

OmniSwitch 6250 L2+ Value Fast Ethernet LAN Stack SE training

(DR4 Availability planned late Q3 2009)



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September 2009

Agenda - OmniSwitch 6250

1. OmniSwitch 6250 in the portfolio
2. Product Overview
3. Hardware Features
4. Software Features
5. Internal Architecture
6. 2009/2010 Roadmap (6250)
7. OmniSwitch 6250 references

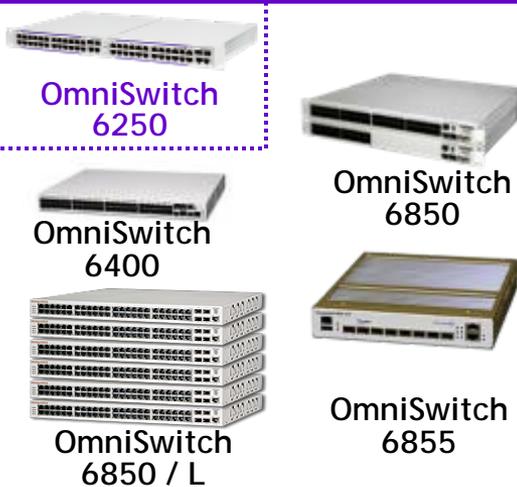
1. OmniSwitch 6250 in the portfolio

Alcatel-Lucent IP Networking Portfolio

WLAN



LAN Edge



LAN Aggregation



LAN Core



WAN/MAN



Consistency of Network Services

SECURITY

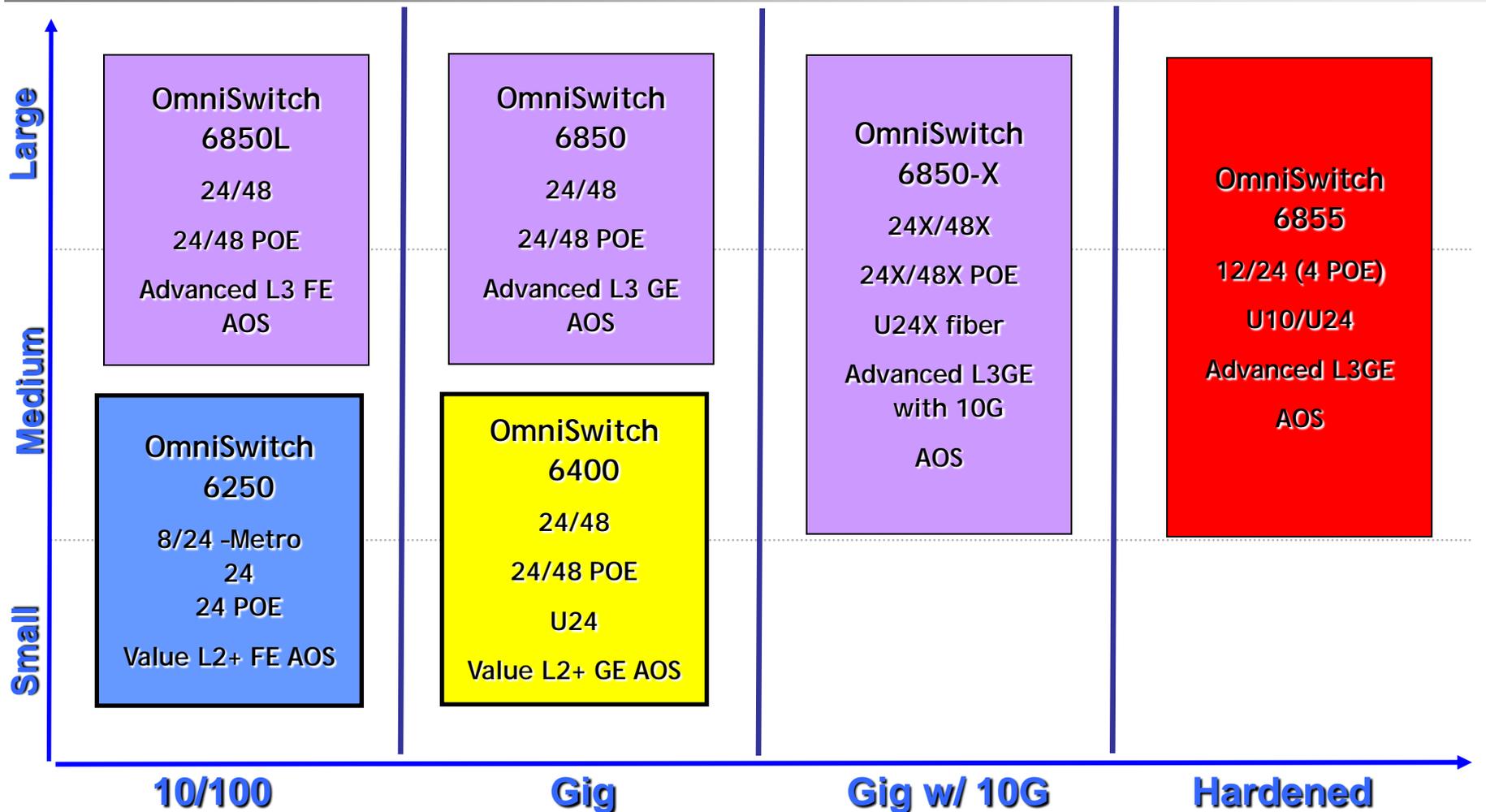
AVAILABILITY

MANAGEABLE

Green IT

LAN Stack Portfolio

OS6250 Positioning



OmniSwitch 6250 supports Full AOS L2+ Functionality

2. Product Overview

Value L2+ FE Stack - OmniSwitch 6250

Edge workgroup and Ethernet Access services

L2+ FE stackable solutions

Flexible offerings:

