

Layer 3 Managed Rack-mount Gigabit Optical Ethernet Switch 48*1000/10000Base SFP+ 2*40G QSFP+ 4*100G QSFP+ port

48
10000M
SFP+

2
40G
QSFP

4
40/100G
QSFP+



Overview

VOSCOM VOS-MLR-48G2Q4C Layer 3 Managed Optical Ethernet Switch provide 48*1000/10000M SFP FX fiber optic ports and 2 QSFP+ ports for 40G module and 4 QSFP+ ports for 100G module (also supports 40G). With 1.92T switching capacity, 1428Mpps packet forwarding speed, supporting STP/RSTP/MSTP/ERPS, full supporting IPV6 protocol family, and meeting the needs of pure IPV6 network equipment management and service control.

VOS-MLR-48G2Q4C supports the messages hierarchical scheduling and protection; supports to guard against Dos, TCP SYN Flood, UDP Flood, Broadcast storm, and other large traffic attacks; supports cli command hierarchical protection different levels of users have different management rights; Supports IEEE 802.1x, Radius and other authentication methods, can provide users with complete safety authentication mechanism; Supports the clear text or MD5 certification of relevant routing protocols.

With working temperature of 0°C ~ 50°C, VOS-MLR-48G2Q4C series switch is widely used for occasions including enterprise, intelligent building, cafe, community access or gathering etc., and for industries like finance, education and government etc.

Features

- 48*1000/10000M SFP+ FX fiber optic ports, 2*40G QSFP+ ports, and 4*100G (support 40G) QSFP+ port.
- Support STP/RSTP/MSTP Protocol, ERPS, VRRP protocol; Also supports ring network protection, double uplink/ main and backup linkage protection; LACP link aggregation and other simple and efficient redundant protection mechanisms.
- The ultra-high precision BFD two-way link detection mechanism realizes millisecond fault detection and service recovery through the linkage with the L2 and L3 protocols, which greatly improves the reliability of the network system.
- High reliability design of software and hardware, meeting the telecommunication service requirements of fault recovery time of 50ms.
- Supports VST virtual switching technology, which can virtualize multiple switches into a single switch for unified management and data forwarding of table items.
- Support Openflow1.5, Meter table, Group table, Multi-level flow meter.

Gigabit Ethernet Switches

Specification

• Switching Features

- **Processing Type:** Store & forward
- **Switching capacity:** 1.92Tbps
- **Packet forwarding speed:** 1428Mpps
- **Port features:**
IEEE802.3x flow control(full-duplex)
Storm suppression basing on percentage of the port speed
Storm suppression basing on PPS
- **VLAN:**
Port-based VLAN, 802.1Q tag VLAN
Super VLAN, Private VLAN
GVRP dynamic VLAN configuration
- **MAC Address:**
Statistic configuration and dynamic learning MAC address
The viewing and clearing of MAC address
The MAC address aging time is configurable
Set the maximum number of port MAC address learning
MAC address filtering function
- **Port aggregation:**
Dynamic LACP or static aggregation, Manual aggregation
- **IPv4 Routing management:**
Static routing, RIP v1/v2,
OSPF, OSPFv3, BGP, ISIS, BGP4+
Support equivalent routing to achieve load balancing
BFD for static routing, OSPF, VRRP, VRRPV3
VRF, policy routing
- **Multicast:**
IGMP v1/v2/v3
IGMP Snooping group broadcast message
automatic monitoring
IGMP Fast leave, Group broadcast VLAN
PIM-SM, PIM-DM, IGMP Snooping, MLD v1/v2 Snooping
- **Flow control:**
Back pressure for half-duplex,
and IEEE802.3X for full-duplex
- **QoS:**
Traffic classification based on each field of the
L2 / L3 / L4 protocol header.
CAR (Committed Access Rate) flow limitation
802.1P/DSCP priority remarking
Port queue scheduling (SP, WRR, SP+WRR)

• Switching Features

- **ACL:**
Support packet filtering function,
provide flow classification basing on source Mac address,
destination Mac address, source IP address,
destination IP address, TCP/UDP port, protocol type,
time flow classification.
- **Reliability:**
STP/RSTP/MSTP, ERPS ring protection
M-LAG, Virtualization technology
- **Port Mirroring:**
Mirror images based on flow classification
Port mirroring
- **VRRP:** VRRP protocol, BFD FOR VRRP
- **MPLS:** MPLS-LDP, MPLS/BGP VPN(L3 VPN)
- **Security features:**
users' level management and password protection
802.1X authentication,
centralized Mac address authentication,
web authentication
Guest VLAN
Remote RADIUS, TACACS+ authentication
SSH
Port isolation
Port security function, IP +MAC +Port binding
CPU protection, IP source guard
Defense against URPF, SYN Flood attacks,
Ping Flood attacks, TCP message attacks,
ICMP message attacks,
TCP / UDP message destination port is equal to source
port attacks.
- **Management & Maintenance:**
Support Modem/FTP/TFTP loading and updating
Support configuration through CLI, Telnet, Console port
Support SNMP v1/v2/v3,
Support WEB management
Support RMON (Remote Monitoring) alarm, events,
history records
Support system logs,
hierarchical alerting and debug information output
Support NTP
Netconf

Gigabit Ethernet Switches

• Interface	• Electrical & Mechanical
• Optical Port: 48 * 1000/10000Base-X SFP, 2* 40G QSFP 4* 40/100G QSFP+ • Console Port: RJ-45 • DC0 Ethernet Management port: RJ-45 • USB Storage port : USB	• Power: AC100V~240V Redundant Input Power consumption: <200W 3-pin Plug Connector Over-current, Over-voltage protection • Mechanical: Dimension(L*W*H): 442*420*44.2mm Weight: 5kg Installation: 19inch 1U Rack Mount • Environment: Operating Temperature: -0°C ~ +50°C Storage Temperature: -45°C ~ +85°C Relative Humidity: 5~95%,non-condensing • Warranty : MTBF: > 100,000 hrs Warranty: 3 years

Ordering Information

Model Number	Description
VOS-MLR-48G2Q4C	Layer 3 Managed Ethernet Switch 48*1000/10000Base SFP+ 2*40G QSFP+ 4*100G QSFP+ port
Note: • The power supply of Industrial Ethernet Switch series need to be purchased separately. • If the device with SFP, the SFP need to be purchased separately. • Please feel free to consult factory for any special requirement and customization.	

Optional Accessories (to be purchased separately)

Accessory Model	Description
SFP Modules	SFP Option. Please select your SFP on our SFP Modules page at the back of the catalogue or our website: www.voscom.com for details.
Power supply	Please refer to the power supply information at our website: www.voscom.com or consult our sales at sales@voscom.com for your power system design properly.

Gigabit Ethernet Switches

Dimensions

