

## Product: [MTS2748-6X-MP-E](#)

### MAMMUTHUS Layer3 Gigabit Ethernet Switch with PoE/PoE+



#### Product Description

1U rack mount, 48 × FE/GE POE/POE+, 4 × 1/10G SFP+ slots, redundant PSU, enhanced software

#### Technical Specifications

##### Product description

|                         |   |
|-------------------------|---|
| Type:                   | MTS2748-6X-MP-E   |
| Name:                   | MTS2748-6X-MP-E   |
| Description:            | 1U rack mount, 48 × FE/GE POE/POE+, 4 × 1/10G SFP+ slots, redundant PSU, enhanced software  |
| Part Number:            | 942999831   |
| Port Type and Quantity: | 48 × FE/GE POE/POE+, 4 × 1/10G SFP+ slots, 1 × RJ45 Console port, 1 × USB 2.0, no Reset Button, extendible with one extended slot for media module with 2 × 1/10G SFP+ interfaces |
| Heat Radiation Type:    | Fixed fan   |

##### More Interfaces

|               |   |
|---------------|---|
| Power Supply: | 2 × modular redundant PSUs, hot swappable |
|---------------|---|

##### Power requirements

|                         |   |
|-------------------------|---|
| PoE Budget:             | According to the PSU module used: 380W (if apply 1 × PSU500); 760W (if apply 2 × PSU500); 760W (if apply 1 × PSU880); 1520W (if apply 2 × PSU880); PSU120 has no PoE output power |
| Operating Voltage:      | 100-240VAC 50-60Hz, redundancy PSU supported  |
| Applicable PSU modules: | MTM2700-PSU120, MTM2700-PSU500, MTM2700-PSU880  |
| Power consumption:      | Device non-PoE power consumption:46W, Max. PoE power consumption:1440W  |

##### Ambient conditions

|   |           |
|---|-----------|
| Permissible Humidity (Storage/Transport): | 5% to 95% |
| Operating temperature:                    | -10+55 °C |
| Minimum Storage Temperature:              | -40+70 °C |
| Relative humidity (non-condensing):       | 10-90 %   |

##### Mechanical construction

|                 |            |
|-----------------|------------|
| Overall Width:  | 442 mm     |
| Overall Height: | 44.2 mm    |
| Depth:          | 420 mm     |
| Weight:         | 7.8 kg     |
| Mount Type:     | Rack mount |

##### Software Specifications

|   |          |  |
|---|----------|--|
| Data link layer protocol and technology | LAN      | MAC address learning amount limit; static Mac configuration; black hole MAC<br>Dynamic and static ARP; proxy ARP; free ARP<br>Ethernet; Ethernet II; VLAN; 802.3x; 802.1p; 802.1Q; 802.3ad<br>Q-in-Q and flexible Q-in-Q; VLAN mapping<br>STP/RSTP/MST; GVRP; Super VLAN; PVLAN; Voice VLAN; Monitor link; BPDU TUNNEL; PPPOE+ |
| PoE                                     | Function | Multi to one port mirroring; multi to multiport mirroring; RSPAN<br>802.3af; 802.3at; priority; preemptive function; automatic fault monitoring  |