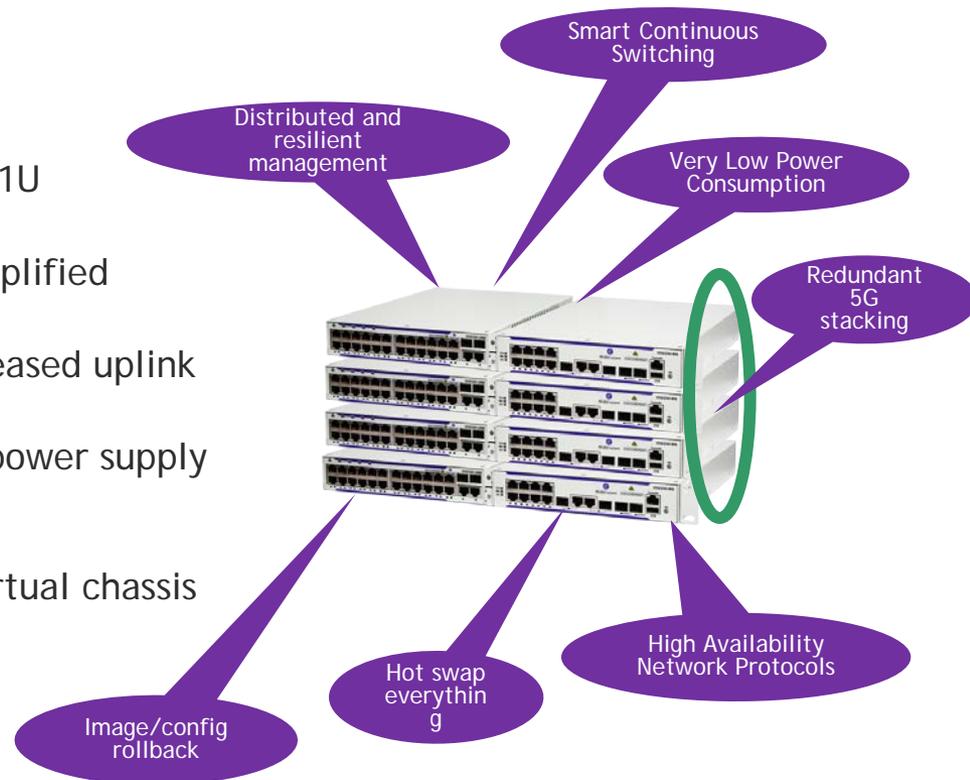
- 8, 24 ports, POE models for a mix of 48 ports in 1U configuration
- Optional 5 Gigabit stacking for resiliency and simplified management
- Up to 4 Gig SFP/Combo ports per switch for increased uplink and connectivity performance
- Low power, fan less switch, optional redundant power supply

Comprehensive AOS Edge features set

- Highly secure and available: Access Guardian, Virtual chassis
- Investment protection: IPv6, 802.1x, low power
- Basic L3 with Static and RIP
- Managed by OmniVista NMS and 5620 SAM

Targeted Markets

- Small to Medium Enterprise Edge
- Branch Office
- Metro Ethernet Access (MDU and Advanced CPE)



Why the OS6250?

Listened to our customers and built upon OS6200 success

OmniSwitch 6250 improvements:

- AOS L2+ SW with Management IP (IPv4/IPv6)
- 4K VLAN, 16k Mac
- QOS (Improved bandwidth control, queuing, prioritization)
- Flexible VLANs (selective, stacking, translation)
- Multicast VLANs
- SLA statistics
- IPv6 ACL's
- Port Mapping
- OAM (802.1ag and 802.3ah)
- 5620 SAM Support
- Lower power consumption
- Improved stacking performance
- Unique dimensioning



Benefits:

- AOS software for Small and Medium Enterprise
- Full L2+ for Ethernet Access services
- 802.3at hot swappable power supplies on PoE models
- Eco-friendly design (power, noise, dimensions)

OmniSwitch 6250

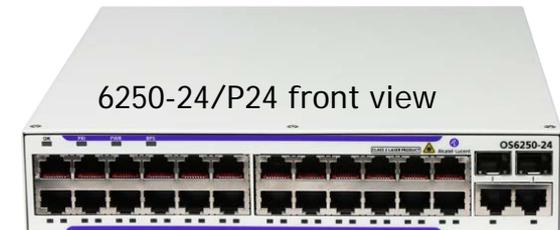
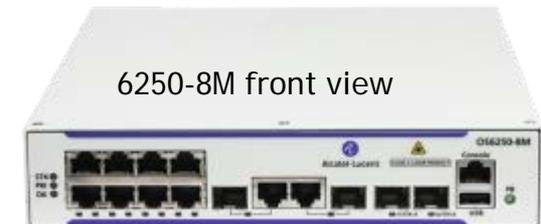
OS6250 models in brief

OmniSwitch 6250 L2+ Fast Ethernet Stack (5 models)

- **OS6250-8M:**
8 RJ45 10/100 FE ports, 2-Gig RJ45/SFP combo, 2-SFP ports
(Gig uplinks or 2.5 Gig stacking)
- **OS6250-24M:**
24 RJ45 10/100 FE ports, 2-Gig RJ45/SFP combo, 2-SFP ports
(Gig uplinks or 2.5 Gig stacking)
- **OS6250-24MD:**
24 RJ45 10/100 FE ports, 2-Gig RJ45/SFP combo, 2-SFP ports
(Gig uplinks or 2.5 Gig stacking), DC PS
- **OS6250-24:**
24 RJ45 10/100 FE ports, 2-Gig RJ45/SFP combo, 2-2.5 Gig HDMI
stacking ports
- **OS6250-P24:**
24 RJ45 PoE(af/at) 10/100 FE ports, 2-Gig RJ45/SFP combo,
2-2.5 Gig HDMI stacking ports

Other Info:

- 8 & 24 port: 1U form factor, 8.5" width, less than 12" deep
- Internal power supply for non-PoE
- Replaceable PoE and backup PS (AC and DC) on 24 port models
- Optimized Power budget (less than 30W system power, all units)



OmniSwitch 6250

Differentiation OS6250 - Mix of models and network services in 1U space

Enterprise Edge -> Maximum flexibility

Example: 48p with 24p POE and 24p non-POE in 1U space: Innovative proposal with 24p non-POE and 24p POE in 1U space

- Units are attached with sliding brackets for easy add/removal of units. 19" bracket pre-mounted
- 4 SFP/Combo ports are available for uplinks or GigE servers/desktop (instead of 2 with competition)
- If Stacked, backplane bandwidth is 5G full duplex (versus 2G with competition)

Bundles are proposed for 48p POE and 48p non-POE: BOS6250-48 and BOS6250-P48



Ethernet Access (CPE/MTU/NID) -> Scalable service deployment

Example: 32p FastEthernet + 4 SFP/Combo + 4 SFPs: Innovative MTU proposal growing with service requests

- Go from 8 to 48 FE user ports, allowing up to 8 GigE ports SFP/RJ45 for GigE users or uplinks



Branch office -> The best of Service Gateway and LAN switch in a 1U compact form factor

24p FastEthernet POE + 4 SFP/combo for uplinks/servers + Router T1/E1 or ADSL + FireWall + VoIP survivability :

- Innovative Branch office proposal for all in one solution, able to scale with the business growth (by adding units)



