

BlackDiamond 8800 Series Switches

with 8500/8800/8900 Series Modules



BlackDiamond® 8800 series switches simplify the Enterprise network.

Enterprise IT managers and service providers have limited time and resources to deal with overly complex, specialized network infrastructure solutions. BlackDiamond 8800 series switches from Extreme Networks® simplify the architecture. Purpose-built core, aggregation, edge and data center/ service provider modules can meet your chassis needs across the network. BlackDiamond 8800 series switches deliver voice-class availability, high-density Power over Ethernet (PoE), Gigabit Ethernet, and 10 Gigabit Ethernet wherever it is needed.

With three families of modules to choose from, the BlackDiamond 8800 series switches can support a wide variety of applications. In enterprise and data center networks, traditional three-tier architectures can be replaced with a streamlined two-tier network that helps reduce management overhead, operational complexity and capital expenditures. The BlackDiamond 8800 series switches with their 8900-xl 10 gigabit modules meet the needs of next generation service provider transport networks for converged services and are ideal for deployment at the metro core and mobile backhaul aggregation hub. BlackDiamond 8900-xm 40 Gigabit modules meet the needs of next-generation data centers and service providers.

The ports interconnect thousands of servers for High Performance Cluster Computing (HPCC). A full range of Layers 2 - 4 features allow the aggregation of high-speed connections, minimizing bottlenecks.

High Availability

BlackDiamond 8800 series switches achieve voice-class availability by combining highly resilient software and redundant hardware. ExtremeXOS® dramatically increases network availability by monitoring independent operating system processes in real time. If any of these processes become unresponsive, or stop running, they are automatically restarted. The modular design of ExtremeXOS allows the extension of switch functionality. New functionality can easily be added to the switch.

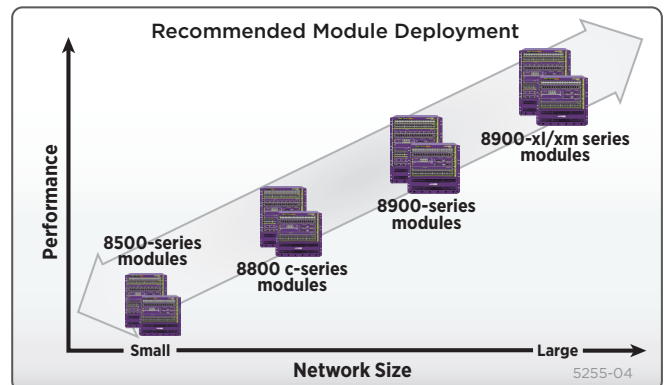
BlackDiamond 8800 series switches support high availability protocols, including Ethernet Automatic Protection Switching (EAPS), allowing the IP network to provide the level of resiliency and uptime that users expect from their traditional voice networks. In most situations, VoIP calls don't drop and digital video feeds don't freeze or pixelize

Features

- High-density gigabit and 10 Gigabit Ethernet switch
- High availability to maximize network uptime
- High performance connectivity for converged networks
- Comprehensive security to maximize protection
- Ease of management to reduce the complexity of network operation
- Support for 40 Gigabit Ethernet*

Target Applications

- High-performance core switch for medium to large enterprise networks
- Scalable and resilient switch for metro core and mobile backhaul cell site aggregation hub
- High-density switch providing low-latency connections at low power for data centers and HPCC
- Cost-effective edge switch for wiring closet



*Future availability.

because EAPS allows the network to recover almost transparently from link failure (in less than 50 milliseconds). Fast failover aids HPCC by keeping calculations and processes moving along unimpeded.

BlackDiamond 8800 series switches include a passive backplane complemented by high availability design elements such as isolated control and data planes, redundant controller boards for power distribution, and fan control and environmental monitoring to identify anomalies before they affect network availability.

