## B-Series B5

Gigabit Ethernet Stackable Edge Switchv

## BUSINESS ALIGNMENT

- Aligns network resource utilization with business goals and priorities
- Reliable network operation for mission-critical applications


## OPERATIONAL EFFICIENCY

- Management automation capabilities reduce network operational expenses
- Automatic discovery and deployment of VoIP services


## SECURITY

- Ability to audit network for adherence to compliance regulations, such as PCl or HIPAA
- Network resources securely allocated according to user roles
- Network security maintained concurrently with user mobility


## SUPPORT AND SERVICE

- Industry-leading customer satisfaction and first call resolution rates
- Personalized services, including site surveys, network design, installation, and training
- Comprehensive limited lifetime warranty, including feature upgrades and more

- Future-proofed with 802.3at high-power PoE support
- Automatic discovery and deployment of VoIP services
- High-availability stacking assures reliable network operations
- Automated management features reduce operational costs
- Investment protection via comprehensive limited lifetime warranty
- 1.47 Tbps capacity and 809.5 Mpps


## Product Overview

The Extreme Networks B5 is a scalable, high-performance Gigabit Ethernet switch that provides support for the bandwidth-intensive and latency-sensitive requirements of today's demanding business applications. The B5 is an excellent choice for environments that require complete multi-layer switching capabilities and support for high density 10/100/1000 Ethernet ports, cost effective10GE uplinks, dual IPv4/IPv6 management, basic routing and policy-based automation capabilities for advanced edge deployments.

The B5 incorporates the new 802.3at high-power PoE on all ports, translating into increased power provisioning for power-hungry devices such as Pan/Tilt/Zoom (PTZ) IP surveillance cameras, IP videophones, third party 802.11 n access points and virtual desktops. Built-in high-power PoE support is a cost effective alternative for customers in place of purchasing separate PoE midspans, which can take away valuable rack space, add cost and contribute more cabling to the wiring closet.

The B5 provides high port density in a 1 U footprint and is environmentally friendly by design. The B5's overall energy efficiency is further enhanced by a low current draw and an extreme tolerance for high environmental temperatures. A highlyscalable architecture and a comprehensive limited lifetime warranty ensure that a B5 network investment will sustain a secure, feature-rich and cost-effective network well into the future.

The B5's highly customizable Layer 2/3/4 packet classification capabilities work together with the 8 hardware-based priority queues associated with each Ethernet port to support a suite of differentiated services with as many as 8 distinct priority levels to provide guaranteed Quality of Service (QoS) for critical voice and video network traffic. In conjunction with its non-blocking L2 switching and L3 routing architecture, the B5's intelligent queuing mechanisms ensure that mission-critical applications receive prioritized access to network resources.

## Reliability and Availability

The B5 design incorporates redundancy and failure protection mechanisms complete with automatic failover and recovery capabilities to provide a reliable network. An integral power supply is the primary source of power for the B5 and complete power redundancy is provided by an optional external power supply. A virtual switch can be created by interconnecting as many as eight B5s in a single stack, which can be managed via a single IP address with redundant management connections. The B5's closed-loop stacking capability utilizes bi-directional switch interconnects to maintain connectivity within the virtual switch despite any physical failures, which includes switches, cables and connections. Flexible Link Aggregation Groups (6 groups of 8,12 groups of 4 or 24 groups of 2) are supported which allow multiple Ethernet ports (8, 4 or 2) to be grouped together to create a LAG. A LAG's Ethernet ports can be co-located on a single B5 or they can be distributed across multiple B5s within a stack to prevent a switch-level failure from disrupting data communications. The B5 also includes Host CPU Protection support to help prevent Denial of Service (DoS) and BPDU attacks.

## Advanced Quality of Service

Robust Quality of Service (QoS) features enable strong support for integrated multimedia networks, as well as all types of data-intensive applications. The B5 is a standardsbased solution optimized for multimedia applications, including VoIP, videoconferencing and real-time collaboration. The B5 uses multiple standards-based discovery methods with policy capabilities to automatically identify and provision VoIP services for IP phones from all major vendors. B5 switches provide dynamic mobility for VoIP clients to reduce operating costs; when an IP phone moves and plugs in elsewhere in the enterprise network, its VoIP service provisioning, security and traffic priority settings move with it, with no manual administration required.

## Security

IThe B5 enables strong network security by utilizing its authentication and security features, which can be applied at the port level or at the user level. Making use of the Extreme Networks Network Management Suite's Policy Manager or a standard CLI, the role-based architecture enables a network administrator to define distinct roles or profiles that represent
operational groups within a business (e.g., employee, executive, guest, etc). Multiple users/devices per port can be authenticated via IEEE 802.1X, MAC address, or web authentication, and then assigned a pre-defined operational role. The B5 now supports increased password security via increased complexity, history tracking and aging. Passwords can now be encrypted using a FIPS 1402 approved algorithm.

Administrators can easily transition from RFC 3580 and complex access control list (ACL) deployments to the Extreme Networks role-based policy framework in a seamless fashion, without the need to make changes to their RADIUS infrastructure (e.g., adding filter-ID). In addition, the B5 also supports ACLs for supplementary network security. Network operations can be easily tailored to meet business-oriented requirements by providing each role with individualized access to network services and applications (e.g., a guest should have different network access privileges than an employee). Utilizing Extreme Networks role-based policy, administrators are able to manipulate DSCP and 802.1p rewrite for classification and prioritization of network traffic.