Value Propositions

Secure, Scalable/Flexible, Eco Friendly

Secure technology for network protection

- Proactive security framework embedded
- User based authentication
- Automatic containment and remediation
- Built in protection against attacks - DDoS, IP/DHCP spoofing

Scalable & flexible for easy network expansion

- Stackable to 8 units in a virtual chassis (future 16 units)
- 5 gigabit full duplex stacking
- Flexible combo ports

Designed to be Eco-Sustainable

- Low power consumption (less than 17W for 8 & 24 port units)
- **Optimized dimensions** (8.5"W x 11.5"D)(21.5cmW x 29.21cmD)
- Acoustic friendly for sound sensitive areas: Fanless for non-PoE, <30 db(A) for PoE



Value Proposition

Manageability Options

OmniVista NMS: Easy deployment and management

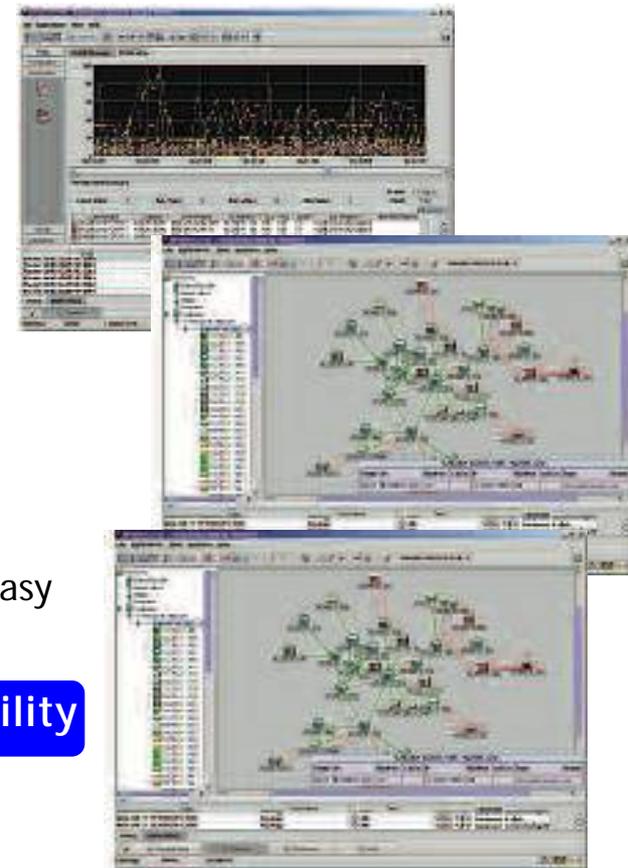
- Easily integrates with existing OmniVista network
- AOS everywhere - All-in-one solution, seamless integration
- Faster troubleshooting, minimizing network disruptions

Familiar AOS CLI and GUI: No Special Training required

- Easier installation and management simplification
- Familiar Command Line Interface (CLI) means, eliminating the training costs normally associated with learning a new product.
- A user-friendly WebView Graphical User Interface (GUI) provides easy configuration and management.

5620 SAM support: Faster time to productivity and profitability

- Fully supported by 5620 Service Aware Management
- Quicker installation and lower cost for a quicker ROI
- Comprehensive SLA features for continued ROI
- Ethernet OAM features - for quicker problem resolution



WebView – device manager

Alcatel-Lucent
AOS everywhere

Alcatel-Lucent
OmniVista

Value Propositions

Software and Hardware Lifetime Warranty Support

Lifetime support 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
- 5 day advanced replacement for failed units



Key Benefit:

Lifetime Warranty eliminates service program costs and ongoing service renewals, lowering total cost of ownership and allowing customers to reach ROI targets more quickly.

Higher level service programs available in North America:

Support Plus - Next Day AVR
Support Total - Same Day AVR

Notes:

- Hardware limited lifetime Warranty does not cover transceivers.
- For more information about the Alcatel-Lucent OmniSwitch 6250 warranty, service and support programs, please visit: www.alcatel-lucent.com/support

Stackable positioning

	OmniStack 6200	OmniSwitch 6250	OmniSwitch 6400	OmniSwitch 6850
User ports	10/100 Mbps	10/100 Mbps	10/100/1000 Mbps	10/100 (Lite) or 10/100/1000 Mbps
Uplinks	1 Gbps	1 Gbps	1 Gbps	10 Gbps
Stack perf.	2 x 1 Gbps links (4 Gbps)	2 x 5 Gbps links (10 Gbps)	2 x 10 Gbps links (40 Gbps)	2 x 10 Gbps links (40 Gbps)
Switch perf. (24 Ports)	9.52 Mpps	24.8 Mpps	35.7 Mpps	65.5 Mpps (w/10G)
Features	Standard L2	AOS L2 + Basic L3	AOS L2 + Basic L3	AOS L2 & Adv. L3
	Low Cost connectivity	Wire Rate performance RIP/Static Routing	Higher performance RIP/Static Routing	Highest Performance Advanced Routing

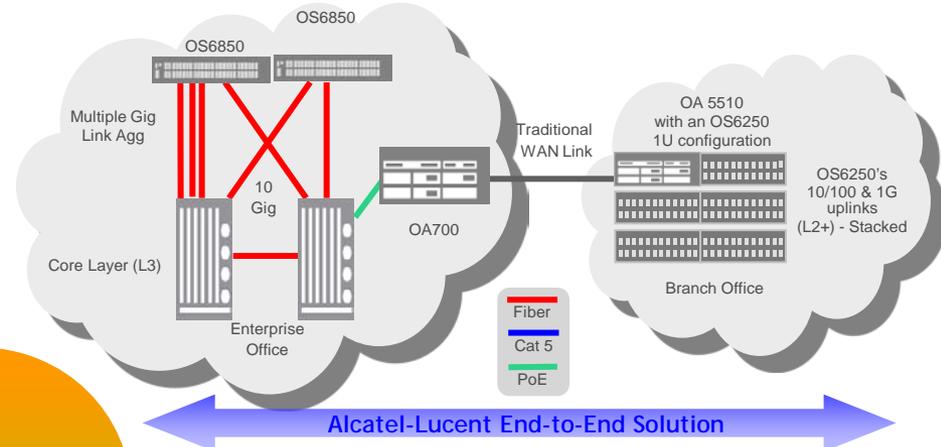
OS6250

Typical Deployment Applications (detailed further on)