| BlackDiamond 8800 Series of Switches Modules (All modules are supported in both BlackDiamond 8806/8810) | |
|--|---|
| Management Module Options | |
| BlackDiamond 8900-series | |
| 8900-MSM128 | Management Switch Module, optional I/O port |
| BlackDiamond 8800 c-series | |
| MSM-48c | Management Switch Module, optional I/O port |
| BlackDiamond 8500-series | |
| 8500-MSM24 | Management Switch Module, optional I/O port |
| I/O Module Options | |
| BlackDiamond 8900-xl/xm series | |
| 8900-40GX-xm* | 6-port 40GBASE-X QSFP+ |
| 8900-10G8X-xl | 8-port 10GBASE-X XFP |
| 8900-G48T-xl | 48-port 10/100/1000BASE-T, RJ45, optional PoE |
| 8900-G48X-xl | 48-port 1000BASE-X SFP |
| BlackDiamond 8900-series | |
| 8900-10G24X-c | 24-port 10GBASE-X SFP+ |
| 8900-G96T-c | 96-port 10/100/1000BASE-T MRJ-21 |
| BlackDiamond 8800 c-series | |
| 10G4Xc | 4-port 10GBASE-SFP |
| 10G8Xc | 8-port 10GBASE-XFP |
| G24Xc | 24-port 1000BASE-X SFP |
| G48Tc | 48-port 10/100/1000BASE-T RJ-45, optional PoE card |
| G48Xc | 48-port 1000BASE-X SFP |
| BlackDiamond 8500-series | |
| 8500-G24X-e | 24-port 1000BASE-X SFP |
| 8500-G48T-e | 48-port 10/100/1000BASE-T, RJ-45, optional PoE card |
| Pluggable Options | |
| S-10G1Xc | 1-port 10G XFP card |
| S-10G2Xc | 2-port 10G XFP card |
| S-G8Xc | 8-port 1G SFP card |
| S-PoE | PoE card |

*Future availability.

High-Performance Connectivity

BlackDiamond 8800 series switches support up to 2,352 gigabit ports or up to 582 10 Gigabit Ethernet ports in a single seven foot rack, allowing these switches to deliver very cost-effective connectivity for a range of edge, aggregation, core and data center needs.

Extreme Networks tradition of building products with low latency and jitter continues with BlackDiamond 8800 series switches, providing voice-quality connections. BlackDiamond 8800 switches can offer PoE on every port. Their extensibility supports large IP Telephony deployments and scales seamlessly as non-computing devices, such as surveillance cameras and Personal Digital Assistants (PDAs), are accommodated at the edge.

BlackDiamond 8800 series switches incorporate Link Layer Discovery Protocol (LLDP) to simplify troubleshooting of enterprise networks and enhance the ability of management tools to discover and maintain accurate network topologies. By reducing the complexity and expense that arise from convergence-driven network changes, BlackDiamond 8800 switches allow enterprises to add new access devices in a non-disruptive, plug-and-play fashion.

Comprehensive Security Management

BlackDiamond 8800 switches, when combined with Extreme Networks Ridgeline™ management tool, allow you to adopt a strategy in safeguarding your network on multiple levels.

User authentication and host integrity checking enforce admission and usage policies on dedicated and shared ports at the edge of the network. The powerful sFlow® and IPFIX technologies provide threat detection and response by offering continuous and simultaneous monitoring of application-level traffic flows on all interfaces. In the event of an attack, network managers can dynamically reconfigure the switches to close vulnerabilities, hardening the network without shutting down network operation. BlackDiamond 8800 switches' policy-based routing provides a flexible mechanism for network administrators to customize the flow of traffic. Access Control Lists (ACLs) configured on the switch can redirect packets away from their normal path

to another physical switch port. Packets are selected according to their ACL match conditions such as class of service, VLAN, IP addresses, protocol, port number or other criteria.

BlackDiamond 8800 switches complement perimeter firewalls by protecting the "soft interior" of the network. Utilizing the industry's most advanced CLEAR-Flow Security Rules Engine, the switches can be programmed to automatically detect and mitigate security threats in seconds.

Identity Manager

Identity Manager allows network managers to track users who access their network. User identity is captured based on NetLogin authentication, LLDP discovery and Kerberos snooping. ExtremeXOS uses the information to then report on the MAC, VLAN, computer hostname, and port location of the user. Further, Identity Manager can create both roles and policies, and then bind them together to create role-based profiles based on organizational structure or other logical groupings, and apply them across multiple users to allow appropriate access to network resources. In addition, support for Wide Key ACLs further improves security by going beyond the typical source/destination and MAC address as identification criteria access mechanism to provide filtering capabilities.

Ease of Management

Extreme Networks has developed tools that save you time and resources in managing your network. The Universal Port capability allows auto-configuration of VoIP phones, for example, providing simplicity in managing network changes. Ridgeline network and service management provides fault, configuration, accounting, performance and security functions, allowing more effective management of Extreme Networks products, solutions and third-party devices, in a converged network.

Investment Protection

With a wide range of available I/O and management modules, the BlackDiamond 8800 series switches provide unparalleled investment protection over the product lifetime. Past and current generations of modules are compatible with any BlackDiamond 8800 series chassis.



Make Your Network Mobile

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