The B5 allows administrators even more network visibility, with the ability to audit their network for adherence to compliance regulations, such as PCl or HIPAA. The B 5 is able to segment roles down to group levels, such as supporting a guest access role, helping to protect corporate applications and information.

## Investment Protection

The B5 is a cost-effective, feature-rich, stackable switch that provides a broad set of features today and will continue to deliver benefits well into the future. All B-Series products include a limited lifetime warranty that includes warranty and support services for which many competitors charge additional fees - adding up to 10\% of initial deployment costs on an annual basis. Included benefits, such as advanced hardware return, firmware feature upgrades (which most vendors cover at most for 90 days) and telephone support (which most don't include or severely limit) combine to significantly decrease operational costs for customers over the life of their network. For more information regarding warranty terms and conditions please go to http://www.ExtremeNetworks.com/support/warranty.aspx.

## Performance \& Scalability

The B5, with support for 32,000 MAC addresses, provides scalable, wire-rate performance in support of the bandwidthintensive and delay-sensitive requirements of today's demanding applications. Along with a switch capacity of 184 Gbps , the B5 provides up to 48 10/100/1000 Ethernet ports as well as two 10 GE ports. Leveraging the B5's stacking capability, as many as 8 B5s (both 24-port and 48-port combinations) can be interconnected in a single stack to create a virtual switch that provides 1.47 Tbps of capacity and up to 384 10/100/1000 Ethernet ports as well as 16 10GE uplink ports.

Extreme:
Connect Beyond the Network

## Features / Standards and Protocols

MAC Address Table Size
32,000
VLANs
4,094 VLAN IDs
1,024 VLAN Entries per Stack

## Switching Services

IEEE 802.1AB - LLDP
ANSI/TIA-1057 - LLDP-MED
IEEE 802.1D - MAC Bridges
IEEE 802.1s - Multiple Spanning Trees
IEEE 802.1t - 802.1D Maintenance
IEEE 802.1w - Rapid Spanning Tree Reconvergence
IEEE 802.3 - Ethernet
IEEE 802.3ab - GE over Twisted Pair
IEEE 802.3ad - Link Aggregation
IEEE 802.3ae - 10 Gigabit Ethernet (fiber)
IEEE 802.3af - PoE
IEEE 802.3at - High Power PoE (up to 30W per port)
IEEE 802.3i - 10Base-T
IEEE 802.3u - 100Base-T, 100Base-FX
IEEE 802.3z - GE over Fiber
Full/half duplex auto-sense support on all ports
IGMP Snooping v1/v2/v3
Jumbo Frame support (9,216 bytes)
Loop Protection
One-to-One and Many-to-One Port Mirroring
Port Description
Protected Ports
Selectable LAG Configuration ( $6 \times 8,12 \times 4,24 \times 2$ )
Host CPUProtection - Broadcast/ Multicast/ Unknown Unicast
Suppression
Spanning Tree Backup Root
STP Pass-Thru

## VLAN Support

Generic Attribute Registration Protocol (GARP)
Generic VLAN Registration Protocol (GVRP)
IEEE 802.1p - Traffic classification
IEEE 802.1q - VLAN Tagging
Protocol-based VLANs with Extreme Networks Policy
IEEE 802.3ac - VLAN Tagging Extensions
Port-based VLAN (private port/private VLAN)
Tagged-based VLAN
VLAN Marking of Mirror Traffic
Standalone VLAN Association application for subnet, protocol and
MAC based VLAN classification

## Quality of Service

8 Priority Queues per Port
802.3x Flow Control

Class of Service (CoS)
Ingress Rate Limiting
IP ToS/DSCP Marking/Remarking
IP Precedence
IP Protocol
Layer 2/3/4 Classification
Multi-layer Packet Processing
Mixed Queuing Control - Strict and
Weighted Round Robin
Source/Destination IP Address
Source/Destination MAC Address
RFC 2474 Definition of Differentiated Services Field

## Security

ARP Spoof Protection
DHCP Spoof Protection
Dynamic and Static MAC Locking
EAP Pass Thru
Hybrid Mode
IEEE 802.1X Port Authentication
MAC-based Port Authentication
RADIUS Accounting for network access
RADIUS Client
IPsec for RADIUS transactions
RFC 3580 - IEEE 802.1X RADIUS Usage Guidelines
Multi-user Authentication
Pre-login banner
Password encrypted using a FIPS 1402 approved algorithm
Secure Networks Policy
Secured Shell (SSHv2)
Secured Socket Layer (SSL)
User and IP Phone Authentication
Web-based Port Authentication
Auto Console Disconnect
Security Log
Secure Directory
IPv4 Routing
Standard Access Control List (ACLs)
Extended ACLs
VLAN-based ACLs
Service ACLs
IPv6 ACLs - not simultaneously supported with policy
MAC-based ACLs - not simultaneously supported with policy
ARP \& ARP Redirect
IP Helper Address
RFC 826 - Ethernet ARP
RFC 1058 - RIP v1
RFC 1256 - ICMP Router Discovery Messages
RFC 1519 Classless Inter-Domain Routing
RFC 1724 - RIPv2 MIB Extension
RFC 2236 - IGMPv2
RFC 2453 - RIP v2
RFC 3046 - DHCP/BootP Relay
RFC 3376 - IGMPv3
Static Routes

