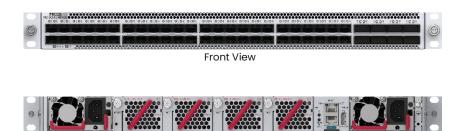


Overview

The M2-S6510-48V8C is a high-performance modular access switch of Micas Networks. It can meet deployment requirements of multiple network architectures, including the traditional L3 architecture and Spine-Leaf architecture. It also supports deployment of the Overlay network and construction of traditional enterprise data center networks and super-large cloud data center networks.

This product offers adjustable L2/L3 resource allocation capabilities for different types of networks, rich virtualization features for deployment of Overlay/virtual networks, and monitoring and O&M functions (such as INT/Telemetry/ZTP) for automatic monitoring and O&M. Besides, switches of this series all support construction of lossless networks and can be applied to service scenarios that require lossless transmission, such as AI training or HPC.



Back View

Product Highlights

Non-blocking Hyperscale Data Center Networks

- Provides 48 × 25GbE ports and 8 × 100GbE ports
- Meets requirements of constructing hyperscale 25GbE data center networks.

Data Center Overlay Networking

 Supports VXLAN to meet the data center overlay networking requirements and enables the establishment of a logically layer-2 network on the layer-3 network

Automated O&M/Monitoring Network

- Supports In-band Network Telemetry to enable active pushing of switch status based on gRPC.
- Supports the ZTP protocol to meet automatic deployment requirements.

RDMA-based Lossless Ethernet

 Supports the RDMA feature and enables the establishment of lossless, low-latency data center Ethernet.

Parameter Specifications

| Switch Model Mc-Se510-48V8C Ports 48 x 259bs SFP28+ 8x1009bs QSFP28 Max 1009bs Ports 8 Max 40Gbs Ports 8 Max 259bs Ports 80 Max 109bs Ports 80 Max 109bs Ports 80 Max 109b Ports 80 Console Port 1 MSMT Port 1 USB Port 1 Switching Capacity 4.0 Tbps Packets/Second 2003.4Mpps CPU 1.2 GHz quad-core System Memory DDR4 4GB System Storage 9 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fons 4(3+1 redundant, hot-swappable) Gs HULKOS Airflow Options Standard and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (Wx Dx H) 17.40 in. x 15.24 in. x 1.73 in. (442 mm×387 mm×44mm), IRU Weight (with all modules) 21 lbs (10kg | System Specifications | |
|--|------------------------------------|--|
| Max 100GbE Ports 8 Max 40GbE Ports 8 Max 25GbE Ports 80 Max 10GbE Ports 80 Max 16bE Ports 80 Max 16bE Ports 80 Console Port 1 MGMT Port 1 USB Port 1 Switching Capacity 4.0 Tbps Packets/Second 2003.4Mpps CPU 1.2 GHz quad-core System Memory DDR4 4GB System Storage 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) GS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. x 15.24 in. x 1.73 in. (442 mmx387 mmx44mm), IRU | Switch Model | M2-S6510-48V8C |
| Max 50GbE Ports - Max 40GbE Ports 80 Max 10GbE Ports 80 Max 10GbE Ports 80 Max 16bE Ports 80 Console Port 1 MGMT Port 1 USB Port 1 Switching Capacity 4.0 Tbps Packets/Second 2003.4Mpps CPU 1.2 GHz quad-core System Memory DDR4 4GB System Storage 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fans 4(3+1 redundant, hot-swappable) OS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), IRU | Ports | 48 x 25GbE SFP28+ 8x100GbE QSFP28 |
| Max 406bE Ports 8 Max 106bE Ports 80 Max 106bE Ports 80 Max 16bE Ports 80 Console Port 1 MGMT Port 1 USB Port 1 Switching Capacity 4.0 Tbps Packets/Second 2003.4Mpps CPU 1.2 GHz quad-core System Memory DDR4 4GB System Storage 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) GS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), IRU | Max 100GbE Ports | 8 |
| Max 25GbE Ports 80 Max 1GbE Ports 80 Console Port 1 MGMT Port 1 USB Port 1 Switching Capacity 4.0 Tbps Packets/Second 2003.4Mpps CPU 1.2 GHz quad-core System Memory DDR4 4GB System Storage 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) GS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), IRU | Max 50GbE Ports | - |
| Max 10GbE Ports 80 Console Port 1 MGMT Port 1 USB Port 1 Switching Capacity 4.0 Tbps Packets/Second 2003.4Mpps CPU 1.2 GHz quad-core System Memory DDR4 4GB System Storage 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fans 4(3+1 redundant, hot-swappable) OS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), IRU | Max 40GbE Ports | 8 |
| Max 16bE Ports Console Port I MGMT Port USB Port Switching Capacity Packets/Second CPU 1.2 GHz quad-core System Memory DDR4 4GB System Storage 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fans Airflow Options Max/Typical Power Consumption Dimensions (W x D x H) 1 A0 Tbps 1 CPU 1.2 GHz quad-core 2003.4Mpps 2004.4GB 32 MB 4GB 32 MB 4GB 4GB 4GB 4GB 4GB 4GB 4GB 4 | Max 25GbE Ports | 80 |
| Console Port MGMT Port USB Port 1 Switching Capacity A.0 Tbps Packets/Second CPU 1.2 GHz quad-core System Memory DDR4 4GB System Storage 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fans 4(3+1 redundant, hot-swappable) Max/Typical Power Sonow/172W Consumption Dimensions (W x D x H) 1 1.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), IRU | Max 10GbE Ports | 80 |
| MGMT Port 1 USB Port 1 Switching Capacity 4.0 Tbps Packets/Second 2003.4Mpps CPU 1.2 GHz quad-core System Memory DDR4 4GB System Storage 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fans 4(3+1 redundant, hot-swappable) OS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), IRU | Max 1GbE Ports | 80 |
| Switching Capacity 4.0 Tbps Packets/Second 2003.4Mpps CPU 1.2 GHz quad-core System Memory DDR4 4GB System Storage 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fans 4(3+1 redundant, hot-swappable) OS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), IRU | Console Port | 1 |
| Switching Capacity A.0 Tbps 2003.4Mpps CPU 1.2 GHz quad-core System Memory DDR4 4GB System Storage 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fans 4(3+1 redundant, hot-swappable) OS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), IRU | MGMT Port | 1 |
| Packets/second 2003.4Mpps CPU 1.2 GHz quad-core System Memory DDR4 4GB System Storage 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fans 4(3+1 redundant, hot-swappable) OS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), IRU | USB Port | 1 |
| CPU System Memory DDR4 4GB System Storage 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fans 4(3+1 redundant, hot-swappable) OS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), IRU | Switching Capacity | 4.0 Tbps |
| System Memory DDR4 4GB 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fans 4(3+1 redundant, hot-swappable) OS HULKOS Airflow Options Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) DDR4 4GB 8 GB 8 GB 12 MB 12 MB Supports temperature alarm and overtemperature protection 2 (1+1 redundant, hot-swappable) 4(3+1 redundant, hot-swappable) 300W/172W 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), 1RU | Packets/Second | 2003.4Mpps |
| System Storage 8 GB Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fans 4(3+1 redundant, hot-swappable) OS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), IRU | CPU | 1.2 GHz quad-core |
| Packet Buffer 32 MB Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fans 4(3+1 redundant, hot-swappable) OS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 1.73 in. (442 mm×387 mm×44mm), 1RU | System Memory | DDR4 4GB |
| Temperature Alarm Supports temperature alarm and overtemperature protection Power Supplies 2 (1+1 redundant, hot-swappable) Fans 4(3+1 redundant, hot-swappable) OS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), 1RU | System Storage | 8 GB |
| Power Supplies 2 (1+1 redundant, hot-swappable) Fans 4(3+1 redundant, hot-swappable) OS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), 1RU | Packet Buffer | 32 MB |
| Fans 4(3+1 redundant, hot-swappable) OS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), 1RU | Temperature Alarm | Supports temperature alarm and overtemperature protection |
| OS HULKOS Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), 1RU | Power Supplies | 2 (1+1 redundant, hot-swappable) |
| Airflow Options Standard* and reversed** airflow Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), 1RU | Fans | 4(3+1 redundant, hot-swappable) |
| Max/Typical Power 300W/172W Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), 1RU | OS | HULKOS |
| Consumption Dimensions (W x D x H) 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), IRU | Airflow Options | Standard* and reversed** airflow |
| | Max/Typical Power | 300W/172W |
| Weight (with all modules) 22 lbs (10kg) | Consumption Dimensions (W x D x H) | 17.40 in. × 15.24 in. × 1.73 in. (442 mm×387 mm×44mm), IRU |
| | Weight (with all modules) | 22 lbs (10kg) |



