronization with hardware-based implementations—both IEEE 1588v2 and SyncE
- Carrier-grade resiliency and integrated hardware-based Ethernet OAM



## E4G-400 Cell Site Aggregation Router*

For aggregation of TDM and Ethernet services and protocols in an Ethernet mobile backhaul infrastructure.

- Compact 1RU size
- Industry-standard pseudowires (up to 16 ports), up to 28 Gigabit Ethernet ports, and optionally up to six 10 GbE ports
- Certified synchronization with hardware-based implementations—both IEEE 1588v2 and SyncE
- Carrier-grade resiliency and integrated hardware-based Ethernet OAM
- Scalable growth of TDM, GbE and 10 GbE ports by stacking up to eight units

* Future availability

# Wireless Products



## Summit WM3000 Series WLAN Controllers

Highly scalable, secure, and feature-rich wireless LAN controller for multimedia enterprise wireless networks.

- Small site to large multi-site deployment
- Comprehensive wired/wireless security features
- Scalability and high availability with clustering
- Seamless mobility



## Altitude 3500/4500/4600/4700 Series Access Points

Full portfolio of access points for campus-wide deployments and for branch office applications.

- Single, dual and tri radio/dual band indoor access points
- Plug-and-play deployment
- 802.11n performance for high-speed wireless access
- Mesh networking and bridging for extending wireless service



## Motorola AirDefense Services Platform*

Single UI-based platform for wireless monitoring, management and troubleshooting.

- Best-of-breed wireless security monitoring with comprehensive intrusion protection and automated threat mitigation
- Multi-vendor wireless infrastructure management solution on a simplified, UI-based single console
- Remote network analysis and troubleshooting solutions leveraging existing sensor deployment
- Cost-effective way to comply with PCI and other regulatory compliance requirements

* Future availability. Appliance models 1252, 3652 and 4250 are sold separately.

# Management Products




## Ridgeline

Ridgeline™ is a flexible management platform capable of establishing and maintaining networks that are undergoing rapid change due to convergence. Ridgeline offers intuitive user interfaces and reduces the complexity of managing converged networking environments. Ridgeline helps simplify provisioning, troubleshooting and status monitoring of networks built with Extreme Networks products and solutions. Ridgeline offers an open architecture to accommodate a multi-vendor, service-rich environment that enables carrier-class availability and the enforcement of robust security policies.

Ridgeline product structure offers a flexible tiered licensing model for incremental growth, and flexible feature packs that allow for comprehensive and focused solutions to be enabled on demand across enterprise, data center and service provider networks.

The powerful service management features of the Ridgeline Service Advisor Feature Pack enable service providers to shift from reactive circuit monitoring to proactive service management that unifies service fulfillment, service assurance, and service engineering. Benefits include shorter time-to-market of services, lower subscriber churn and increased network efficiency.

The Data Center Feature Pack offers support for XNV, which brings insight, control and automation for highly virtualized data centers. The Security Feature Pack provides support for Identity Manager, which offers network-wide reporting of identities and also helps administrators manage network-wide, role-based policies for both users and devices and apply them consistently across the network to enable seamless mobility and on-demand access to applications to maintain business continuity.

# EAS Series



## EAS 200-24p/100-24t

The EAS family of switches provides consistent, secure, cost-effective network access to support exploding mobility of users, applications and devices. These switches complement an intelligent and high-performance core and edge, providing IT managers with an enterprise-class access layer to build out their network infrastructure.

- Dense connectivity for growing enterprise access requirements
- Cost-effective enterprise access
- Simple and flexible management

# Port Extenders



## ReachNXT 100-8t

ReachNXT™ 100-8t extends the revolutionary ExtremeXOS core-class operating system from Extreme Networks to the network access. ReachNXT 100-8t provides users with a consistent ExtremeXOS experience at an affordable price. It is best suited for network access applications where easy network deployment is required.

# Support

## ExtremeWorks Maintenance and Support

Extreme Networks offers comprehensive service solutions that help you optimize your network. ExtremeWorks® maintenance programs give you the support you need to operate and manage your network on a day-to-day basis, and provide you the safety net you need when the unexpected occurs.

# Extensibility

## XML SDK

ExtremeXOS InSite is a Software Development Kit (SDK) that extends the capabilities of ExtremeXOS through a set of comprehensive Application Programming Interfaces (APIs). These interfaces augment the networking power of ExtremeXOS by allowing applications the ability to interface directly with Extreme Networks switches.

## Ridgeline XML SDK (InSite)

The Ridgeline InSite SDK extends the capabilities of Ridgeline through a set of comprehensive APIs that can be used by third-party, partner, and OSS/BSS applications to retrieve network-wide information. The information retrieved using the APIs allows creation of Service Oriented Architecture (SOA) solutions that bridge the gap between application and business logic.

## Mobile Applications Portfolio

Extreme Networks Mobile Application Portfolio simplifies networking and empowers mobile users and network administrators. The applications are available for download at the Apple® App Store®, and directly link iPad® users to Extreme Networks global service and support, to enable tracking of service requests and warranty statuses, and making educational resources, including guides and multimedia training, available. Extreme Networks Mobile Application Portfolio also provides management tools that offer functionality essential to daily operations, such as port monitoring and insight into bandwidth utilization.

## Widgets

**Deploy**—Widgets that help you quickly deploy your network devices

**Monitor**—Widgets that monitor the health of your network

**Operate**—Widgets that help you handle ongoing network events automatically

Extreme Networks Widgets are designed to ease deployment, monitoring, operations and optimization across the spectrum of Extreme Networks switches, access points and security appliances. What is a widget? Simply put, a widget is a published script, rule set or other aid that helps you address your network challenges.

Visit our developer forum where you can download free widgets, get information about widgets and related product documentation—as well as contribute new widgets, or ideas to develop new widgets.

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