## MIB Support

Enterasys Networks Entity MIB
Enterasys Networks Policy MIB
Enterasys Networks VLAN Authorization MIB
Enterasys Networks Spanning Tree Diagnostic MIB
ANSI/TIA-1057 - LLDP-MED MIB
IEEE 802.1AB - LLDP MIB
IEEE 802.1X MIB - Port Access
IEEE 802.3ad MIB - LAG MIB
RFC 826 - ARP and ARP Redirect
RFC 951, RFC 1542 - DHCP/BOOTP Relay
RFC 1213 - MIB/MIB II
RFC 1493 - BRIDGE-MIB
RFC 1643 - Ethernet-like MIB
RFC 2096 - IP Forwarding Table MIB
RFC 2131, RFC 3046 - DHCP Client/Relay
RFC 2571 - SNMP Framework MIB
RFC 2465 - IPv6 MIB
RFC 2466 - ICMPv6 MIB

## Features / Standards and Protocols (cont.)

RFC 2613 - SMON MIB
RFC 2618 - RADIUS Authentication Client MIB
RFC 2620 - RADIUS Accounting Client MIB
RFC 2668 - Managed Object Definitions for 802.3 MAUs
RFC 2674 - P-BRIDGE-MIB
RFC 2674 - QBRIDGE-MIB VLAN Bridge MIB
RFC 2737 - Entity MIB (physical branch only)
RFC 2819 - RMON-MIB
RFC 2863 - IfMIB
RFC 2933-IGMP MIB
RFC 3413 - SNMP v3 Applications MIB
RFC 3414 - SNMP v3 User-based Security Module (USM) MIB
RFC 3415 - View-based Access Control Model for SNMP
RFC 3584 - SNMP Community MIB
RFC 3621 - Power over Ethernet MIB

## Management

Alias Port Naming Command Line Interface (CLI)
Configuration Upload/Download
Dual IPv4/IPv6 Management Support
Editable Text-based Configuration File
TFTP Client
Command Logging
Multi-configuration File Support
NMS Automated Security Manager
NMS Console
NMS Inventory Manager
NMS Policy Manager
Node/Alias Table
RFC 768 - UDP
RFC 783 - TFTP
RFC 791 - IP
RFC 792 - ICMP
RFC 793 - TCP
RFC 826 - ARP

RFC 854 - Telnet
RFC 951 - BootP
RFC 1157 - SNMP
RFC 1901 - Community-based SNMPv2
RFC 1981 - Path MTU for IPv6
RFC 2030 - Simple Network Time Protocol (SNTP)
RFC 2460 - IPv6 Protocol Specification
RFC 2461 - IPv6 Neighbor Discovery
RFC 2462 - Stateless Autoconfiguration
RFC 2463 - ICMPv6
RFC 2465 - IPv6 MIB
RFC 2933 - IGMP MIB
RFC 3176 - sFlow
RFC 3413 - SNMP Applications MIB
RFC 3414 - SNMP User-based Security
Module (USM) MIB
RFC 3415 - View-based Access Control
Model for SNMP
RFC 3587 - IPv6 Global Unicast Address Format
RFC 3826 - Advanced Encryption Standard (AES) for SNMP
RMON (Stats, History, Alarms, Events,
Filters, Packet Capture)
RFC 4007-IPv6 Scoped Address Architecture
RFC 4291 - IPv6 Addressing Architecture
Secure Copy (SCP)
Secure FTP (SFTP)
Simple Network Management Protocol
(SNMP) v1/v2c/v3
SSHv2
RFC 3164 - The BSD Syslog Protocol
TACACS+ for Management Authentication, Authorization and Auditing
Web-based Management
Webview via SSL Interface

