Alcatel-Lucent OmniSwitch 6250

STACKABLE FAST ETHERNET LAN SWITCH

The Alcatel-Lucent OmniSwitch™ 6250 is a new value layer-2+ Fast Ethernet stackable LAN family of switches for both the enterprise and Ethernet access segments. Enterprise models address the small- and medium-sized enterprise edge and branch office environments, while the metro models address the residential and business Ethernet access supplied by service providers.

OmniSwitch 6250-8M

OmniSwitch 6250-24/P24/24M/24MD

With an optimized design for flexibility and scalability as well as low power consumption, the OmniSwitch 6250 runs the field-proven Alcatel-Lucent Operating System (AOS), providing an outstanding edge solution for highly available, self-protective, easily managed and eco-friendly networks.

The OmniSwitch 6250 family is an evolution of the current Alcatel-Lucent OmniStack™ 6200 Stackable LAN Switch

product family, embedding the latest technology and AOS innovations.

Solutions benefiting from the OmniSwitch 6250 family of switches are:

- Edge of small- to medium-sized networks
- Branch office enterprise work groups
- Residential/metro Ethernet triple play applications

FEATURES	BENEFITS
OmniSwitch 6250 switches offer innovative half-rack-wide models for a great variety of switch combination deployments	Provides simplified selection with only two enterprise models: Power-over-Ethernet (PoE) and non-PoE • Reduces sparing and inventory costs • Allows any combination of PoE and non-PoE, up to 416 ports
OmniSwitch 6250 switches are highly efficient and optimized in their form factor, power consumption and acoustic output	Small form factor and low noise output make the OmniSwitch 6250 ideal for collocation environments. The low power consumption reduces operating expenses and cooling costs, lowering operating expenditures (OPEX), resulting in faster return on investment (ROI).
Developed to satisfy customers' requests for feature-rich, cost-effective, 10/100 stackable switch built on the latest technologies	Leads the industry in price/feature-performance ratio and offers customers a cost-efficient network technology upgrade, without the necessity to move to a higher priced, layer-2+ Gigabit solution
Feature-rich services incorporated in the operating system: • Integrated security including Access Guardian, 802.1x and captive portal • Alcatel-Lucent virtual chassis design provides resiliency and 5G performance • Quality of service (QoS) and static, RIP routing and IPv6	Outstanding list of features and performance for supporting scalable, real-time voice, data and video applications for converged networks
OmniSwitch 6250 switches run the same AOS as the other OmniSwitch products and are fully manageable by Alcatel-Lucent CLI, WebView browser, the OmniVista™ network management system and the Alcatel-Lucent 5620 Service Aware Manager (SAM)	Existing AOS customers/users are immediately familiar with the product from day one, reducing their ownership and training costs. New users may choose the method of switch access most beneficial to their needs
Limited Lifetime Warranty Software and Hardware Support included	The lifetime warranty eliminates service program costs and ongoing service renewals, lowering total cost of ownership (TCO) and allowing customers to reach ROI targets more quickly.

Alcatel-Lucent OmniSwitch 6250 models

All models in the OmniSwitch 6250 switch family are stackable, with a half-rack width (21.59 cm/8.5 in.), fixed-configuration chassis in a 1U form factor. A variety of PoE (enterprise) and non-PoE (enterprise and metro) models are available. They can be optionally equipped with Alcatel-Lucent-approved small form factor pluggable (SFP) transceivers supporting short, long and very long distances.

Table 1. OmniSwitch 6250 models available

ENTERPRISE MODELS					
CHASSIS	10/100 PORTS	GIGABIT COMBO PORTS	HDMI STACKING PORTS (2.5 Gb/s)	POWER SUPPLY SUPPORTED	BACKUP POWER SUPPLY SUPPORTED
Non-PoE model OS6250-24	24	2	2	Internal AC supply	External AC brick supply
PoE model OS6250-P24	24	2	2	225 W, external AC supply	225 W, external AC supply

The OmniSwitch 6250-P24 supports 30 W per port PoE (complies with both IEEE 802.3af and 802.3at standards).