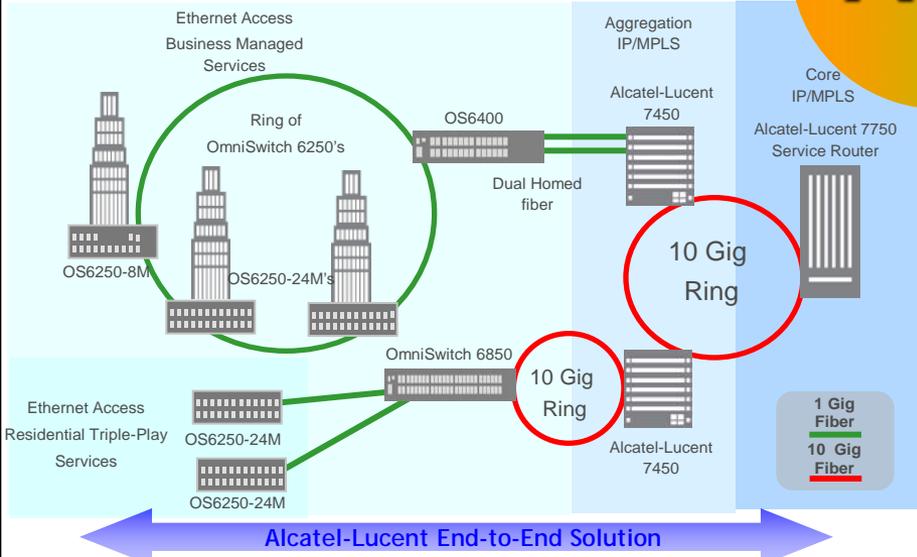
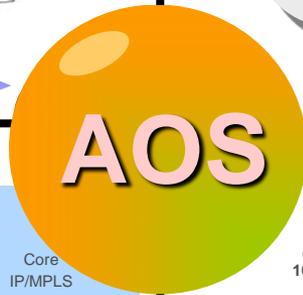
Small Business Solution



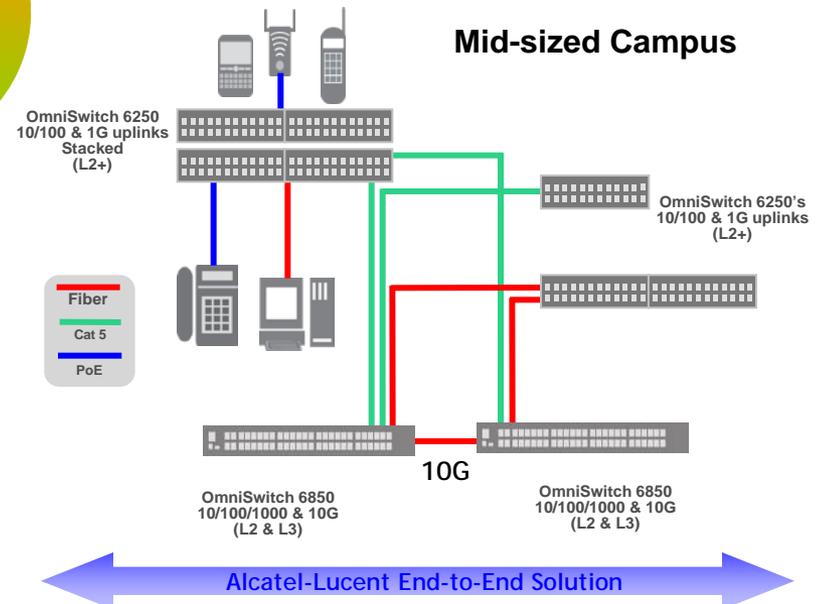
Branch Office



Metro/Triple Play switching

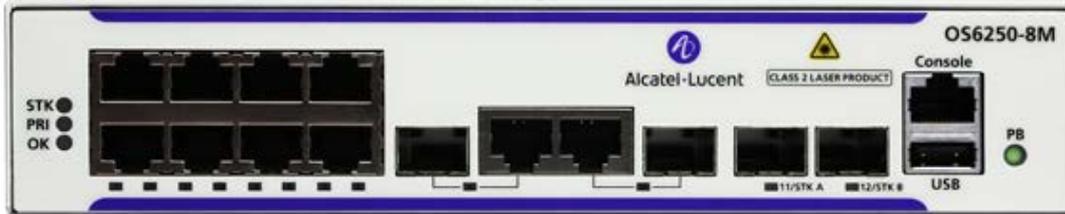


Mid-sized Campus

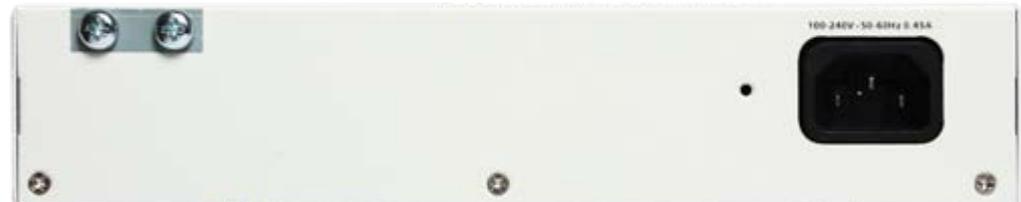


3. Hardware Details

OS6250-8M Metro Model



- 8 RJ-45 ports configurable to 10/100 Base-T
- 2 RJ45/SFP gigabit combo ports
- 2 SFP interfaces for additional Gigabit uplinks or stacking capability
- Chipset capacity: 10.8 Gbps full duplex/21.6 Gbps aggregated
- Throughput:
 - No stacking: 14.3 Mpps at 9.6 Gbps aggregated
 - With stacking: 23.1 Mpps at 15.6 Gbps aggregated
 - Stacking capacity: 5 Gbps full duplex
- Powered by 30W AC (internal)
- No BPS option
- Power consumption: 12.8W