Switch Model Specifications

|  | B5G124-24 | B5G124-24P2 | B5G124-48 | B5G124-48P2 |
| :---: | :---: | :---: | :---: | :---: |
| Performance |  |  |  |  |
| Throughput Capacity wirespeed Mpps (switch / stack) | 35.7 Mpps / 285.7 Mpps | 35.7 Mpps / 285.7 Mpps | 71.4 Mpps / 571.4 Mpps | 71.4 Mpps / 571.4 Mpps |
| Switching Capacity (switch / stack) | ```48 Gbps (35.7 Mpps)/ 384 Gbps (285.7 Mpps)``` | ```48 Gbps (35.7 Mpps)/ 384 Gbps (285.7 Mpps)``` | ```96 Gbps (71.4 Mpps)/ 768 Gbps (571.4 Mpps)``` | ```96 Gbps (71.4 Mpps)/ 768 Gbps (571.4 Mpps)``` |
| Stacking Capacity (switch / stack) | 48 Gbps ( 35.7 Mpps )/ <br> 384 Gbps (285.7 Mpps) | 48 Gbps (35.7 Mpps)/ <br> 384 Gbps (285.7 Mpps) | $\begin{aligned} & 48 \text { Gbps (35.7 Mpps)/ } \\ & 384 \text { Gbps (285.7 Mpps) } \end{aligned}$ | ```48 Gbps (35.7 Mpps)/ 384 Gbps (285.7 Mpps)``` |
| Aggregate Throughput Capacity (switch / stack) | 96 Gbps (71.4 Mpps)/ <br> 768 Gbps (571.4 Mpps) | 96 Gbps (71.4 Mpps)/ <br> 768 Gbps (571.4 Mpps) | 144 Gbps (107.1 Mpps)/ <br> 1,152 Gbps (857.1 Mpps) | 144 Gbps (107.1 Mpps)/ 1,152 Gbps (857.1 Mpps) |
| PoE Specifications |  |  |  |  |
| 802.3af Interoperable | N/A | Yes | N/A | Yes |
| 802.3at Interoperable | N/A | Yes | N/A | Yes |
| System Power | N/A | 375 watts per switch with up to 30 watts per port Per-port switch power monitor: <br> - Enable/disable <br> - Priority safety <br> - Overload \& short circuit protection | N/A | 375 watts per switch with up to 30 watts per port Per-port switch power monitor: <br> - Enable/disable <br> - Priority safety <br> - Overload \& short circuit protection |
| Physical Specifications |  |  |  |  |
| Dimensions ( $\mathrm{H} \times \mathrm{W} \times \mathrm{D}$ ) | H: $4.4 \mathrm{~cm}\left(1.73^{\prime \prime}\right)$ <br> W: 44.1 cm (17.36") <br> D: $36.85 \mathrm{~cm}\left(14.51^{\prime \prime}\right)$ | H: 4.4 cm (1.73") <br> W: 44.1 cm (17.36") <br> D: 36.85 cm (14.51") | H: $4.4 \mathrm{~cm}\left(1.73^{\prime \prime}\right)$ <br> W: 44.1 cm (17.36") <br> D: 36.85 cm (14.51") | H: $4.4 \mathrm{~cm}\left(1.73^{\prime \prime}\right)$ <br> W: 44.1 cm (17.36") <br> D: 36.85 cm (14.51") |
| Net Weight | $4.92 \mathrm{~kg}(10.85 \mathrm{lb})$ | $6.10 \mathrm{~kg}(13.45 \mathrm{lb})$ | $5.31 \mathrm{~kg}(11.70 \mathrm{lb})$ | $6.49 \mathrm{~kg}(14.30 \mathrm{lb})$ |
| MTBF | 394,679 hours | 345,093 hours | 308,359 hours | 260,806 hours |
| Physical Ports | - (24) 10/100/1000 autosensing, auto-negotiating MDI/MDI-X RJ45 ports <br> - (4) Combo SFP ports <br> - (2) dedicated stacking ports <br> - (1) DB9 console port <br> - (1) RPS connector | - (24) 10/100/1000 PoE (.af + .at) auto-sensing, autonegotiating MDI/MDI-X RJ45 ports <br> - (4) Combo SFP ports <br> - (2) dedicated stacking ports <br> - (1) DB9 console port <br> - (1) RPS connector | - (48) 10/100/1000 auto-sensing, autonegotiating MDI/MDI-X RJ45 ports <br> - (4) Combo SFP ports <br> - (2) dedicated stacking ports <br> - (1) DB9 console port <br> - (1) RPS connector | - (48) 10/100/1000 PoE (.af + .at) auto-sensing, auto-negotiating MDI/MDI-X RJ45 ports <br> - (4) Combo SFP ports <br> - (2) dedicated stacking ports <br> - (1) DB9 console port <br> - (1) RPS connector |
| Power Requirements |  |  |  |  |
| Normal Input Voltage | 100-240 VAC | 100-240 VAC | 100-240 VAC | 100-240 VAC |
| Input Frequency | $50-60 \mathrm{~Hz}$ | $50-60 \mathrm{~Hz}$ | $50-60 \mathrm{~Hz}$ | $50-60 \mathrm{~Hz}$ |
| Input Current | 2 A Max | 7.5 A Max | 2 A Max | 7.5 A Max |
| Power Consumption | 48 watts | 93 watts | 76 watts | 125 watts |
| Temperature |  |  |  |  |
| IEC 6-2-1 <br> Standard Operating <br> Temperature | $\begin{aligned} & 0^{\circ} \text { to } 50^{\circ} \mathrm{C} \\ & \left(32^{\circ} \text { to } 122^{\circ} \mathrm{F}\right) \end{aligned}$ | $\begin{aligned} & 0^{\circ} \text { to } 50^{\circ} \mathrm{C} \\ & \left(32^{\circ} \text { to } 122^{\circ} \mathrm{F}\right) \end{aligned}$ | $\begin{aligned} & 0^{\circ} \text { to } 50^{\circ} \mathrm{C} \\ & \left(32^{\circ} \text { to } 122^{\circ} \mathrm{F}\right) \end{aligned}$ | $\begin{aligned} & 0^{\circ} \text { to } 50^{\circ} \mathrm{C} \\ & \left(32^{\circ} \text { to } 122^{\circ} \mathrm{F}\right) \end{aligned}$ |
| IEC 6-2-14 Non-Operating Temperature | $\begin{aligned} & -40^{\circ} \text { to } 70^{\circ} \mathrm{C} \\ & \left(-40^{\circ} \text { to } 158^{\circ} \mathrm{F}\right) \end{aligned}$ | $\begin{aligned} & -40^{\circ} \text { to } 70^{\circ} \mathrm{C} \\ & \left(-40^{\circ} \text { to } 158^{\circ} \mathrm{F}\right) \end{aligned}$ | $\begin{aligned} & -40^{\circ} \text { to } 70^{\circ} \mathrm{C} \\ & \left(-40^{\circ} \text { to } 158^{\circ} \mathrm{F}\right) \end{aligned}$ | $\begin{aligned} & -40^{\circ} \text { to } 70^{\circ} \mathrm{C} \\ & \left(-40^{\circ} \text { to } 158^{\circ} \mathrm{F}\right) \end{aligned}$ |
| Heat Dissipation | 164 BTUs/Hr | 318 BTUs/Hr | 258 BTUs/Hr | 427 BTUs/Hr |
| Humidity |  |  |  |  |
| Operating Humidity | 5\% - 95\% non-condensing | 5\%-95\% non-condensing | 5\% - 95\% non-condensing | 5\%-95\% non-condensing |
| Vibration |  |  |  |  |
|  | IEC 68-2-6, IEC68-2-36 | IEC 68-2-6, IEC68-2-36 | IEC 68-2-6, IEC68-2-36 | IEC 68-2-6, IEC68-2-36 |
| Shock |  |  |  |  |
|  | IEC 68-2-29 | IEC 68-2-29 | IEC 68-2-29 | IEC 68-2-29 |
| Drop |  |  |  |  |
|  | IEC 68-2-32 | IEC 68-2-32 | IEC 68-2-32 | IEC 68-2-32 |

