



OS3110

10-Port Gigabit L2 Managed Switch

8x1000Base-T (RJ-45), 2x100/1000Base-X SFP, 1xConsole RJ-45, 19" rack mounting



The ORIGO OS3110 is a managed L2 switch with 8xGigabit RJ-45 ports and 2x100/1000Base-X SFP ports.

The ORIGO OS3110 switch is recommended for building of the networks of small, medium and large sized enterprises that need a modern gigabit solution with functions that provide basic routing, security, access control, fault-tolerance, quality of service and network segmentation.

The switch supports static routing, advanced VLAN functionality, Port Security, 802.1X authentication and ACL. IGMP/MLD Snooping function allows to operate with multicasting applications effectively, and QoS is used to provide a priority transmission of multimedia traffic.

To increase performance and resiliency, the OS3126 supports Link Aggregation Control Protocol (LACP), the redundant connections by means of STP/RSTP/MSTP, Loopback Detection and ERPS, providing fast network recovery if one of the ring links fails.

Key Features

- 8x10/100/1000Base-T (RJ-45) ports
- 2x100/1000Base-X SFP ports
- IPv4/IPv6 static routing
- 802.1X, ACL, Port Security
- 802.1Q VLAN, Voice VLAN, Selective Q-in-Q
- ERPS, STP/RSTP/MSTP, Loopback Detection for enhanced network reliability
- Advanced QoS features for traffic prioritization
- IGMP/MLD Snooping to work with multicast traffic
- Management via Web, Console, Telnet, SSH, SNMP



Specifications

Hardware

CPU and memory	<ul style="list-style-type: none">• CPU: RTL8380M• RAM: 128 MB• Flash: 32 MB
Interfaces	<ul style="list-style-type: none">• 8x10/100/1000Base-T (RJ-45)• 2x100/1000Base-X SFP• RJ-45 console port
Standards and Functions	<ul style="list-style-type: none">• IEEE 802.3 10Base-T• IEEE 802.3u 100Base-TX• IEEE 802.3ab 1000Base-T• IEEE 802.3u 100Base-FX• IEEE 802.3z 1000Base-X• IEEE 802.3x (Full Duplex Flow Control)• IEEE 802.3az Energy-Efficient Ethernet• Auto-Negotiation• Auto MDI/MDIX on all copper ports
LEDs	<ul style="list-style-type: none">• PWR<ul style="list-style-type: none">- ON – power on state- OFF – power off state• Link/Act (port 1 – 10)<ul style="list-style-type: none">- Always bright– terminal device is connected- Flicker green – data pass- Off – no connection• SYS<ul style="list-style-type: none">- Blinking: System operating normally- Off: System is booting or a fault has occurred
Button	<ul style="list-style-type: none">• Reset



Power	<ul style="list-style-type: none">• Power input (AC)
Ventilation	<ul style="list-style-type: none">• Fanless
Housing	<ul style="list-style-type: none">• Metal
Mounting	<ul style="list-style-type: none">• Desktop• 19" rackmount

Performance

Switching Capacity	<ul style="list-style-type: none">• 20 Gbps
Packet Forwarding Rate	<ul style="list-style-type: none">• 14.88 Mpps
Packet Buffer	<ul style="list-style-type: none">• 512 KB
Transfer Mode	<ul style="list-style-type: none">• Store-and-forward
MAC Address Table	<ul style="list-style-type: none">• 8K entries
Routing Table Size	<ul style="list-style-type: none">• 512 entries (IPv4/IPv6)
Routing Table Size L3	<ul style="list-style-type: none">• 512 entries (IPv4/IPv6)
Jumbo Frame	<ul style="list-style-type: none">• 10 000 bytes