METRO MODELS					
CHASSIS	10/100 PORTS	10/100/1000 COMBO PORTS	SFP UPLINK (GIGABIT) SFP STACKING (2.5 Gb/s)	POWER SUPPLY SUPPORTED	BACKUP POWER SUPPLY SUPPORTED
OS6250-8M	8	2	2	Internal AC supply	N/A
OS6250-24M	24	2	2	Internal AC supply	External AC brick supply
OS6250-24MD	24	2	2	Internal DC supply	External DC supply

OmniSwitch 6250 metro models support additional metro software features outlined later in this document.
- Gigabit combo port supporting RJ45 10/100/1000 and SFP 100/1000
- M model SFP interfaces support only Gigabit SFP transceivers or OmniSwitch 6250 SFP direct stacking cable

Technical specifications

	ENTERPRISE MODELS		METRO MODELS		
PORT	OS6250-24	OS6250-P24	OS6250-8M	OS6250-24M	OS6250-24MD
RJ-45 100/100 ports	24	24	8	24	24
RJ-45/SFP 10/100/1000 combo ports	2	2	2	2	2
HDMI stacking ports	2	2	0	0	0
SFP uplink/stacking ports	0	0	2	2	2
PoE ports	0	24 FE or 22 FE + 2 GE	0	0	0
Max unit per stack	8*	8*	2	2	2

* 16 units available in future software release

DIMENSIONS	ENTERPRISE MODELS		METRO MODELS		
	OS6250-24	OS6250-P24	OS6250-8M	OS6250-24M	OS6250-24MD
Switch width	21.5 cm (8.50 in.)	21.5 cm (8.50 in.)	21.5 cm (8.50 in.)	21.5 cm (8.50 in.)	21.5 cm (8.50 in.)
Switch height	4.4 cm (1.73 in.)	4.4 cm (1.73 in.)	4.4 cm (1.73 in.)	4.4 cm (1.73 in.)	4.4 cm (1.73 in.)
Switch depth (no PS shelf attached)	29.21 cm (11.5 in.)	29.21 cm (11.5 in.)	29.21 cm (11.5 in.)	29.21 cm (11.5 in.)	29.21 cm (11.5 in.)
Switch depth (with PS shelf attached)	47.6 cm (18.88 in.)	47.6 cm (18.88 in.)	N/A	47.6 cm (18.88 in.)	47.6 cm (18.88 in.)
Switch weight (*no PS)	1.72 kg (3.80 lb)	1.91 kg (4.20 lb)*	1.72 kg (3.80 lb)	1.72 kg (3.80 lb)	1.72 kg (3.80 lb)
Switch tray weight	0.61 kg (1.35 lb)	0.61 kg (1.35 lb)	0.61 kg (1.35 lb)	0.61 kg (1.35 lb)	0.61 kg (1.35 lb)
WIRE-RATE PERFORMANCE	OS6250-24	OS6250-P24	OS6250-8M	OS6250-24M	OS6250-24MD
Raw switch capacity: (full duplex/aggregated)	12.4 Gb/s/24.8 Gb/s	12.4 Gb/s/24.8 Gb/s	10.8 Gb/s/21.6 Gb/s	12.4 Gb/s/24.8 Gb/s	12.4 Gb/s/24.8 Gb/s
Throughput no stacking at aggregated	13 Mpps @ 8.8 Gb/s	13 Mpps @ 8.8 Gb/s	14.3 Mpps @ 9.6 Gb/s	19 Mpps @ 12.8 Gb/s	19 Mpps @ 12.8 Gb/s
Throughput with stacking at aggregated	28 Mpps @ 18.8 Gb/s	28 Mpps @ 18.8 Gb/s	23.2 Mpps @ 15.6 Gb/s	28 Mpps @ 18.8 Gb/s	28 Mpps @ 18.8 Gb/s
Stacking capacity (full duplex/aggregated)	5 Gb/s/10 Gb/s	5 Gb/s/10 Gb/s	5 Gb/s/10 Gb/s	5 Gb/s/10 Gb/s	5 Gb/s/10 Gb/s
OPERATING CONDITIONS	OS6250-24	OS6250-P24	OS6250-8M	OS6250-24M	OS6250-24MD
Operating temperature	0°C to 45°C (32°F to 113°F)	0°C to 45°C (32°F to 113°F)	0°C to 45°C (32°F to 113°F)	0°C to 45°C (32°F to 113°F)	0°C to 45°C (32°F to 113°F)
Storage temperature	-40°C to +75°C (-40°F to +167°F)	-40°C to +75°C (-40°F to +167°F)	-40°C to +75°C (-40°F to +167°F)	-40°C to +75°C (-40°F to +167°F)	-40°C to +75°C (-40°F to +167°F)
Humidity (operating and storage)	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%
MTBF (hours)	268,730	189,585	290,108	268,698	268,715
Fanless design	Yes	1 fan	Yes	Yes	Yes
Acoustic (dB) – all fans on*	Silent	<35db(A)	Silent	Silent	Silent
System power consumption (watts)**	17.40 W	24.90 W	12.80 W	16.20 W	15.89 W
Heat dissipation (BTU)***	59	85	44	55	54