Switch Model Specifications

|  | B5G124-24 | B5G124-24P2 | B5G124-48 | B5G124-48P2 |
| :---: | :---: | :---: | :---: | :---: |
| Altitude |  |  |  |  |
| Operating | $10,000 \mathrm{ft}(3,048 \mathrm{~m})$ | $10,000 \mathrm{ft}(3,048 \mathrm{~m})$ | 10,000 ft (3,048 m) | $10,000 \mathrm{ft}(3,048 \mathrm{~m})$ |
| Non-operating | 15,000 ft (4,572 m) | 15,000 ft (4,572 m) | 15,000 ft (4,572 m) | 15,000 ft (4,572 m) |
| Acoustics |  |  |  |  |
| Front of switch (normal operation) | 44.5 dB | 45 dB | 45.5 dB | 44.5 dB |
| Agency and Regulatory Standard Specifications |  |  |  |  |
| Safety | UL 60950-1, CSA 22.1 60950, EN 60950-1, and IEC 60950-1 | UL 60950-1, CSA 22.1 60950, <br> EN 60950-1, and IEC 60950-1 | UL 60950-1, CSA 22.1 60950, <br> EN 60950-1, and IEC 60950-1 | UL 60950-1, CSA 22.1 <br> 60950, EN 60950-1, and IEC 60950-1 |
| EMC | FCC Part 15 (Class A), ICES-003 (Class A), BSMI, VCCI V-3, AS/NZS CISPR 22 (Class A), EN 55022 (Class A), EN 55024, EN 61000-32, and EN 61000-3-3 | FCC Part 15 (Class A), ICES003 (Class A), BSMI, VCCI V-3, AS/NZS CISPR 22 (Class A), EN 55022 (Class A), EN 55024, EN 61000-3-2, and EN 61000-3-3 | FCC Part 15 (Class A), ICES003 (Class A), BSMI, VCCI V-3, AS/NZS CISPR 22 (Class A), EN 55022 (Class A), EN 55024, EN 61000-3-2, and EN 61000-3-3 | FCC Part 15 (Class A), ICES-003 (Class A), BSMI, VCCI V-3, AS/NZS CISPR 22 (Class A), EN 55022 (Class A), EN 55024, EN 61000-32, and EN 61000-3-3 |
| Environmental | 2002/95/EC (RoHS Directive), 2002/96/EC (WEEE Directive), Ministry of Information Order \#39 (China RoHS) | 2002/95/EC (RoHS Directive), 2002/96/EC (WEEE Directive), Ministry of Information Order \#39 (China RoHS) | 2002/95/EC (RoHS Directive), 2002/96/EC (WEEE Directive), Ministry of Information Order \#39 (China RoHS) | 2002/95/EC (RoHS Directive), 2002/96/EC (WEEE Directive), Ministry of Information Order \#39 (China RoHS) |