| Power Supply | |
|-------------------------------|---|
| Model | PA550II-F/R |
| Input Connector | IEC 320-C14 |
| Output Power | 550W |
| Input Voltage | 100-240 VAC |
| Frequency | 50-60 Hz |
| Efficiency | 94% Platinum |
| Typical Input Current | 7.2-3.5A |
| Environmental Characteristics | |
| Operating Temperature | 32 to 104° F (0 to 40°C) |
| Storage Temperature | -40 to 158° F (-40 to 70°C) |
| Operating Humidity | 10% to 90% RH (Non-condensing) |
| Altitude (Operating) | 0-16,404.20 ft. (0-5,000 m) |
| Standard Compliance | |
| EMC Standards | FCC 47 CFR Part 15 Subpart B ANSI C63.4 ICES-003 Issue 7 EN 55032 EN 55035 EN IEC 61000-3-2 EN 61000-3-3 EN 300386 BS EN 55032 BS EN 55035 BS EN IEC61000-3-2 BS EN 61000-3-3 BS EN 61000-3-3 BS EN 300386 |
| Safety | UL 62368-1 CSA C22.2 NO. 62368-1 IEC 62368-1 EN 62368-1 BS EN 62368-1 |
| Certifications | FCC; IC; cTUVus; CE; CB; ANATEL; UKCA; VOC |
| European Union Directives | Low Voltage Directive 2014/35/EU EMC Directive 2014/30/EU Directive 2012/19/EU DIRECTIVE 2011/65/EU |



Ordering Information

| Product ID | Product Description |
|-------------------|---|
| M2-S6510-48V8C-FA | M2-S6510-48V8C switch, 48×10G/25G SFP28, 8×40G/100G QSFP28, 2×AC power modules, 4×fan modules, front-to-rear airflow. |
| M2-S6510-48V8C-RA | M2-S6510-48V8C switch, 48×10G/25G SFP28, 8×40G/100G QSFP28, 2×AC power modules, 4×fan modules, rear-to-front airflow. |
| M1EFAN IV-F | Fan module, front-to-rear airflow. |
| M1EFAN IV-R | Fan module, rear-to-front airflow. |
| PA550II-F | AC power supply module, front-to-rear airflow. |
| PA550II-R | AC power supply module, rear-to-front airflow. |

ABOUT MICAS

Micas Networks, a pioneer in open networking solutions, offers high-performance switch products and reliable services tailored for data centers.

Address: 250W Tasman Drive. San Jose

For more information, please visit. https://micasnetworks.com or contact your local Micas sales representative.