* Acoustic levels measured with a single power supply at room temperature
** Power consumption of the OmniSwitch 6250 PoE model is tested under fully loaded traffic conditions using a 225 W PoE supply.
*** Power consumption measured under fully loaded traffic conditions

OmniSwitch 6250 backup power supplies and specifications

Backup power supplies for the OmniSwitch 6250-24 and OmniSwitch 6250-24MD models come in the form of a power brick in either AC or DC variant respectively and may be mounted to the rear of the chassis using the power shelf with securing brackets. All necessary parts are included in the backup power supply kits.

The OmniSwitch 6250-P24 external 225 W power supply acts as both the primary supply and the redundant supply. The primary supply/tray combination attaches directly to the rear of the chassis. The redundant supply/tray combination mounts to the side of the switch and attaches using remote cable.

SPECIFICATION	BACKUP POWER SUPPLY MODEL		
	OS6250-BP	OS6250-BP-D	OS6250-BP-P
Style	Brick	Brick	Framed
Internal/external	External	External	External
Input voltage	90 V AC to 220 V AC	36 V DC to 72 V DC	90 V AC to 220 V AC
Output voltage	12 V DC	12 V DC	12 V DC/54 V DC
Wattage	42 W	30 W	225 W
PoE power budget	N/A	N/A	180 W
Weight	0.21 kg (0.45 lb)	0.25 kg (0.55 lb)	1.04 kg (2.30 lb)

Power supply shelf

The power supply shelf holds one brick or PoE style backup power supply and mounts to the rear of the unit. Any backup power supply and shelf may be mounted in a side-by-side configuration to the switch using the supplied mounting ears. This feature allows for space-sensitive installations requiring reduced depth (for example, in a wall-mounted cabinet).

Indicators
System LEDs
- System (OK) (chassis HW/SW status)
- PWR (primary power supply status)
- PRI (virtual chassis primary)
- BPS (backup power status)
- STK (stacking indicator for metro models)
- Switch ID via port LED indicates the stack ID of the unit in the stack: 1 to 8

Per-port LEDs
- 10/100/1000: PoE, link/activity
- SFP: link/activity
- Stacking: link/activity

Compliance and certifications
Commercial
EMI/EMC
- FCC CRF Title 47 Subpart B (Class A limits. Note: Class A with UTP cables)
- VCCI (Class A limits. Note: Class A with UTP cables)
- AS/NZS 3548 (Class A limits. Note: Class A with UTP cables)
- CE marking for European countries (Class A. Note: Class A with UTP cables)
- EN 55022: 2006 (Emission Standard)
- EN 61000-3-3:1995
- EN 61000-3-2:2006
- EN 55024: 1998 (Immunity Standards)
  - ¬ EN 61000-4-2:1995 + A1:1998
  - ¬ EN 61000-4-3:1996 + A1:1998
  - ¬ EN 61000-4-4:1995
  - ¬ EN 61000-4-5:1995
  - ¬ EN 61000-4-6:1996
  - ¬ EN 61000-4-8:1994
  - ¬ EN 61000-4-11:1994
- IEEE 802.3: Hi-Pot Test (2250 V DC on all Ethernet ports)

Safety agency certifications
- US UL 60950
- IEC 60950-1:2001; all national deviations
- EN 60950-1:2001; all deviations
- CAN/CSA-C22.2 No. 60950-1-03
- NOM-019 SCFI, Mexico
- AS/NZ TS-001 and 60950:2000, Australia
- UL-AR, Argentina
- UL-GS Mark, Germany
- EN 60825-1 Laser, EN 60825-2 Laser
- CDRH Laser