Software

L2 Features	<ul style="list-style-type: none">• Flow Control• Link Aggregation<ul style="list-style-type: none">- Static- 802.3ad- Up to 8 groups per device / up to 8 ports per group• Load Balance<ul style="list-style-type: none">- src-mac- dst-mac- src-ip- dst-ip• Loopback Detection• ERPS• MRPP
-------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<ul style="list-style-type: none">• ULPP• ULSM• Spanning Tree Protocol<ul style="list-style-type: none">- 802.1D STP- 802.1w RSTP- 802.1s MSTP (64 instances)- Root Guard (Restriction)- BPDU Guard (Restriction)• LLDP• LLDP-MED• Port Mirroring<ul style="list-style-type: none">- One-to-One- Many-to-One- Flow-based- CPU-based- Ingress/egress/both- RSPAN
VLAN	<ul style="list-style-type: none">• 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)<ul style="list-style-type: none">- Selective Q-in-Q

	<ul style="list-style-type: none">- Port-based Q-in-Q• VLAN Translation• Multicast VLAN
L2 Multicast	<ul style="list-style-type: none">• IGMP Snooping<ul style="list-style-type: none">- IGMP v1/v2/v3- Supports up to 512 groups- IGMP Snooping Fast Leave- IGMP Proxy• MLD Snooping<ul style="list-style-type: none">- MLD v1/v2- Supports up to 512 groups• Multicast Source/Destination (DCSCM)
L3 Features	<ul style="list-style-type: none">• Maximum number of IP interfaces: 16• 8K ARP entries• Static routing<ul style="list-style-type: none">- 512 IPv4 routes- 512 IPv6 routes• Gratuitous ARP
QoS	<ul style="list-style-type: none">• 802.1p• CoS based on:<ul style="list-style-type: none">- DSCP- VLAN ID- IP Precedence- IP ACL/ MAC ACL/ IPv6 ACL- IPv6 Flow Labels• Queue Handling<ul style="list-style-type: none">- Strict Priority (SP)- Weighted Round Robin (WRR)- Weighted Deficit Round Robin (WDRR)

	<ul style="list-style-type: none">• Bandwidth Control• 8 Egress Queues
Security	<ul style="list-style-type: none">• SSH v1/v2• SSL<ul style="list-style-type: none">- TLS 1.0/1.1/1.2 support- IPv4/IPv6 support• Port Security<ul style="list-style-type: none">- Up to 8K MAC addresses per port• 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	<ul style="list-style-type: none">• 802.1X Authentication:<ul style="list-style-type: none">- Port-Based- MAC-Based• Guest VLAN• IPv6 RADIUS Server• RADIUS/TACACS+ Authentication
Access Control Lists (ACL)	<ul style="list-style-type: none">• Up to 1.5K ACL entries• ACL based on:<ul style="list-style-type: none">- VLAN

	<ul style="list-style-type: none">- MAC address- IPv4 address- DSCP- ToS- TCP/UDP port number- User-defined ACL• Based on time period ACL
OAM	<ul style="list-style-type: none">• Cable diagnostics• ULDP (Unidirectional Link Detection Protocol)• Dying Gasp• 802.3ah Ethernet Link OAM• 802.1ag Connectivity Fault Management (CFM)• DDM (Digital Diagnostics Monitoring)• Watchdog
Management	<ul style="list-style-type: none">• Web-based GUI• CLI• Telnet• SSH v1/v2• FTP• TFTP• System Log• SNMP v1/v2c/v3• SNMP Traps• SNTP• NTP• Firmware Backup/Upgrade• Ping / Traceroute for IPv4/IPv6• DHCP Server• DHCPv6 Server



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

Physical Parameters

Dimensions (L x W x H)	• 280 x 180 x 44 mm
Weight	• 1.36 kg
Package Dimensions	• 37 x 23 x 8 cm
Gross Weight	• 1.96 kg

Operating Conditions

Power	• 100-240V AC, 50/60 Hz
Max Power Consumption	• 7.87W
Heat Dissipation	• 14.38W (49.13 BTU/H)
Surge Protection	• ± 2 kV (common mode) • ± 1 kV (differential mode)
Electrostatic Discharge (ESD) Protection	• Contact discharge: ± 4 kV • Air discharge: ± 6 kV
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	• OS3110 Switch • Power Cord • RJ-45 Console Cable • Rack-Mount Kit • Quick Installation Guide
------------------	------------------------------------------------------------------------------------------------------------



Order Info

OS3110	Managed L2 Switch, 8x1000Base-T, 2x1000Base-X SFP
--------	---------------------------------------------------