|                     |                           |   |
|---------------------|---------------------------|---|
| Security            | Security features         | IPv4/v6 ACL; AAA; 802.1X; RADIUS; TACACS+; SSH; port security; user classification; port isolation; UNI/NNI isolation; DHCP snooping; DAI; ARP check; IP source guard; CPU protection |
|                     | Attack protection         | URPF; LAND attack; SYN Flood attack; Smurf attack; Ping Flood attack; TearDrop attack; Ping of Death attack   |
| Network protocol    | Routing protocol          | Static router; RIP v1/v2; OSPF; BGP; ISIS; RIPng; OSPFv3; BGP4; ISISv6; ECMP; Network load balancing  |
|                     | Multicast protocol        | IGMP PROXY; IGMP filter; MLD v1/v2; IGMP Snooping; MLD v1/v2 Snooping; PIM-DM; PIM-SM; PIM-SDM; PIM-SSM   |
|                     | IP application            | DHCP Server; DHCP Client; DHCP Relay; DHCP Snooping; DHCPv6 Server; DHCPv6 Client; DHCPv6 Relay; DNS; Ping; FTP Server; FTP Client; IP Accounting; UDP Helper; NTP                    |
|                     | IPv6                      | IPv6 basic function: IPv6 ND, IPv6 PMTU, IPv6 ACL, DS-Lite, IPv4/v6 Dual Stack  |
|                     | IPv6 Tunneling            | IPv6 manual tunnel; GRE tunnel; Ipv4/Ipv6 compatible automatic tunnel, 6to4 tunnel, ISATAP tunnel   |
| QoS                 | Traffic classification    | Based on port/MAC address/IP address/IP priority/DSCP priority/TCP or UDP port number/ protocol type etc.   |
|                     | Traffic policing          | CAR   |
|                     | Congestion management     | SP; WRR; SP+WRR   |
|                     | Congestion avoidance      | RED; WRED   |
| Virtualization      | Virtualization technology | Stacking, up to 8 devices   |
| Management          | Network management        | Console port; HTTP; Telnet; SSH management; SNMP v1/v2/v3; RMON 1/2/3/9; SYSLOG; DDMI   |
|                     | Line management           | VCT; UDLD   |
|                     | Traffic analysis          | sFlow traffic analysis  |
| OAM                 | SLA                       | Including network delay/network jitter/packet loss rate test  |
| Reliability         | Link reliability          | BFD for OSPF/RRRP etc.; Keepalive Gateway; VRRP/RRRPv6; ERPS(G.8032) ring network protocol  |
| Data center feature |                           | VXLAN; EVPN; XML API/NETCONF; M-LAG   |

## Mechanical stability

|                          |   |
|--------------------------|---|
| IEC 60068-2-6 vibration: | 1 mm, 2 Hz-13.2 Hz, 90 min.; 0.7 g, 13.2 Hz-100 Hz, 90 min.; 3.5 mm, 3 Hz-9 Hz, 10 cycles, 1 octave/min.; 1 g, 9 Hz-150 Hz, 10 cycles, 1 octave/min |
| IEC 60068-2-27 shock:    | 15 g, 11 ms duration, 18 shocks   |

## EMC interference immunity

|  |   |
|--|---|
| EN 61000-4-2 electrostatic discharge (ESD):  | 4 kV contact discharge, 8 kV air discharge                      |
| EN 61000-4-3 electromagnetic field:          | 10V/m (80-1000MHz), 3V/m (1000-6000MHz)                         |
| EN 61000-4-4 fast transients (burst):        | 2 kV power line, 1 kV data line                                 |
| EN 61000-4-5 surge voltage:                  | power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line |
| EN 61000-4-6 Conducted Immunity:             | 10 V (150 kHz-80 MHz)   |
| EN 61000-4-8 power freq magnetic field:      | 30A/m   |
| EN 61000-4-11 voltage dips, short interrupt: | 0%(20ms), 40%(300ms), 70%(500ms), 0%(5s)                        |

## EMC emitted immunity

|                    |                            |
|--------------------|----------------------------|
| EN 55032:          | EN 55032 Class A           |
| EN 61000-3-2:      | EN 61000-3-2 Class A       |
| EN 61000-3-3:      | EN 61000-3-3               |
| FCC CFR47 Part 15: | FCC 47CFR Part 15, Class A |

## Approvals

|                                   |  |
|-----------------------------------|--|
| FCC:                              | CE/FCC Compliant   |
| UL/cUL:                           | Compliant  |
| China Network Access Certificate: | Compliant  |
| CCC:                              | Compliant  |
| Common Criteria:                  | EAL 2+   |
| RoHS Compliant:                   | RoHS ((EU) 2015/863) and RoHS (GB/T26572-2011) compliant |

## Scope of delivery and accessories

|                                  |  |
|----------------------------------|--|
| Accessories to Order Separately: | Network Management Industrial HiVision, SFP, extended line card                            |
| Scope of delivery:               | Device, console cable, installation package, **Power cord does not included in the package |

## History

|                      |   |
|----------------------|---|
| Update and Revision: | Revision Number: 0.88 Revision Date: 10-09-2024 |
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