

# RAGILE

## RA-BS6500-32H BARE METAL SWITCH

### OVERVIEW

The Ragile RA-BS6500-32H is a new generation high performance and high density 50G switch comply with Open19™ specification, which provide 3.2Tbps in-band and 51Gbps out-of-band switching capacity to driven a large-scale wire-speed non-blocking network.

RA-BS6500-32H provides high density 48-port 50G in-band interface and 48-port 1G out-of-band interface and 8-port 100G Quad Small Form-Factor Pluggable (QSFP28) up-link interface supporting 25/100Gbps high performance flexible-scale datacenter networks. All 50G and 1G interface can be connected to Open19™ servers with Molex Impel break-out cable. The platform provide hot-pluggable 4+1 redundancy cooling fan module to meet the high reliability requirement of datacenter networks.

RA-BS6500-32H is Broadcom ICOS certified and equipped with a x86 CPU and BMC. The switch can also be used as a bare metal switch, customer can install any NOS needed.



### PRODUCT HIGHLIGHTS

#### Performance

- 8×QSFP28 100G up-link Ports
- 48×50G Ports
- 48×1G Out-of-band Ports
- Base on Broadcom BCM56960 (Tomahawk)
- Up to 3.2 Terabits per second
- Up to 3.3 Billion packets per second
- Wire speed L2/L3 forwarding

#### Data Center Optimized Design

- Typical power of under 4W per 100G port
- 4+1 redundant & hot-swappable fans
- Rear-to-front cooling
- Toolless maintenance and simple installation

#### Cloud Networking Ready

- 16 MB Integrated Smart Buffer
- 136 K MAC entries
- Up to 128 K IPv4 Routes
- Up to 84 K IPv6 Routes
- Up to 136 K Multicast Groups
- Up to 128-way ECMP

\* The above table is the maximum capacity that the switching chip can provide.

#### Resilient Control Plane

- Intel Xeon D-1527 (4 core @ 2.2GHz, 6MB LLC, 35W)
- Support up to 48G DDR4 2133/1600 ECC
- 128 GB SSD

#### Advanced Provisioning & Monitoring

- Self-configure and recover from USB

## SPECIFICATIONS

Switch Model	RA-BS6500-32H
Ports (Module)	8 × QSFP28
Ports (Cable)	48 × 50G 48 × 1G (out-of-Band)
Throughput	3.2 Tbps
Packets/Second	3.3 Bpps
Latency	450 ns
CPU	Intel Xeon D-1527
System Memory	8 GB (Up to 48G DDR4 2133/1600 ECC)
System Storage	128 GB SSD
BMC	AST1250
Switch ASIC	Broadcom BCM56960 (Tomahawk)
Packet Buffer Memory	16 MB
10/100/1000 MGMT Ports	3 (RJ-45)
RS-232 Serial Ports	1 (RJ-45)
USB Ports	1 (Type-A)
Power Supplies	12V DC (Amphenol DWR-P1P-BQ200-1A7 connector)
Hot-swappable Fans	5 (4+1 redundant)
Airflow	Rear to front
Typical Power Draw	290W
Typical Heat Dissipation	989.77 BTU/hr
Size(W × H × D)	17.126 × 1.72 × 34.513 in. (435 × 43.7 × 876.64mm)
Weight	27.5 Pounds (12.5kg)

## POWER SUPPLY SPECIFICATIONS

Power Supply	550W
Input Voltage	100-240V AC      240V DC
Typical Input Current	7.2-3.5A (AC)      3.6A (DC)
Input Frequency (AC)	50-60Hz
Input Connector	IEC 320-C13
Efficiency (Typical)	94% Platinum

## ORDER INFORMATION

Model	Description
RA-BS6500-32H	48-port 50G, 8-port 100G QSFP28 48-port 1G out-of-band 3-port 1G MGMT, 1-port Console, 1-port USB 5 slots for fan modules. 5 fan modules already included.
BS6500-40FAN-R	Fan module for, rear-to-front airflow. With up to 5 fan modules, support 4+1 redundancy.

## STANDARD COMPLIANCE

EMC	Emissions: FCC, EN55022, EN61000-3-2, EN61000-3-3 or EN61000-3-11, EN61000-3-12 (as applicable) Immunity: EN55024 Emissions and Immunity: EN300 386
Safety	UL/CSA 60950-1, EN 60950-1, IEC 60950-1 CB Scheme with all country differences
European Union Directives	2006/95/EC Low Voltage Directive 2004/108/EC EMC Directive 2011/65/EU RoHS Directive

## ENVIRONMENTAL CHARACTERISTICS

Operating Temperature	32° F to 104° F (0°C to 40°C)
Storage Temperature	-40° F to 158° F (-40°C to 70°C)
Relative Humidity	5% to 95% non-condensing
Altitude (Operating)	Designed to meet: 0 ft to 10,000 ft
Altitude (Non-operating)	-1000 ft to 30,000 ft

## MORE INFORMATION

Phone: +1-408-772-9724      Email: [info@ragilenetworks.com](mailto:info@ragilenetworks.com)

Address: 35649 Embassy Common, Fremont, CA

For more information about the Ragile RA-BS6500-32H switch, please visit <http://www.ragilenetworks.com> or contact your local Ragile sales representative.