|  | B5K125-24 | B5K125-24P2 | B5K125-48 | B5K125-48P2 |
| :---: | :---: | :---: | :---: | :---: |
| Performance |  |  |  |  |
| Throughput Capacity wire-speed Mpps (switch / stack) | 65.5 Mpps / 523.8 Mpps | 65.5 Mpps / 523.8 Mpps | 101.2 Mpps / 809.5 Mpps | 101.2 Mpps / 809.5 Mpps |
| Switching Capacity (switch / stack) | $\begin{aligned} & 88 \text { Gbps ( } 65.5 \mathrm{Mpps} \text { )/ } \\ & 704 \text { Gbps ( } 523.8 \mathrm{Mpps} \text { ) } \end{aligned}$ | 88 Gbps (65.5 Mpps)/ <br> 704 Gbps (523.8 Mpps) | 136 Gbps (101.2 Mpps)/ 1,088 Gbps (809.5 Mpps) | 136 Gbps (101.2 Mpps)/ <br> 1,088 Gbps (809.5 Mpps) |
| Stacking Capacity (switch / stack) | ```48 Gbps (35.7 Mpps)/ 384 Gbps (285.7 Mpps)``` | ```48 Gbps (35.7 Mpps)/ 384 Gbps (285.7 Mpps)``` | 48 Gbps (35.7 Mpps)/ <br> 384 Gbps (285.7 Mpps) | 48 Gbps (35.7 Mpps)/ <br> 384 Gbps (285.7 Mpps) |
| Aggregate Throughput Capacity (switch / stack) | $\begin{aligned} & \text { 136 Gbps (101.2 Mpps)/ } \\ & \text { 1,088 Gbps ( } 809.5 \text { Mpps) } \end{aligned}$ | 136 Gbps (101.2 Mpps)/ 1,088 Gbps (809.5 Mpps) | 184 Gbps (136.9 Mpps)/ 1,472 Gbps (1,095.2 Mpps) | 184 Gbps (136.9 Mpps)/ <br> 1,472 Gbps (1,095.2 Mpps) |
| PoE Specifications |  |  |  |  |
| 802.3af Interoperable | N/A | Yes | N/A | Yes |
| 802.3at Interoperable | N/A | Yes | N/A | Yes |
| System Power | N/A | 375 watts per switch with up to 30 watts per port Per-port switch power monitor: <br> - Enable/disable <br> - Priority safety <br> - Overload \& short circuit protection | N/A | 375 watts per switch with up to 30 watts per port Per-port switch power monitor: <br> - Enable/disable <br> - Priority safety <br> - Overload \& short circuit protection |
| Physical Specifications |  |  |  |  |
| Dimensions ( $\mathrm{H} \times \mathrm{W} \times \mathrm{D}$ ) | H: 4.4 cm (1.73") <br> W: 44.1 cm (17.36") <br> D: 36.85 cm (14.51") | H: 4.4 cm (1.73") <br> W: 44.1 cm (17.36") <br> D: 36.85 cm (14.51") | H: $4.4 \mathrm{~cm}\left(1.73^{\prime \prime}\right)$ <br> W: 44.1 cm (17.36") <br> D: 36.85 cm (14.51") | H: 4.4 cm (1.73") <br> W: 44.1 cm (17.36") <br> D: 36.85 cm (14.51") |
| Net Weight | 4.92 kg ( 10.85 lb ) | $6.10 \mathrm{~kg}(13.45 \mathrm{lb})$ | $5.31 \mathrm{~kg}(11.70 \mathrm{lb})$ | $6.49 \mathrm{~kg}(14.30 \mathrm{lb})$ |
| MTBF | 374,029 hours | 328,905 hours | 297,808 hours | 252,940 hours |
| Physical Ports | - (24) 10/100/1000 autosensing, auto-negotiating MDI/MDI-X RJ45 ports <br> - (2) Combo SFP ports <br> - (2) 10GE ports <br> - (2) dedicated stacking ports <br> - (1) DB9 console port <br> - (1) RPS connector | - (24)10/100/1000 PoE (.af + .at) auto-sensing, autonegotiating MDI/MDI-X RJ45 ports <br> - (2) Combo SFP ports <br> - (2) 1OGE ports <br> - (2) dedicated stacking ports <br> - (1) DB9 console port <br> - (1) RPS connector | - (48) 10/100/1000 autosensing, auto-negotiating MDI/MDI-X RJ45 ports <br> - (2) Combo SFP ports <br> - (2) 10GE ports <br> - (2) dedicated stacking ports <br> - (1) DB9 console port <br> - (1) RPS connector | - (48)10/100/1000 PoE (.af + .at) auto-sensing, auto-negotiating MDI/ MDI-X RJ45 ports <br> - (2) Combo SFP ports <br> - (2) 10GE ports <br> - (2) dedicated stacking ports <br> - (1) DB9 console port <br> - (1) RPS connector |

Switch Model Specifications (cont.)