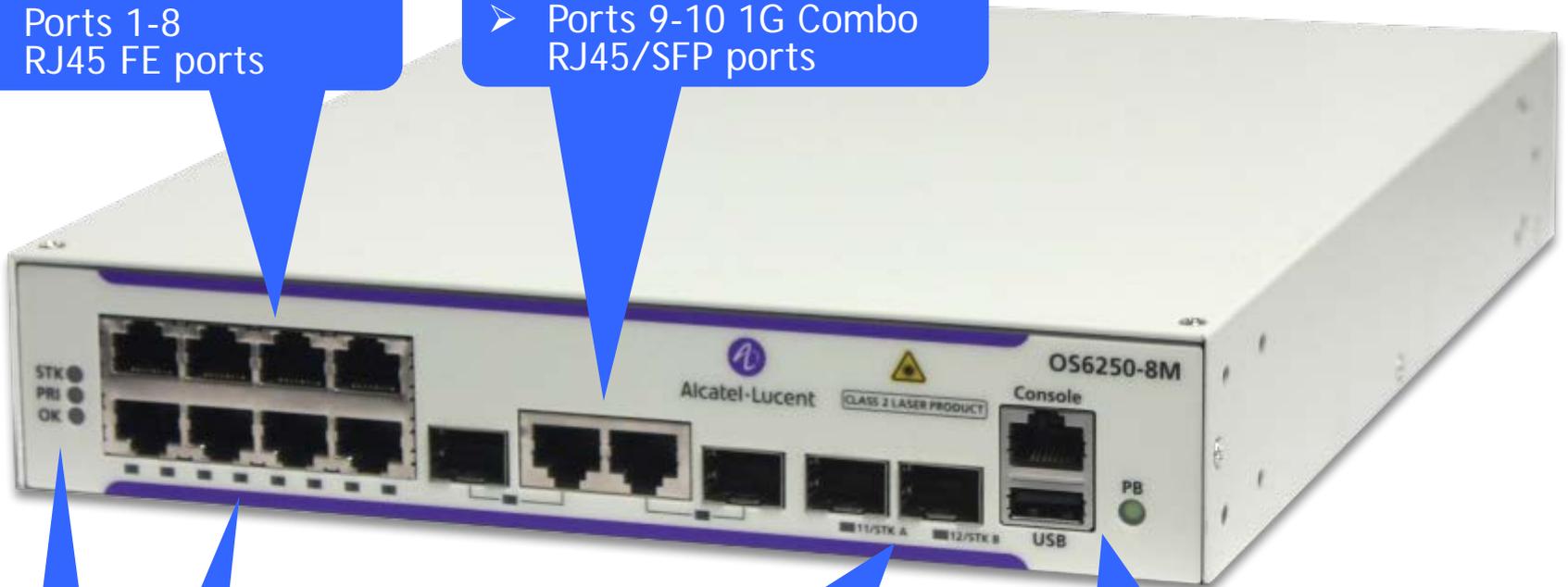
OmniSwitch 6250-8M Hardware Details

User Interface Ports

- Ports 1-8 RJ45 FE ports

User/Uplink Ports

- Ports 9-10 1G Combo RJ45/SFP ports

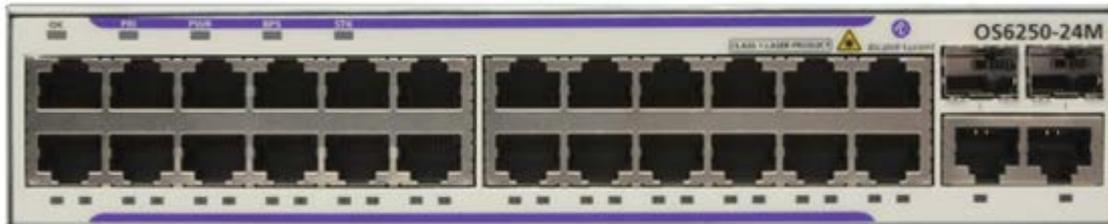


Status LEDs

- User/Uplink/Stacking Ports
- Ports 11-12 - 1G SFP ports
- 2.5G SFP+ Stacking

- User Console/USB Port
- Push Button Selector

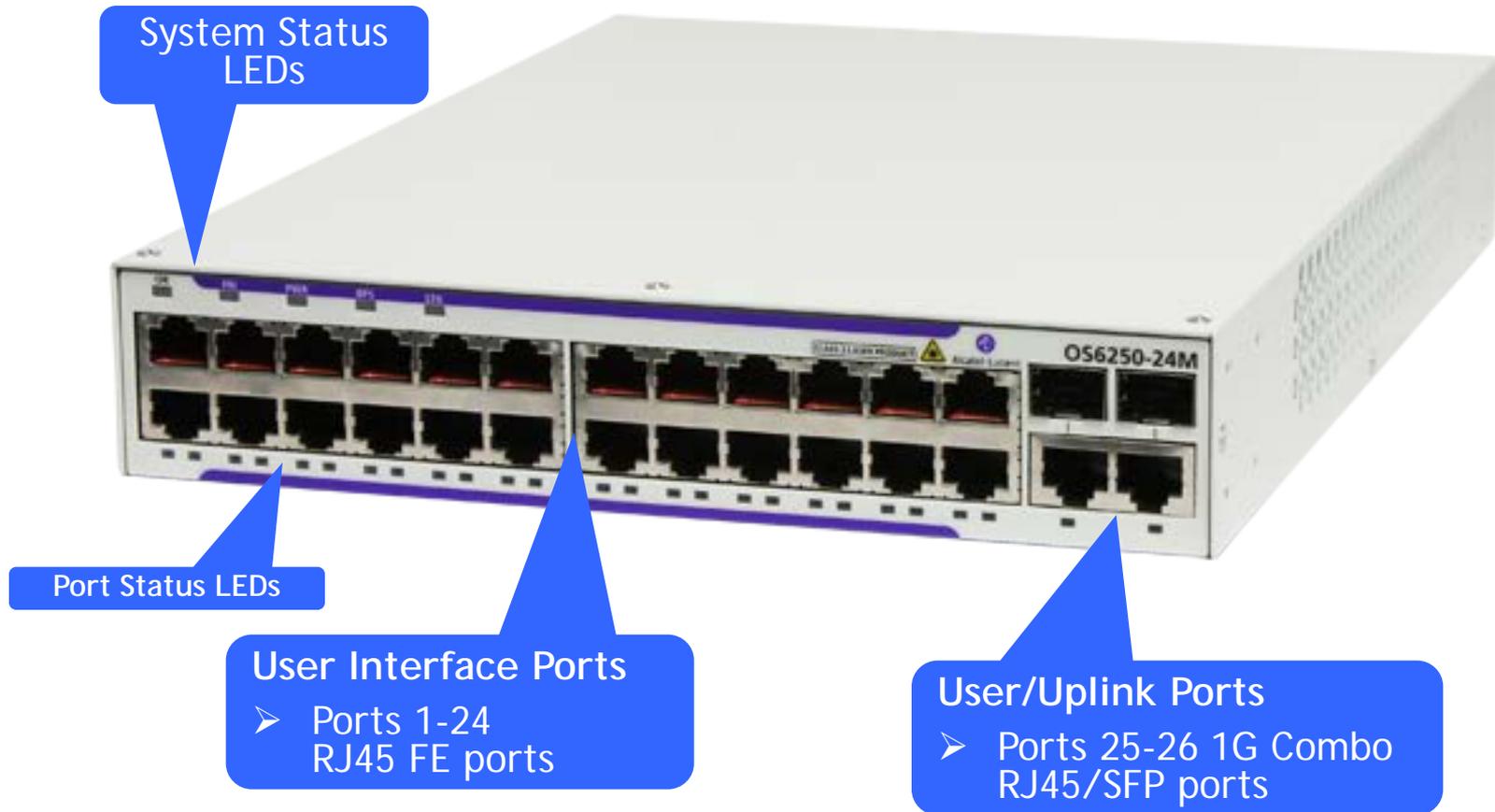
OS6250-24M Metro Model



- 24 RJ-45 ports configurable to 10/100 Base-T
- 2 RJ45/SFP gigabit combo ports
- 2 SFP interfaces for additional Gigabit uplinks or stacking capability
- Chipset capacity: 12.4 Gbps full duplex/24.8 Gbps aggregated
- Throughput:
 - No stacking: 19 Mpps at 12.8 Gbps aggregated
 - With stacking: 28 Mpps at 18.8 Gbps aggregated
 - Stacking capacity: 5 Gbps full duplex
- Powered by 42W AC (internal)
- External DC BPS available
- Power consumption: 16.4W



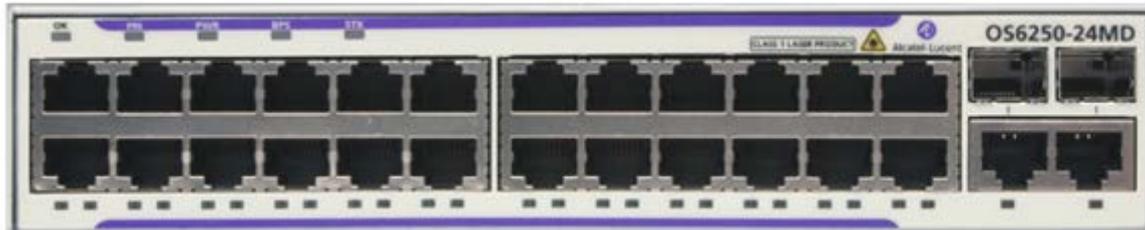
OmniSwitch 6250-24M Front Hardware Details



OmniSwitch 6250-24M Rear Panel Hardware Details



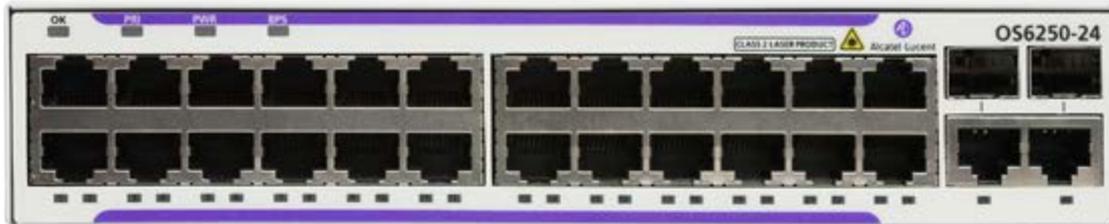
OS6250-24MD Metro Model



- 24 RJ-45 ports configurable to 10/100 Base-T
- 2 RJ45/SFP gigabit combo ports
- 2 SFP interfaces for additional Gigabit uplinks or stacking capability
- Chipset capacity: 12.4 Gbps full duplex/24.8 Gbps aggregated
- Throughput:
 - No stacking: 19 Mpps at 12.8 Gbps aggregated
 - With stacking: 28 Mpps at 18.8 Gbps aggregated
 - Stacking capacity: 5 Gbps full duplex
- Powered by 30W DC (internal)
- External DC BPS available
- Power consumption: 16.4W