Detailed product features
Simplified management
Management interfaces
- Intuitive Alcatel-Lucent CLI with familiar interface reducing training costs
- Easy-to-use, point-and-click, web-based element manager (WebView) with built-in help for easy configuration
- Integration with Alcatel-Lucent OmniVista™ Network Management System (NMS)
- Full configuration and reporting using SN-MPv1/2/3 across all OmniSwitch families to facilitate third-party NMS integration
- Remote Telnet management or Secure Shell access using SSH
- File upload using TFTP, FTP, SFTP, or SCP for faster configuration
- Human-readable ASCII-based configuration files for off-line editing and bulk configuration
- Managed by Alcatel-Lucent 5620 Service Aware Manager (SAM)*

Monitoring and troubleshooting
- Local (on the flash) and remote server logging: Syslog and command log
- Port-based mirroring for troubleshooting and lawful interception, supports four sessions with multiple sources-to-one destination
- Policy-based mirroring allows selection of the type of traffic to mirror by using QoS policies*
- Remote port mirroring facilitates passing mirrored traffic through the network to a remotely connected device
- Port monitoring feature allows capture of Ethernet packets to a file, or for on-screen display to assist in troubleshooting
- sFlow v5 and RMON for advanced monitoring and reporting capabilities (statistics, history, alarms and events)
- IP tools: ping and traceroute

Network configuration
- Auto-negotiating 10/100/1000 ports automatically configure port speed and duplex setting
- Auto-MDI/MDIX automatically configures transmit and receive signals to support straight-through and crossover cabling
- BOOTP/Dynamic Host Configuration Protocol (DHCP) client allows auto-configuration of switch IP information for simplified deployment
- DHCP relay to forward client requests to a DHCP server
- Alcatel-Lucent Mapping Adjacency Protocol (AMAP) for building topology maps
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP) with MED extensions for automated device discovery

- GARP VLAN Registration Protocol (GVRP) for 802.1Q-compliant VLAN pruning and dynamic VLAN creation
- Auto-QoS for switch management traffic as well as traffic from Alcatel-Lucent IP phones
- Network Time Protocol (NTP) for network-wide time synchronization
- Stackable to eight units (*16 units – check availability)

Resiliency and high availability
- Ring Rapid Spanning Tree Protocol (RRSTP) optimized for ring topology to provide less than 100 ms convergence time
- IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) encompasses IEEE 802.1D Spanning Tree Protocol (STP) and IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
- Per-VLAN Spanning Tree (PVST) and Alcatel-Lucent 1x1 STP mode
- IEEE 802.3ad Link Aggregation Control Protocol (LACP) and static link aggregation (LAG) groups across modules are supported
- Broadcast and multicast storm control to avoid degradation in overall system performance
- Uni-Directional Link Detection (UDLD) detects and disables unidirectional links on fiber optic interfaces
- Redundant and hot-swappable power supplies, transceivers, modules offering uninterruptable service
- Dual-image and dual-configuration file storage provides backup

Advanced security
Access control
- AOS Access Guardian framework for comprehensive user-policy-based Network Access Control (NAC)*
- Auto-sensing 802.1X multi-client, multi-VLAN
- MAC-based authentication for non-802.1x hosts
- Web-based authentication (captive portal) – a customizable web portal residing on the switch that can be used for authenticating supplicants as well as non-supplicants
- Group mobility rules and "guest" VLAN support
- The host integrity check (HIC) agent on each switch makes it an HIC enforcer and facilitates endpoint device control for company policy compliance; quarantine and remediation are supported as required.*
- User Network Profile (UNP) simplifies NAC management and control by dynamically providing pre-defined policy configuration to authenticated clients – VLAN, ACL, BW, HIC
- SSH for secure CLI session with PKI support
- Centralized RADIUS and LDAP user authentication