|  | B5K125-24 | B5K125-24P2 | B5K125-48 | B5K125-48P2 |
| :---: | :---: | :---: | :---: | :---: |
| Power Requirements |  |  |  |  |
| Normal Input Voltage | 100-240 VAC | 100-240 VAC | 100-240 VAC | 100-240 VAC |
| Input Frequency | $50-60 \mathrm{~Hz}$ | $50-60 \mathrm{~Hz}$ | $50-60 \mathrm{~Hz}$ | $50-60 \mathrm{~Hz}$ |
| Input Current | 2 A Max | 7.5 A Max | 2 A Max | 7.5 A Max |
| Power Consumption | 59 watts | 98 watts | 94 watts | 125 watts |
| Temperature |  |  |  |  |
| IEC 6-2-1 <br> Standard Operating Temperature | $\begin{aligned} & 0^{\circ} \text { to } 50^{\circ} \mathrm{C} \\ & \left(32^{\circ} \text { to } 122^{\circ} \mathrm{F}\right) \end{aligned}$ | $0^{\circ}$ to $50^{\circ} \mathrm{C}$ <br> ( $32^{\circ}$ to $122^{\circ} \mathrm{F}$ ) | $0^{\circ}$ to $50^{\circ} \mathrm{C}$ <br> ( $32^{\circ}$ to $122^{\circ} \mathrm{F}$ ) | $\begin{aligned} & 0^{\circ} \text { to } 50^{\circ} \mathrm{C} \\ & \left(32^{\circ} \text { to } 122^{\circ} \mathrm{F}\right) \end{aligned}$ |
| IEC 6-2-14 Non-Operating Temperature | $\begin{aligned} & -40^{\circ} \text { to } 70^{\circ} \mathrm{C} \\ & \left(-40^{\circ} \text { to } 158^{\circ} \mathrm{F}\right) \end{aligned}$ | $\begin{aligned} & -40^{\circ} \text { to } 70^{\circ} \mathrm{C} \\ & \left(-40^{\circ} \text { to } 158^{\circ} \mathrm{F}\right) \end{aligned}$ | $\begin{aligned} & -40^{\circ} \text { to } 70^{\circ} \mathrm{C} \\ & \left(-40^{\circ} \text { to } 158^{\circ} \mathrm{F}\right) \end{aligned}$ | $\begin{aligned} & -40^{\circ} \text { to } 70^{\circ} \mathrm{C} \\ & \left(-40^{\circ} \text { to } 158^{\circ} \mathrm{F}\right) \end{aligned}$ |
| Heat Dissipation | 200 BTUs/Hr | 335 BTUs/Hr | 321 BTUs/Hr | 427 BTUs/Hr |
| Humidity |  |  |  |  |
| Operating Humidity | 5\%-95\% non-condensing | 5\%-95\% non-condensing | 5\%-95\% non-condensing | 5\%-95\% non-condensing |
| Vibration |  |  |  |  |
|  | IEC 68-2-6, IEC68-2-36 | IEC 68-2-6, IEC68-2-36 | IEC 68-2-6, IEC68-2-36 | IEC 68-2-6, IEC68-2-36 |
| Shock |  |  |  |  |
|  | IEC 68-2-29 | IEC 68-2-29 | IEC 68-2-29 | IEC 68-2-29 |
| Drop |  |  |  |  |
|  | IEC 68-2-32 | IEC 68-2-32 | IEC 68-2-32 | IEC 68-2-32 |
| Acoustics |  |  |  |  |
| Front of switch (normal operation) | 45.5 dB | 45 dB | 46 dB | 45.5 dB |
| Altitude |  |  |  |  |
| Operating | 10,000 ft (3,048 m) | $10,000 \mathrm{ft}(3,048 \mathrm{~m})$ | 10,000 ft (3,048 m) | 10,000 ft (3,048 m) |
| Non-operating | 15,000 ft (4,572 m) | 15,000 ft (4,572 m) | 15,000 ft (4,572 m) | 15,000 ft (4,572 m) |
| Agency and Regulatory Standard Specifications |  |  |  |  |
| Safety | UL 60950-1, CSA 22.1 60950, EN 60950-1, and IEC 60950-1 | UL 60950-1, CSA 22.1 60950, EN 60950-1, and IEC 60950-1 | UL 60950-1, CSA 22.1 60950, EN 60950-1, and IEC 60950-1 | UL 60950-1, CSA 22.1 60950, EN 60950-1, and IEC 60950-1 |
| EMC | FCC Part 15 (Class A), ICES-003 (Class A), BSMI, VCCI V-3, AS/NZS CISPR 22 (Class A), EN 55022 (Class A), EN 55024, EN 61000-32, and EN 61000-3-3 | FCC Part 15 (Class A), ICES003 (Class A), BSMI, VCCI V-3, AS/NZS CISPR 22 (Class A), EN 55022 (Class A), EN 55024, EN 61000-3-2, and EN 61000-3-3 | FCC Part 15 (Class A), ICES003 (Class A), BSMI, VCCI V-3, AS/NZS CISPR 22 (Class A), EN 55022 (Class A), EN 55024, EN 61000-3-2, and EN 61000-3-3 | FCC Part 15 (Class A), ICES-003 (Class A), BSMI, VCCI V-3, AS/NZS CISPR 22 (Class A), EN 55022 (Class A), EN 55024, EN 61000-3-2, and EN 61000-3-3 |
| Environmental | 2002/95/EC (RoHS <br> Directive), 2002/96/EC <br> (WEEE Directive), Ministry of Information Order \#39 (China RoHS) | 2002/95/EC (RoHS <br> Directive), 2002/96/EC <br> (WEEE Directive), Ministry of Information Order \#39 (China RoHS) | 2002/95/EC (RoHS <br> Directive), 2002/96/EC <br> (WEEE Directive), Ministry of Information Order \#39 (China RoHS) | 2002/95/EC (RoHS <br> Directive), 2002/96/EC <br> (WEEE Directive), Ministry of Information Order \#39 (China RoHS) |

## Redundant Power Supply Equipment Specifications

```
STK-RPS-150CH2 POWER
SHELF
Power Supply Slots
2
Dimensions (H x W x D)*
5.5 cm (2.2") x 44.0 cm (17.3") x 18.0 cm
(7.0")
Weight
0.95 kg (2.09 lbs)
*Note: dimensions include integrated rack
mount ears
STK-RPS-150CH8 POWER
SHELF
```


## Power Supply Slots

```
8
Dimensions (H x W x D)*
22.26 cm (8.77") x 44.0 cm (17.3") x 26.4
cm (10.4")
```


## Weight

```
\(5.27 \mathrm{~kg}(11.6 \mathrm{lbs})\)
STK-RPS-150PS POWER SUPPLY
Dimensions ( \(\mathrm{H} \times \mathrm{W} \times \mathrm{D}\) )
19.6 cm (7.7") \(\times 5.2 \mathrm{~cm}(2.04\) ") \(\times 25.7 \mathrm{~cm}\) (10.1")
```


## Net Weight (Unit Only)

1.75 kg (3.85 lbs)

Gross Weight (Packaged Unit)
3.20 kg ( 7.04 lbs )

MTBF
300,000 hours
Operating Temperature
$0^{\circ} \mathrm{C}$ to $50^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F}\right.$ to $\left.122^{\circ} \mathrm{F}\right)$

## Storage Temperature

$-30^{\circ} \mathrm{C}$ to $73^{\circ} \mathrm{C}\left(-22^{\circ} \mathrm{F}\right.$ to $\left.164^{\circ} \mathrm{F}\right)$
Operating Relative Humidity 5\% to 95\%

AC Input Frequency Range
$50-60 \mathrm{~Hz}$
AC Input Voltage Range
100-240 VAC
Maximum Output Power
156 W continuous
STK-RPS-500PS POWER SUPPLY

