ORIGO

OS6256

Managed L3 Switch with 48×10G SFP+ Ports and 8×100G QSFP28 Ports

48x10GBase-X SFP+, 8x100GBase-X QSFP28, 19" rack mounting

The ORIGO OS6256 is a high-performance L3 managed switch with 48×10G SFP+ Ports and 8×100G QSFP28 Ports.

The ORIGO OS6256 is designed for deployment at the core and aggregation layers of enterprise networks, as well as for high-speed switching in modern data centers.

The ORIGO OS6256 adopts a redundant hardware architecture with backup design for key components and multiple reliability protection at both the device and link levels. The switch integrates overcurrent, overvoltage, and overheating protection, and supports 50 – 200 ms fast link failover, ensuring uninterrupted transmission of critical services. Cross-device link aggregation provides additional redundancy, allowing dual-active uplinks from servers and switches.

For continuous operation in mission-critical environments, the OS6256 is equipped with two hot-swappable AC power modules and two front-to-back fan modules with automatic speed control, delivering enhanced fault tolerance and high availability.

The ORIGO OS6256 supports L3 routing (RIP, IS-IS, OSPF, and BGP), advanced security features, Quality of Service (QoS), VLAN management, and link redundancy via STP/RSTP/MSTP. The switch supports VXLAN and EVPN, which can meet the needs of data center Overlay network construction and large layer 2 network deployment requirements inside the data center.

Key Features

- 48×10GBase-X SFP+ Ports
- 8×100GBase-X QSFP28 Ports
- Switching capacity: 2.56 Tbps
- Packet forwarding rate:1000 Mpps
- Redundant PSU and fan modules
- VXLAN/EVPN support for data centers
- L3 routing: RIP, IS-IS, OSPF, BGP
- Advanced QoS features for traffic prioritization
- Management via Telnet, SSH, Console, SNMP

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Specifications

Hardware

CPU and Memory	• CPU: LS1046 • Switch chip: BCM56771 • RAM: 4 GB • Flash: 64 MB
Interface	• 48×10GBase-X SFP+ Ports • 8×100GBase-X QSFP28 Ports • Console RJ45 port • 10/100/1000Base-T management port (OOB) • USB 2.0 port
Standards and Functions	• IEEE 802.3ae 10GBase-X • IEEE 802.3ba 40GBase-X • IEEE 802.3ba 100GBase-X
LEDs	• Fan status (ACT/ALM) • ACT • L/A • LINK/ACT • 40/100GE BREAKOUT
Power	• 2xPower supply modules • Redundant backup • Hot-swappable
Ventilation System	• 2xFront-to-back fan modules • Automatic speed control • Redundant backup • Hot-swappable
Casing	• Metal
Mounting	• 19'' rack

Capacity

Switching Capacity	• 2.56 Tbps
Packet Forwarding Rate	• 1000 Mpps
MAC Address Table Size	• 96K
Routing Table Size	• 24K entries (IPv4/IPv6)
L3 Forwarding Table	• 24K entries (IPv4/IPv6)

Jumbo Frame	• 9000 bytes

Software

L2 Features	• Flow Control
	• Link Aggregation
	- Static
	- 802.3ad
	- Up to 64 groups per device / up to 16 ports per group
	• Loopback Detection
	• Spanning Tree Protocol
	- 802.1d STP
	- 802.1w RSTP
	- 802.1s MSTP
	- Root Guard (Restriction)
	- BPDU Guard (Restriction)
	- Loop Guard
	• Port mirroring
	• Flow mirroring
VLAN	• 802.1Q, 4094 VLAN
	• MAC-based VLAN
	• Protocol-based VLAN (802.1v)
	• Subnet-based VLAN
	• Voice VLAN
	• Double VLAN (Q-in-Q)
	• VLAN Mapping
	• Guest VLAN
L2 Multicast	• IGMP Snooping
	- Supports up to 4K groups
	• MLD Snooping
	- Supports up to 1K groups
L3 Features	• Maximum number of IP interfaces: 2K
	• 24K ARP entries
	• Static routing for IPv4/IPv6
	- 2K IPv4 routes
	- 1K IPv6 routes
	• RIP v1/v2/ng
	• OSPFv2/v3
	• BGPv4/v4+

	• IS-IS
	• IS-ISv6
	• IPv6 Tunneling
	- GRE
	- ISATAP
	• PBR (Policy-based Routing)
	• Bidirectional Forwarding Detection (BFD)
	- Static Routing
	- VRRP
	- OSPF
	- IS-IS
	- BGP
	- RIP
	• VRRP
	• IPv6 Neighbor Discovery (ND)
	• Path MTU Discovery (PMTU)
Data Center Functions	• VXLAN
	- 32K entries
	• EVPN
	• MP-BGP EVPN
	• Symmetric IRB
QoS	• Supports up to 8 queues per port
	• 802.1p
	• CoS based on:
	- DSCP
	- 802.1p Priority Queues
	- ToS
	• Queue handling
	- Strict Priority (SP/PQ)
	- Deficit-Round Robin (DRR)
	- SP/PQ + DRR
	• Congestion Control
	- Weighted Random Early Detection (WRED)
	- Tail Drop
	• Port-based bandwidth control
	- Port-based
	- Flow-based

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Security	• ARP Spoofing Prevention
	- Max. 24K entries
	• DoS Attack Prevention
	• IP Source Guard
	• Port Security
	- Supports up to 1024 MAC addresses per port
	• IP-MAC-Port Binding (IMPB)
AAA	• 802.1X Authentication:
	- MAC-based
	• RADIUS Server with IPv6 Protocol Support
	• RADIUS/TACACS+ Authentication
Access Control Lists (ACL)	• Up to 4K ACL entries
	• ACL for L2/L3/L4
	• Management ACL
	• IPv6 ACL
	• Time-based ACLs
Management	• CLI
	• Telnet
	• SSH v2.0
	• FTP
	• TFTP
	• SNMP v1/v2/v3
	• System Log
	• Ping
	• RMON
	• NETCONF

Physical Parameters

Dimensions (W × D × H)	• 440 x 420 x 44 mm
Weight	• 8 kg

Operating Conditions

Power Input	• 100–240 V AC, 50/60 Hz
Temperature	• Operating: 0 to 40 °C
Humidity	• Operating: 10% to 90% (non-condensing)

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Package Contents

Package Contents	• OS6256 Switch
	• 2 x AC Power Modules
	• Power Cable
	• RJ-45 Console Cable
	• Grounding Wire
	• 19-inch Rack Mount Kit
	• Quick Installation Guide

Order Info

OS6256	Managed L3 Switch, 48x10GBase-X SFP+, 8x100GBase-X QSFP28