* Future support – contact for availability

Containment, monitoring and quarantine

- Support for Alcatel-Lucent OmniVista 2500 NMS Quarantine Manager and quarantine VLAN*
- Learned Port Security (LPS) or MAC address lockdown secures network access on user or trunk ports based on MAC address
- DHCP Snooping, DHCP IP Spoof protection
- TACACS+ client allows for authentication, authorization and accounting with a remote TACACS+ server
- Dynamic Address Resolution Protocol (ARP) protection and ARP poisoning detection
- Access control lists (ACLs) to filter out unwanted traffic including denial of service attacks; flow-based filtering in hardware (L1-L4)
- Bridge Protocol Data Unit (BPDU) blocking automatically shuts down user ports if an STP BPDU packet is seen to prevent topology loops
- STP Root Guard prevents edge devices from becoming STP root node

Converged networks
PoE

- The PoE models support Alcatel-Lucent IP phones and WLAN access points, as well as any end device compliant with IEEE 802.3af or IEEE 802.3at compliant end device.
- Configurable per-port PoE priority and max power for power allocation
- Dynamic PoE allocation delivers only the power needed by the device up to the total power budget for the most efficient power consumption.

QoS

- Priority queues: Eight hardware-based queues per port for flexible QoS management
- Traffic prioritization: Flow-based QoS with internal and external (re-marking) prioritization
- Bandwidth management: flow (policy) based and port based bandwidth management for both ingress rate limiting and/or egress rate shaping
- Queue management: Configurable scheduling algorithm – Strict Priority, Weighted Round Robin (WRR) and Deficit Round Robin (DRR)
- Congestion avoidance: Support for End-to-End Head-of-Line (E2E-HOL) Blocking Protection
- Auto-QoS for switch management traffic as well as traffic from Alcatel-Lucent IP phones
- Three-color marker – Single/Dual Rate – policing with Commit BW, Excess BW, Burst Size

Layer-2, layer-3 routing and multicast
Layer-2 switching

- Up to 16,000 MACs
- Up to 4000 VLANs
- Up to 2000 ACLs
- Latency: <4 μseconds

IPv4 and IPv6

- Static routing for IPv4 and IPv6
- RIP v1 and v2 for IPv4, RIPng for IPv6
- Up to 256 IPv4/128 IPv6 static and RIP routes
- Up to 128 IPv4 and 16 IPv6 interfaces

Multicast

- IGMPv1/v2/v3 snooping to optimize multicast traffic
- MLD snooping
- Up to 1000 multicast groups/stack
- IP Multicast VLAN (IPMVLAN) for optimized multicast replication at the edge, saving network core resources

Network protocols

- DHCP relay (including generic User Datagram Protocol (UDP) relay)
- ARP
- DHCP relay
- DHCP relay to forward client requests to a DHCP server
- Generic UDP relay per VLAN
- DHCP Option 82 – configurable relay agent information

Metro Ethernet access (software features available on the M models)

- Ethernet services support per IEEE 802.1ad Provider Bridge
  - ¬ Transparent LAN Services with Service VLAN (SVLAN) and Customer VLAN (CVLAN) concept
  - ¬ Ethernet network-to-network interface (NNI) and user-network interface (UNI) services
  - ¬ Service Access Point (SAP) profile identification
  - ¬ CVLAN to SVLAN translation and mapping
- ITU-T Y.1731 and IEEE 802.1ag (v8.1) Ethernet operations administration and maintenance (OA&M): Connectivity Fault Management and performance measurements (layer-2 ping and link trace)
- IEEE 802.3ah Ethernet in the First Mile (EFM) for link monitoring , remote fault detection, and loopback control (layer-1 ping)
- UDLD: detects and disables unidirectional links on fiber optic interfaces
- ITU-T G.8032 Ethernet Ring Protection designed for loop protection and fast convergence times (sub 50 ms) in ring topologies
- Private VLAN feature for user traffic segregation
- Port loopback detection for preventing customer loops on Ethernet access ports
- DHCP Option 82 – configurable relay agent information
- IPMVLAN for optimized multicast replication at the edge, saving network core resources
- Three-color marker – Single/Dual Rate – policing with Commit BW, Excess BW, Burst Size
- Layer 2 Protocol Tunneling (L2PT) support with ability to define tunnel destination MAC address for maximum vendor compatibility
- Embedded 2544 customer premise equipment (CPE) test head feature for validating a customer's provisioned bandwidth and uni-profile settings from CPE-to-CPE
- Service Assurance Agent (SAA) for SLA compliance validation including: L2, IP, ETH-LB and ETH-DMM