Dimensions ( $\mathrm{H} \times \mathrm{W} \times \mathrm{D}$ )
$4.45 \mathrm{~cm}\left(1.75^{\prime \prime}\right) \times 44.5 \mathrm{~cm}\left(17.5^{\prime \prime}\right) \times 16.5 \mathrm{~cm}$ (6.5")

## Net Weight (Unit Only)

3.47 kg (7.63 lb)

Gross Weight (Packaged Unit)
4.95 kg (10.89 lb)

MTBF
589,644 hours at $25^{\circ} \mathrm{C}\left(77^{\circ} \mathrm{F}\right)$

## Operating Temperature

$0^{\circ} \mathrm{C}$ to $50^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F}\right.$ to $\left.122^{\circ} \mathrm{F}\right)$

## Storage Temperature

$-30^{\circ} \mathrm{C}$ to $73^{\circ} \mathrm{C}\left(-22^{\circ} \mathrm{F}\right.$ to $\left.164^{\circ} \mathrm{F}\right)$

## Operating Relative Humidity

5\% to 95\%
AC Input Frequency Range
$50-60 \mathrm{~Hz}$
AC Input Voltage Range
100-240 VAC
Maximum Output Power
500 W continuous

| Part Number | Description |
| :--- | :--- |
| B5 Switches | (24) 10/100/1000 RJ45 ports, (4) combo SFP ports, (2) dedicated high-speed stacking ports and external RPS <br> connector. Total active ports per switch: (24) Gigabit ports |
| B5G124-24 | (24) 10/100/1000 PoE (.at + .af) RJ45 ports, (4) combo SFP ports, (2) dedicated high-speed stacking ports and <br> external RPS connector. Total active ports per switch: (24) Gigabit ports |
| B5G124-24P2 | (48) 10/100/1000 RJ45 ports, (4) combo SFP ports, (2) dedicated high-speed stacking ports and external RPS <br> connector. Total active ports per switch: (48) Gigabit ports |
| B5G124-48 | (48) 10/100/1000 PoE (.at + .af) RJ45 ports, (4) combo SFP ports, (2) dedicated high-speed stacking ports and <br> external RPS connector. Total active ports per switch: (48) Gigabit ports |
| B5G124-48P2 | (24) 10/100/1000 RJ45 ports, (2) combo SFP ports, (2) 10GE ports, (2) dedicated high-speed stacking ports and <br> external RPS connector. Total active ports per switch: (24) Gigabit ports + (2) 10GE ports |
| B5K125-24 | (24) 10/100/1000 PoE (.at + .af) RJ45 ports, (2) combo SFP ports, (2) 10GE ports, (2) dedicated high-speed stacking <br> ports and external RPS connector. Total active ports per switch: (24) Gigabit ports + (2) 10GE ports |
| B5K125-24P2 | (48) 10/100/1000 RJ45 ports, (2) combo SFP ports, (2) 10GE ports, (2) dedicated high-speed stacking ports and <br> external RPS connector. Total active ports per switch: (48) Gigabit ports + (2) 10GE ports |
| B5K125-48 | (48) 10/100/1000 PoE (.at + .af) RJ45 ports, (2) combo SFP ports, (2) 10GE ports, (2) dedicated high-speed stacking <br> ports and external RPS connector. Total active ports per switch: (48) Gigabit ports + (2) 10GE ports |
| B5K125-48P2 |  |
| Cables | Stacking cable for connecting adjacent B5/C5 switches (30cm) |
| STK-CAB-SHORT | Stacking cable for connecting top switch to bottom switch in a B5 or C5 stack (1m) |
| STK-CAB-LONG | Stacking cable for B5/C5 models (2m) |
| STK-CAB-2M | Stacking cable for B5/C5 models (5m) |
| STK-CAB-5M | Spare DB9 Console Cable |
| SSCON-CAB |  |

## Ordering Information

| Part Number |  |
| :--- | :--- |
| Redundant Power Supplies |  |
| STK-RPS-150CH2 | 2-slot modular power supply shelf (power supply STK-RPS-150PS sold separately) |
| STK-RPS-150CH8 | 8-slot modular power supply shelf (power supply STK-RPS-150PS sold separately) |
| STK-RPS-150PS | 150W Non-PoE redundant power supply |
| STK-RPS-500PS | 500W 802.3at PoE redundant power supply |

## POWER CORDS

In support of its expanding Green initiatives as of July 1st 2014, Extreme Networks will no longer ship power cords with products. Power cords can be ordered separately but need to be specified at the time order. Please refer to www.extremenetworks.com/product/powercords/for details on power cord availability for this product.

## Transceivers

Extreme Networks transceivers provide connectivity options for Ethernet over twisted pair copper and fiber optic cables with transmission speeds from 100 Megabits per second to 10 Gigabits per second. All Extreme Networks transceivers meet the highest quality for extended life cycle and the best possible return on investment.

For detailed specifications, compatibility and ordering information please go to: www.extremenetworks.com/product/transceivers

## Warranty

As a customer-centric company, Extreme Networks is committed to providing quality products and solutions. In the event that one of our products fails due to a defect, we have developed a comprehensive warranty that protects you and provides a simple way to get your products repaired or media replaced as soon as possible. B-Series switches come with the Extreme Networks limited lifetime warranty against manufacturing defects.

For full warranty terms and conditions please go to: www.extremenetworks.com/support/policies

## Service and Support

Extreme Networks provides comprehensive service offerings that range from Professional Services to design, deploy and optimize customer networks, customized technical training, to service and support tailored to individual customer needs. Please contact your Extreme Networks account executive for more information about Extreme Networks Service and Support.

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