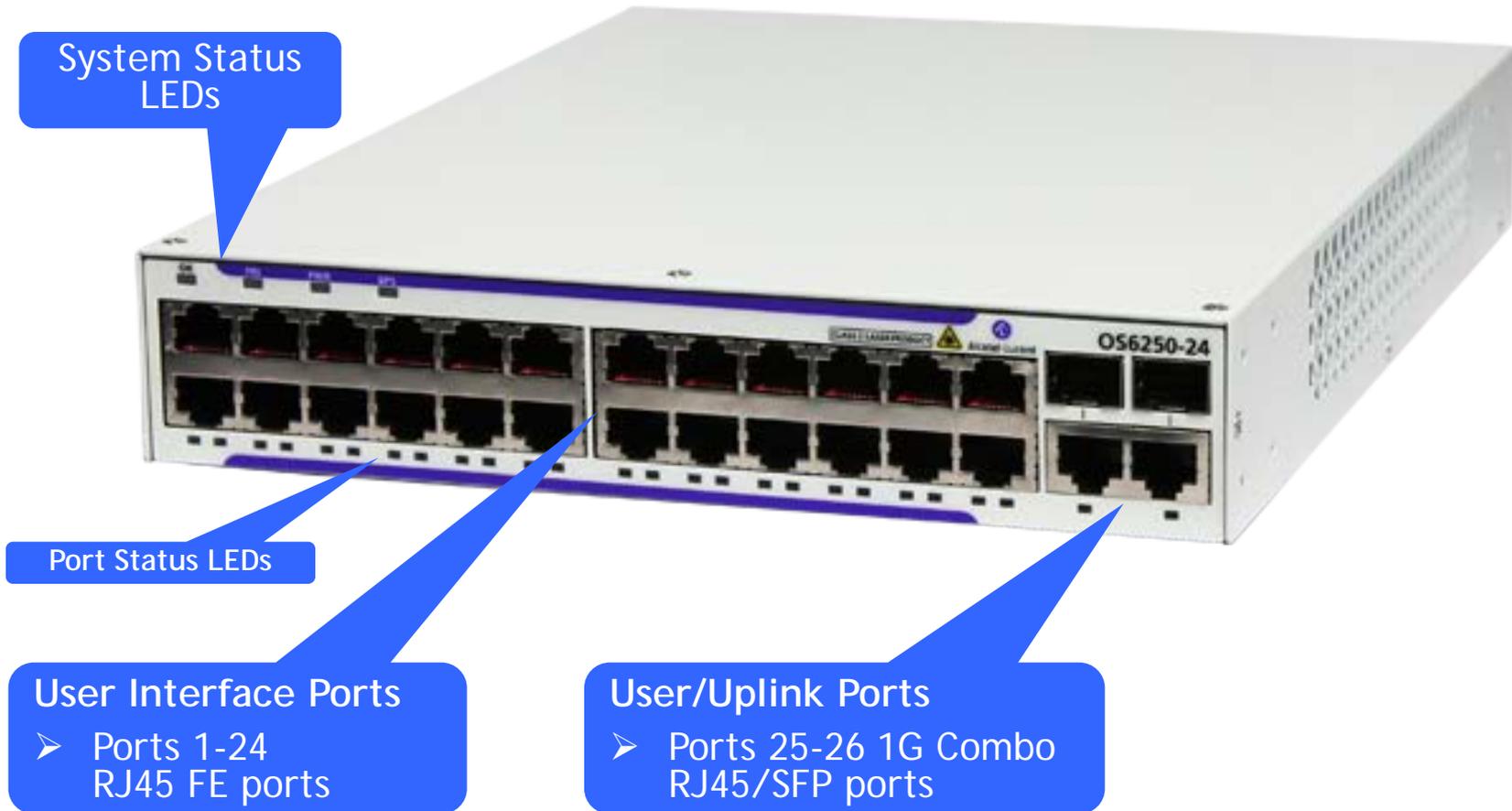
OS6250-24 Enterprise Model



- 24 RJ-45 ports configurable to 10/100 Base-T
- 2 RJ45/SFP gigabit combo ports
- 2 HDMI stacking capability
- Chipset capacity: 12.4 Gbps full duplex/24.8 Gbps aggregated
- Throughput:
 - No stacking: 19 Mpps at 12.8 Gbps aggregated
 - With stacking: 28 Mpps at 18.8 Gbps aggregated
 - Stacking capacity: 5 Gbps full duplex
- Powered by 42W DC (internal)
- External AC BPS available
- Power consumption: 16.4W