- Zero touch auto configuration of switch over specified management VLAN using DHCP services
- MEF 9 and 14 certified
- Managed by Alcatel-Lucent 5620 SAM

Supported standards
IEEE standards

- IEEE 802.1D (STP)
- IEEE 802.1p (CoS)
- IEEE 802.1Q (VLANs)
- IEEE 802.1ad (Provider Bridge) Q-in-Q (VLAN stacking)
- IEEE 802.1ag (Connectivity Fault Management)
- IEEE 802.1s (MSTP)
- IEEE 802.1w (RSTP)
- IEEE 802.1X (Port-based Network Access Protocol)
- IEEE 802.3i (10Base-T)
- IEEE 802.3u (Fast Ethernet)
- IEEE 802.3x (Flow Control)
- IEEE 802.3z (Gigabit Ethernet)
- IEEE 802.3ab (1000Base-T)
- IEEE 802.3ac (VLAN Tagging)
- IEEE 802.3ad (Link Aggregation)
- IEEE 802.3af (Power-over-Ethernet)
- IEEE 802.3at (Power-over-Ethernet)
- IEEE 802.ah (Ethernet First Mile)

ITU-T standards

- ITU-T G.8032: Draft (June 2007) Ethernet Ring Protection

IETF standards
IPv4

- RFC 2003 IP/IP tunneling
- RFC 2784 GRE tunneling

RIP

- RFC 1058 RIP v1
- RFC 1722/1723/2453/1724 RIP v2 and MIB
- RFC 1812/2644 IPv4 Router Requirement
- RFC 2080 RIPng for IPv6

IP Multicast

- RFC 1112 IGMP v1
- RFC 2236/2933 IGMP v2 and MIB
- RFC 2365 Multicast
- RFC 3376 IGMPv3 for IPv6

IPv6

- RFC 1886 DNS for IPv6
- RFC 2292/2373/2374/2460/2462
- RFC 2461 NDP
- RFC 2463/2466 ICMP v6 and MIB
- RFC 2452/2454 IPv6 TCP/UDP MIB
- RFC 2464/2553/2893/3493/3513
- RFC 3056 IPv6 Tunneling
- RFC 3542/3587 IPv6
- RFC 4007 IPv6 Scoped Address Architecture
- RFC 4193 Unique Local IPv6 Unicast Addresses

* Future support – contact for availablility

Manageability

- RFC 1350 TFTP Protocol
- RFC 854/855 Telnet and Telnet Options
- RFC 1155/2578-2580 SMI v1 and SMI v2
- RFC 1157/2271 SNMP
- RFC 1212/2737 MIB and MIB-II
- RFC 1213/2011-2013 SNMP v2 MIB
- RFC 1215 Convention for SNMP Traps
- RFC 1573/2233/2863 Private Interface MIB
- RFC 1643/2665 Ethernet MIB
- RFC 1901-1908/3416-3418 SNMP v2c
- RFC 2096 IP MIB
- RFC 2570-2576/3411-3415 SNMP v3
- RFC3414 User-based Security Model
- RFC 2616 /2854 HTTP and HTML
- RFC 2667 IP Tunneling MIB
- RFC 2668/3636 IEEE 802.3 MAU MIB
- RFC 2674 VLAN MIB
- RFC 4251 Secure Shell Protocol Architecture
- RFC 4252 The Secure Shell (SSH) Authentication Protocol
- RFC 959/2640 FTP

Security

- RFC 1321 MD5
- RFC 2104 HMAC Message Authentication
- RFC 2138/2865/2868/3575/2618 RADIUS Authentication and Client MIB
- RFC 2139/2866/2867/2620 RADIUS Accounting and Client MIB
- RFC 2228 FTP Security Extensions
- RFC 2284 PPP EAP
- RFC 2869/2869bis RADIUS Extension

Quality of service

- RFC 896 Congestion Control
- RFC 1122 Internet Hosts
- RFC 2474/2475/2597/3168/3246 DiffServ
- RFC 3635 Pause Control

