ORIGO

OS3218

16-Port Gigabit L3 Managed Switch with 2x10G SFP+ Ports

16x1000Base-T, 2x10GBase-X SFP+, 1xConsole RJ-45, 19" rack mounting

The ORIGO OS3218 is a managed L3 switch with 16xGigabit RJ-45 ports and 2x10G SFP+ uplinks.

The OS3218 switch is designed for SMBs and enterprises, delivering a compact Gigabit switching solution with 10G uplinks and advanced Layer 2/3 functionality.

The OS3228P combines powerful L3 routing (BGP, OSPF, RIP) with advanced security, QoS, and flexible VLAN features. Designed for reliable performance, it supports link aggregation, Loopback Detection, and redundancy protocols (STP/RSTP/MSTP, ERPS) to keep networks stable even in demanding environments. Built-in OAM tools provide comprehensive monitoring and troubleshooting, making network management simple and efficient.

Key Features

- 16 x 10/100/1000Base-T (RJ-45) ports

- 2 x 10G SFP+ uplinks

- L3 routing: RIP, OSPF, BGP

- IPv4/IPv6 static routing

- 802.1Q VLAN, Selective Q-in-Q, Multicast VLAN

- 802.1X authentication, ACL, Port Security

- Comprehensive QoS for traffic prioritization

- IGMP/MLD Snooping for multicast traffic management

- ERPS, STP/RSTP/MSTP, LoopBack Detection for high availability

- Management via Web UI, CLI (Telnet, SSH, Console), and SNMP

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Specifications

Hardware

CPU and memory	• CPU: RTL9311BR • RAM: 512 MB • Flash: 64 MB
Interfaces	• 16x10/100/1000 Base-T (RJ-45) • 2x10G Base-X SFP+ • 1xRJ-45 console port
Standards and Functions	• IEEE 802.3 10Base-T • IEEE 802.3u 100Base-TX • IEEE 802.3ab 1000Base-T • IEEE 802.3z 1000Base-X • IEEE 802.3ae 10GBase-X • IEEE 802.3az Energy-Efficient Ethernet • IEEE 802.3x Full Duplex Flow Control • Auto-Negotiation • Auto MDI/MDIX on all copper ports

LEDs	• PWR
	
	  - ON – power on state
	
	  - OFF – power off state
	
	• Link/Act (port 1 – 16)
	
	  - Always bright green – connection at 1000 Mbps
	
	  - Always bright orange – connection at 10/100 Mbps
	
	  - Flicker – data pass
	
	  - Off – no connection
	
	• Link/Act (port 17 – 18)
	
	  - Always bright – connection at 10 Mbps
	
	  - Flicker – data pass
	
	  - Off – no connection
	
	• SYS
	
	  - Flicker – the switch is booting up
	
	  - Off – power is off or a failure has occurred, the switch is not ready for operation

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Button	• Reset
Power	• Power input (AC)
Ventilation	• Fanless
Housing	• Metal
Mounting	• Desktop • 19" rackmount

Performance

Switching Capacity	• 72 Gbps
Packet Forwarding Rate	• 95.23 Mpps
Packet Buffer	• 1.5 MB
Transfer Mode	• Store-and-forward
MAC Address Table	• 16K entries
Jumbo Frame	• 12 KB

Software

L2 Features	• Flow Control
	• Link Aggregation
	  - Static
	  - 802.3ad
	  - Up to 64 groups per device / up to 8 ports per group
	• Load Balance
	  - src-mac
	  - dst-mac
	  - src-ip
	  - dst-ip
	• Loopback Detection
	• ERPS
	• MRPP
	• ULPP
	• ULSM
	• Spanning Tree Protocol
	  - 802.1D STP
	  - 802.1w RSTP

