



# SSE-F3548S and SSE-F3548SR:

## 10G/25G/100G Ethernet Switch (Standalone)

Datacenter Ethernet networks are rapidly shifting from 10 Gigabits per second (10G) to 25G to take advantage of technology advancements in compute and storage technology. Newer applications demand higher network throughput – as well as lower latency in order to complete jobs more rapidly.

The economic advantages of an investment in 25G technology are numerous. There is essentially no price premium for a 25G infrastructure when compared to 10G. When other cost of ownership factors are considered, including power consumption, space and cabling requirements, ease of migration and etc, the choice becomes clear.

The Supermicro SSE-F3548S (and its companion reverse airflow model, the SSEF3548SR) are Layer 2 & Layer 3 Ethernet switches offering forty-eight 25G SFP28 ports which allow datacenter optimized connectivity to server systems. The SFP28 port can also run at 10G - or even at one-gigabit, thus accommodating requirements for connectivity with legacy low-speed network devices. The **SSE-F3548S/R** also offer six QSFP28 ports running at 100G for connections to high-speed backbone networks or storage systems. Each of the QSFP28 ports can also operate at 40G – or can be split into four SFP28 ports using a breakout cable to operate at 25G or 10G per port.

Since all of the 25G ports on the Supermicro **SSE-F3548S** are backward compatible with 10G, customers can gain greater deployment flexibility to invest in a 25GbE networking infrastructure by multiple phases. Customers can choose to deploy these new switches today and operate with existing 10Gbps Ethernet infrastructure; when the time to upgrade to 25Gbps Ethernet comes, it is merely a configuration update – no need for any prolonged downtime.

The 1U rackmount form factor enables optimized deployments in standalone or top-of-rack environments. The included rail kit facilitates rack-mounting installations. The SSE-F3548SR model provides a datacenter friendly reverse air-flow for improved cooling when installed in the rear of a rack.

## Specifications

### Ports

- 48x 25-Gigabit Ethernet ports - SFP28
- 6x 100-Gigabit Ethernet ports - QSFP28
  - 100Gbps ports can further split to 4x 25Gbps each
  - Alternatively can operate at 40Gbps
  - Ports configured for 40Gbps can be split into 4x10Gbps each
- Cost-Effective Solution for Migration from 10Gbps
  - All 25Gbps ports are backward compatible with 10Gbps
- RJ-45 (for console cable)
- RJ-45 Gigabit Ethernet Management Port
- USB

### Switching

- 3.6 Tbps switching capacity
- 1:1 Non-blocking connectivity

### Power

- Redundant hot-swappable 500W power supplies
- AC Input: 100-127/200-240 V, 50/60 Hz
- Power Consumption: 305 Watts

### Software Features

- Layer 2 standard features
- Layer 3 Support
- Multi Chassis Link Aggregation (MLAG)
- RESTCONF
- VXLAN Bridging

- RoCE / Data Center Bridging / Storage Support
  - PFC/Per-Priority Flow Control (802.1Qbb)
  - Enhanced Transmission Selection (802.1Qaz)
  - Data Center Bridging Extensions (DCBX)

### General

- Mounting rails (included)

### Physical/Environmental

- 1U form factor for flexible installation
- Temperature: Operating 0°C to 40°C (32°F to 104°F)
- Humidity: Operating: 5% to 95% (noncondensing)



## Supermicro SuperSwitch Solution Benefit Highlights

- 48x 25G Ethernet SFP28 ports
- 6x 100G QSFP28 uplinks for better subscription ratio
- All QSFP28 ports can alternatively operate at 40G
- Switching Capacity: 3.6 Tbps
- 1:1 Non-blocking connectivity
- Datacenter Friendly
  - Multi Chassis Link Aggregation (MLAG)
  - RESTCONF
  - VXLAN Bridging
  - RoCE / Data Center Bridging / Storage Support
  - Redundant, Hot-Swappable power supplies
  - Regular and Reverse Airflow models
- Cost-Effective Solution for Migration from 10G Ethernet
  - All 25G ports are backward compatible with 10G