Others

- RFC 791/894/1024/1349 IP and IP/Ethernet
- RFC 792 ICMP
- RFC 768 UDP
- RFC 793/1156 TCP/IP and MIB
- RFC 826/903 ARP and Reverse ARP
- RFC 919/922 Broadcasting Internet Datagram

- RFC 925/1027 Multi LAN ARP/Proxy ARP
- RFC 950 Sub-netting
- RFC 951 BOOTP
- RFC 1151 RDP
- RFC 1191 Path MTU Discovery
- RFC 1256 ICMP Router Discovery
- RFC 1305/2030 NTP v3 and Simple NTP
- RFC 1493 Bridge MIB
- RFC 1518/1519 CIDR
- RFC 1541/1542/2131/3396/3442 DHCP
- RFC 1757/2819 RMON and MIB
- RFC 2131/3046 DHCP/BOOTP Relay
- RFC 2132 DHCP Options
- RFC 2251 LDAP v3
- RFC 3060 Policy Core
- RFC 3176 sFlow
- RFC 3021 Using 31-bit prefixes

OmniSwitch 6250 ordering information

PART NUMBER	DESCRIPTION
OS6250-8M	OS6250-8M Fast Ethernet chassis with AOS Metro software
	Chassis provides 8 RJ-45 ports configurable to 10/100Base-T, 2 SFP/RJ-45 combo ports configurable to be 10/100/1000Base-T or 100/1000Base-X and 2 SFP fiber ports configurable to be 1G uplinks or 2.5G stacking ports in a 1U by half-rack form factor with internal AC power supply.
OS6250-24M OS6250-24MD	OS6250-24M Fast Ethernet chassis with AOS Metro software
	Chassis provides 24 RJ-45 ports configurable to 10/100Base-T, 2 RJ-45/SFP combo ports configurable to be 10/100/1000Base-T or 100/1000Base-X and 2 SFP fiber ports configurable to be 1G uplinks or 2.5G stacking ports in a 1U by half-rack form factor with internal AC or DC power supply respectively.
OS6250-24	OS6250-24 Fast Ethernet chassis with AOS Enterprise software
	Chassis includes 24 RJ-45 ports configurable to 10/100Base-T, 2 RJ-45/SFP combo ports configurable to be 10/100/1000Base-T or 100/1000Base-X and 2 dedicated 2.5G HDMI stacking ports. Ethernet SFP optical transceivers, HDMI stacking cables and backup power supply can be ordered separately.
OS6250-P24	OS6250-P24 Fast Ethernet chassis with AOS Enterprise software
	Chassis includes 24 PoE RJ-45 ports configurable to 10/100Base-T, 2 SFP/PoE RJ-45 combo ports configurable to be 10/100/1000Base-T or 100/1000Base-X and 2 dedicated 2.5G HDMI stacking ports in a 1U by half-rack form factor with external AC PoE supply. Includes 225 W AC PoE supply and power shelf.
BOS6250-48	Two OS6250-24 units with AOS Enterprise software bundled for side-by-side mounting in a 19-in. by 1U rack space providing a total of 48 Fast Ethernet and 4 RJ-45/SFP combo ports
BOS6250-P48	Two OS6250-P24 units with AOS Enterprise software bundled for side-by-side mounting within a 19-in. by 1U rack space for a total of 48 PoE Fast Ethernet ports and 4 PoE RJ-45/SFP combo ports. Includes two 225 W supplies and power shelves.

Ethernet SFP optical transceivers and SFP direct connect stacking cable can be ordered separately.

Above bundles include country-specific power cords, user manuals access cards, software download access cards, RJ-45 to DB-9 adapters and hardware for mounting unit side by side with another OmniSwitch 6250 in a 19-in. rack.