OmniSwitch 6250-24 Front Hardware Details



System Status LEDs

Port Status LEDs

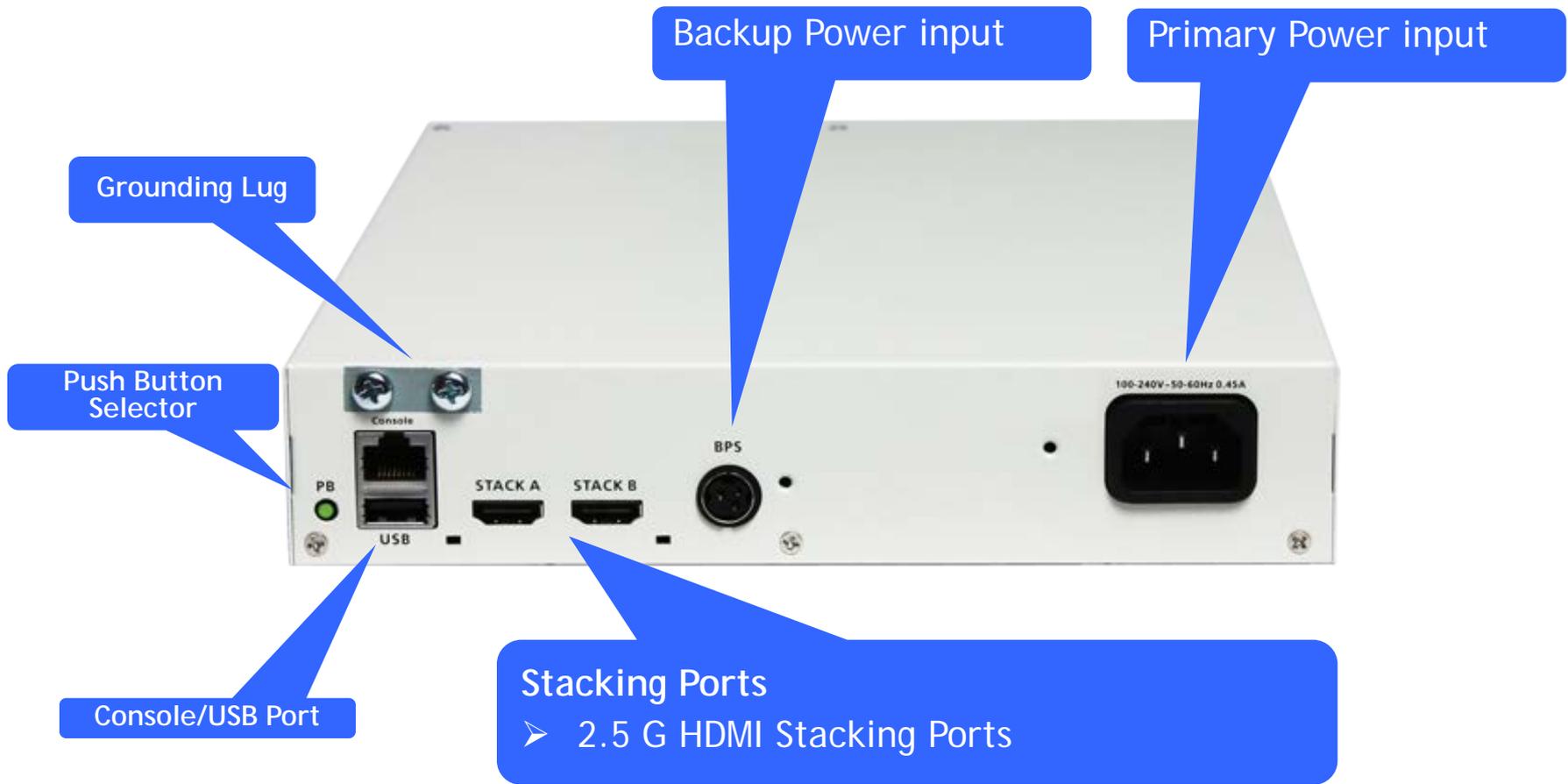
User Interface Ports

- Ports 1-24 RJ45 FE ports

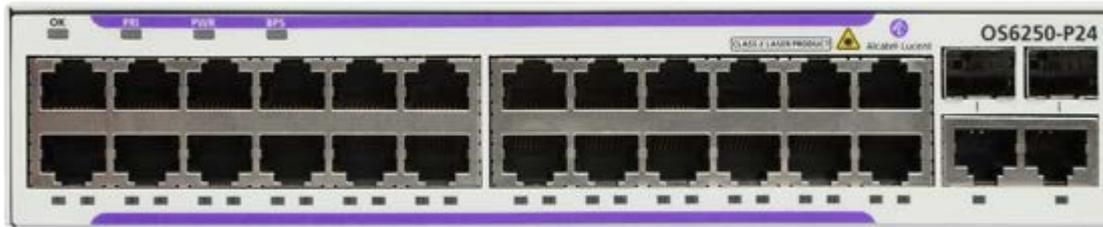
User/Uplink Ports

- Ports 25-26 1G Combo RJ45/SFP ports

OmniSwitch 6250-24 Rear Panel Hardware Details



OS6250-P24 Enterprise Model



- 24 RJ-45 PoE ports configurable to 10/100 Base-T
- 2 RJ45/SFP gigabit combo ports
- PoE port flexibility with 24 FE or 22 FE/2 GE configuration
- 2 HDMI stacking ports
- Chipset capacity: 12.4 Gbps full duplex/24.8 Gbps aggregated
- Throughput:
 - No stacking: 13 Mpps at 8.8 Gbps aggregated
 - With stacking: 28 Mpps at 18.8 Gbps aggregated
 - Stacking capacity: 5 Gbps full duplex
- Powered by 225W AC (external)
- External BPS available
- System power consumption: 24.9 W
- PoE power budget: ~180 W
- Maximum per port PoE power: 30 W



OmniSwitch 6250-P24 Front Hardware Details

External primary PoE supply and tray system

System Status LEDs

Port Status LEDs

User Interface Ports

- Ports 1-24 RJ45 FE ports

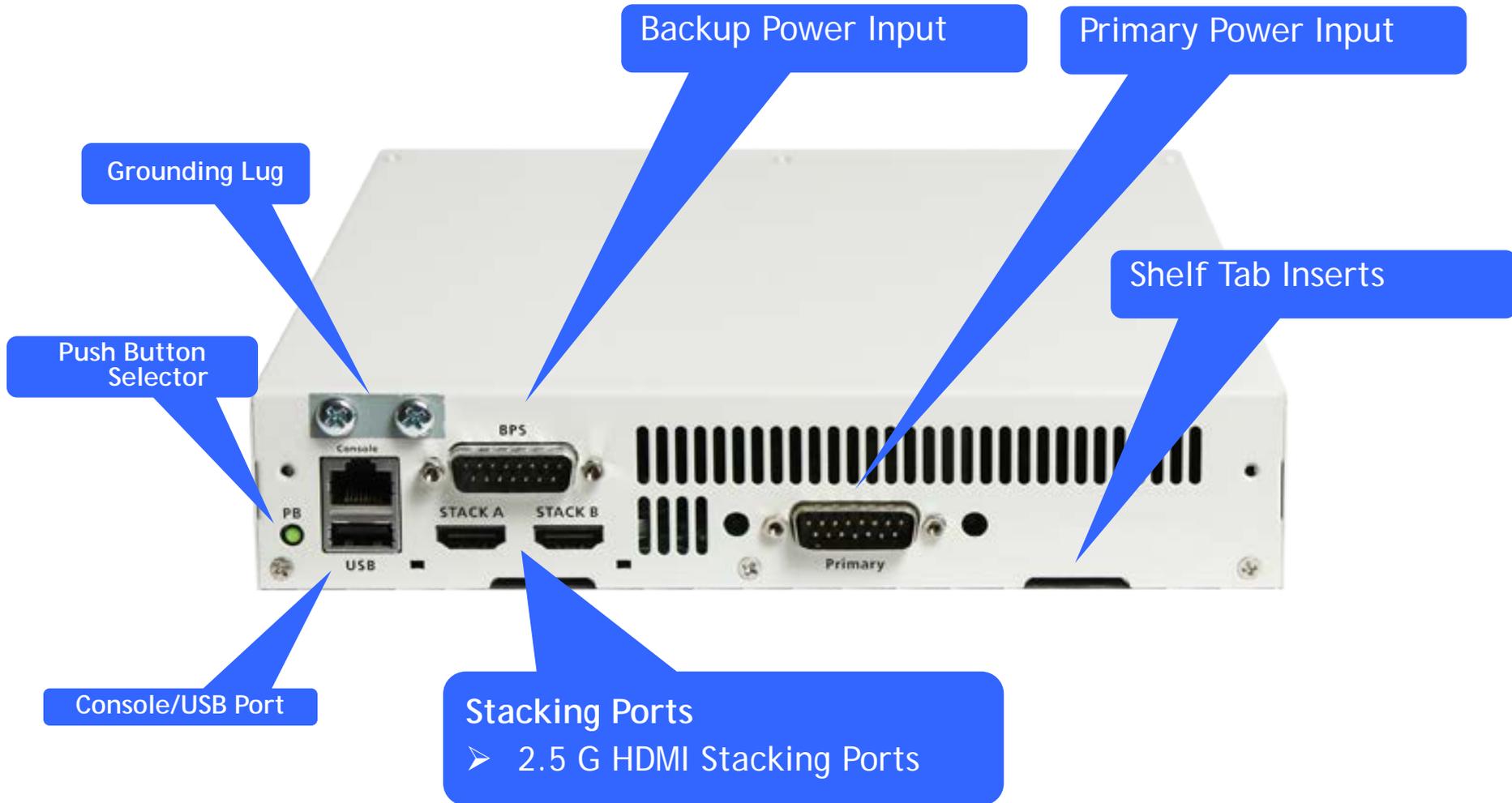
User/Uplink Ports

- Ports 25-26 1G Combo RJ45/SFP ports

802.3at Support

- PoE on 24 FE ports *or software select*