	- 802.1s MSTP (64 instances)
	- BPDU Guard
	- Root Guard
	- BPDU Tunnel
	• LLDP
	• LLDP-MED
	• Port Mirroring
	- One-to-One
	- Many-to-One
	- Flow-based
	- CPU-based
	- Ingress/egress/both
	- RSPAN
VLAN	• 802.1Q, 4094 VLAN
	• Port-based VLAN
	• MAC-based VLAN
	• Protocol-based VLAN (802.1v)
	• Subnet-based VLAN
	• Private VLAN
	• VLAN Filtering
	• Voice VLAN
	• GVRP
	• GMRP
	• Double VLAN (Q-in-Q)
	- Selective Q-in-Q
	- Port-based Q-in-Q
	• VLAN Translation
L2 Multicast	• IGMP Snooping
	- IGMP v1/v2/v3
	- Supports up to 1K groups
	- IGMP Snooping Fast Leave
	- IGMP Proxy
	- IGMP Authentication (RADIUS)
	• MLD Snooping
	- MLD v1/v2
	- Supports up to 1K groups
	• Multicast Source/Destination (DCSCM)

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L3 Features	- Maximum number of IP interfaces: 32
	- 8K ARP entries
	- Static routing for IPv4/IPv6
	  - 6K IPv4 routes
	  - 2K IPv6 routes
	- Gratuitous ARP
	- RIPv1/v2
	- OSPFv2
	- BGPv4

QoS	- 802.1p
	- CoS based on:
	  - DSCP
	  - VLAN ID
	  - IP Precedence
	  - IP ACL/ MAC ACL/ IPv6 ACL
	  - IPv6 Flow Labels
	- Queue Handling
	  - Strict Priority (SP)
	  - Weighted Round Robin (WRR)
	  - Weighted Deficit Round Robin (WDRR)
	- Bandwidth Control
	- 8 Egress Queues

Access Control Lists (ACL)	- Up to 2K ACL entries
	- ACL based on:
	  - VLAN
	  - MAC address
	  - IPv4 address
	  - DSCP
	  - ToS
	  - TCP/UDP port number
	  - User-defined ACL
	- Based on time period ACL

Security	- Port Security - Port Isolation - Storm Control - Dynamic ARP Inspection - ARP Spoofing Prevention

	• ARP Scanning Prevention • ARP Guard • DoS Attack Prevention • DHCP Snooping • DHCPv6 Snooping • IPv6 SAVI • Security RA • CPU Protection

AAA	• 802.1X Authentication:
	  - Port-Based
	  - MAC-Based
	• Guest VLAN
	• IPv6 RADIUS Server
	• RADIUS/TACACS+ Authentication

OAM	• Cable diagnostics • ULDP (Unidirectional Link Detection Protocol) • 802.3ah Ethernet Link OAM • 802.1ag Connectivity Fault Management (CFM) • DDM (Digital Diagnostics Monitoring) • Watchdog
Management	• Web-based UI • CLI • Telnet • SSH • FTP • TFTP • System Log • SNMP v1/v2c/v3 • SNMP Traps • SNTP • NTP • Firmware Backup/Upgrade • Ping/Traceroute (IPv4/IPv6) • DHCP Server • DHCPv6 Server • BootP/DHCP Client • DHCP Relay

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- DHCPv6 Relay
- DHCP Option 82, 43, 60, 61, 67
- IPv4/IPv6 DNS Client

Physical Parameters

Dimensions (L x W x H)	• 280 x 180 x 44 mm

Operating Conditions

Power	• 100-240V AC, 50/60 Hz
MTBF (hours)	• >100 000
Surge Protection	• Common mode ±4KV • Differential mode ±2KV
Electrostatic Discharge (ESD) Protection	• Contact discharge: ± 6kV • Air discharge: ± 8kV
Temperature	• Operating: 0 to 40 °C • Storage: -40 to 70 °C
Humidity	• Operating: 10% to 90% (non-condensing) • Storage: 5% to 90% (non-condensing)

Package Contents

Package Contents	• OS3218 Switch • Power Cord • RJ-45 Console Cable • Rack-Mount Kit • Quick Installation Guide

Order Info

OS3218	Managed L3 PoE Switch, 16x1000Base-T, 2x10GBase-X SFP+