Order mounting tray kit (OS6250-RM-19) for single-mounting the unit in a 19-in. rack

PART NUMBER	DESCRIPTION
POWER SUPPLIES	
OS6250-BP	OS6250-BP 40 W power brick AC backup power supply. Provides backup power to one non-PoE switch. Ships with country-specific power cord, backup power supply tray and securing brackets.
OS6250-BP-P	OS6250-BP-P 225 W AC PoE backup power supply. Provides backup power to one PoE switch. Ships with country-specific power cord and backup power supply tray.
OS6250-BP-D	OS6250-BP-D 30 W DC power brick backup power supply. Provides backup DC power to one non-PoE switch. Ships with chassis connection cable, backup power supply tray and securing brackets.
CABLES AND MOUNTING	
OS6250-CBL-30	OS6250 30-cm long HDMI stacking cable
OS6250-CBL-60	OS6250 60-cm long HDMI stacking cable
OS6250-CBL-150	OS6250 150-cm long HDMI stacking cable
OS6250M-CBL-30	OS6250M 30-cm long SFP direct stacking cable
OS6250M-CBL-60	OS6250M 60-cm long SFP direct stacking cable
OS6250M-CBL-150	OS6250M 150-cm long SFP direct stacking cable
OS6250-RM-19	Tray kit for mounting one OmniSwitch 6250 in a 19-in. rack
OS6250-DUAL-MNT	Two mounting and sliding brackets replacement kit. Hardware to mount two 6250 units in a 19-in. rack
GIGABIT TRANSCEIVERS	
SFP-GIG-LH70	1000Base-LH transceiver with an LC interface for single-mode fiber over 1550 nm wavelength. Typical reach of 70 km
SFP-GIG-LH40	1000Base-LH transceiver with an LC interface for single-mode fiber over 1310 nm wavelength. Typical reach of 40 km
SFP-GIG-LX	1000Base-LX transceiver with an LC interface for single-mode fiber over 1310 nm wavelength. Typical reach of 10 km
SFP-GIG-SX	1000Base-SX transceiver with an LC interface for multimode fiber over 850 nm wavelength. Typical reach of 300 m
SFP-GIG-BX-D	1000Base-BX bidirectional transceiver with an LC-type interface for use over single-mode fiber on a single strand link up to 10 km point-to-point. Transmits 1490 nm and receives 1310 nm optical signal
SFP-GIG-BX-U	1000Base-BX bidirectional transceiver with an LC-type interface for use over single-mode fiber on a single strand link up to 10 km point-to-point. Transmits 1310 nm and receives 1490 nm optical signal
100 MEGABIT TRANSCEIVERS	
SFP-100-MM	100Base-FX transceiver with an LC interface for multimode fiber optic cable
SFP-100-SM15	100Base-FX transceiver with an LC-type interface for single-mode fiber optic cable up to 15 km
SFP-100-SM40	100Base-FX transceiver with an LC-type interface for single-mode fiber optic cable up to 40 km
SFP-100-BX-U	100Base-BX bidirectional transceiver with an SC-type interface for use over single-mode fiber on a single strand link up to 20 km point-to-point, where the client (ONU) transmits 1310 nm and receives 1550 nm optical signal
SFP-100-BX-D	100Base-BX bidirectional transceiver with an SC-type interface for use over single-mode fiber on a single strand link up to 20 km point-to-point, where the client (OLT) transmits 1550 nm and receives 1310 nm optical signal

Service and support

Warranty information – OmniSwitch 6250 Lifetime Support

Alcatel-Lucent includes a Limited Lifetime Warranty with the purchase of your OmniSwitch 6250 product. This program covers both the OmniSwitch 6250 hardware and related Alcatel-Lucent Operating System (AOS) software.

Hardware Limited Lifetime Warranty (LLW) Support

This hardware warranty support service concerns Alcatel-Lucent OmniStack and OmniSwitch 6XXX series. (Refer to the worldwide price list [WPL] for information on availability.) Limited to the original owner and/or registered end user, this service is provided for up to 5 years after the product's End-of-Sales announcement.

Replacement parts will be shipped within 5 business days of receipt of the order with the refurbished product.

Note: Hardware Limited Lifetime Warranty does not cover transceivers.
This service covers only hardware switch replacement and does not apply to transceivers.

Software Limited Lifetime Support

This service applies to the Alcatel-Lucent OmniSwitch 6250 series. Limited to the original product owner and/or registered end user, this Advanced Replacement (AVR) service will be provided for up to 2 years after the product's End-of-Sales announcement.

This service includes:

• Technical support with Alcatel-Lucent Switch Certified personnel

• Web and phone access to support services

• Remote diagnostics

• Operating system software maintenance, minor and major releases

For more information about the Alcatel-Lucent OmniSwitch 6250 warranty, service and support programs, please visit: www.alcatel-lucent.com/support

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