SSE-G3648B and SSE-G3648BR:

Layer 2/3 1G/10G Ethernet SuperSwitch (Standalone)

Advanced SDN Switch offering 1/10 Gigabit Ethernet Performance in a Top-of-Rack 1U Enclosure

The SSE-G3648B Layer 2/3 Ethernet Switch complements the growing family of switch offerings by Supermicro in the Open Networking arena. Open Networking provides customers with the ability to maximize the efficient and flexible use of valuable data center resources while providing an ideal platform for managing and maintaining those resources in a manner in tune with the needs of the organization.

Offering forty-eight 1Gbps RJ45 Ethernet ports and four 10Gbps SFP+ uplinks, the SSE-G3648B switch allows connectivity at 1Gbps to servers while aggregating traffic for high speed connection to high-bandwidth servers, to routers, and/or to other backbone network switches. The compact 1U form factor gives users the ability to optimize deployment in standalone or top-of-rack environments. The included pair of mounting flanges facilitates rack-mounting installation. And a reverse-airflow model, the SSE-G3648BR, is available for use in large data centers with alternating hot and cold equipment aisles. These switches are ideal for deployment in Data Center, Cloud and Enterprise environments with the capability of handling access for the most demanding applications.

Pre-loaded with the Open Network Install Environment (ONIE), the SSE-G3648B/R is ready for your networking operating system of choice. As with other bare metal switches from Supermicro, the SSE-G3648B/R switches are truly open - customers can deploy a software solution best suited for their application. Supermicro recommends the use of Cumulus Linux on the SSE-G3648B/R. Cumulus Linux is an OS for open networking incorporating a true Linux distribution with extensive networking features plus hardware acceleration of routing and switching functions. By using many of the same tools employed for servers, Cumulus Linux enables affordable scalability with clear CapEx savings and even greater OpEx savings; it unleashes rapid innovation via custom, open source or commercial Linux tools and applications. The embedded X86 Linux-based controller is particularly well suited for running the provisioning tools which are typically used for servers. Contact Cumulus Networks for more details and ordering information.

Supermicro SuperSwitch Solution Benefit Highlights

- **1U TOR 1/10G Ethernet Switch**
- **Bare metal – ONIE installed**
- **Cumulus Linux Ready**
- **48 x 1Gbps Ethernet RJ45 ports**
- **4 x 10Gbps SFP+ ports**
- **Data Center Friendly**
  - Hot swappable power supplies
  - Power Supply Redundancy option
  - Regular and Reverse Airflow models
- **Powerful Broadcom Helix4 Switch Chip**
  - 176 Gbps Switching Capacity
  - Non-blocking
- **Versatile Intel Rangeley Processor**
  - 2G DRAM
  - 8G SSD

Specifications

Ports
- 48 x 1Gbps Ethernet RJ45 ports
- 4 x 10Gbps Ethernet SFP+ ports
- RJ-45 Ethernet management port
- RJ45 (for console cable)
- Type A USB 2.0 port

Data Forwarding
- Aggregated switching Capacity – 176 Gbps
- Broadcom Helix4 Switch Chip
- Non-blocking, wire-speed Layer 3 Routing

Control Plane
- Intel Rangeley CPU
- 2Gbyte DRAM
- 8Gbyte SSD
- Cumulus Linux Ready

Power
- Hot-pluggable 200W power supply
- Optional second redundant power supply
- AC Input: 100-127/200-240 V, 50/60 Hz
- Power Consumption: < 85.2 Watts

Physical/Environmental
- Weight: Net weight: 8.18kg (with 2 PSUs)
- Regular and Reverse Airflow Models
- Size (W x D x H): 434 x 320 x 44 mm (17.1 x 11.2 x 1.73 in.)
- Temperature: Operating 0°C to 45 °C (32°F to 113°F)
- Humidity: Operating: 5% to 95% (non-condensing)

General
- Bare metal
- 1U form factor for flexible installation
- Mounting Flanges (included)

www.supermicro.com/switch