- PoE on 22 FE and 2 GE ports

OmniSwitch 6250-P24 Rear Panel Hardware Details



OS6250

Stacking - the scalability/flexibility of the OS6250 family



- **Dedicated** 2 – 2.5 Gigabit stacking links on each model
- Up to 16 chassis in a stack*
 - 384 Fast Ethernet and 32 Gigabit ports in a 8U space
 - PoE and non-PoE
 - Virtual chassis, single IP for management
- Primary, secondary, idle and pass-through elements in the stack
- Stack element number identify by port LEDs by pressing PB
- Each module in the stack is capable to act as Primary
- ALU supplied HDMI cables required for stacking

Metro models:

- 2 - User/Uplink/Stacking Ports
- User/Uplink SFP ports @ 1Gbps or
- Stacking SFP ports @ 2.5Gbps
- Software configurable port configuration
- Metro models stackable to two units
- ALU supplied SFP copper stacking cable required for stacking



5G Full Duplex

Alcatel-Lucent 
stacking

* Future software release

- ALU tested and approved HDMI cables required for enterprise model stacking. (30/60/150 cm). Up to 16 units.



- ALU tested and approved SFP copper stacking cable required for Metro model stacking (30/60/150 cm). Up to 2 units.



- These stacking cables are higher quality.

6250 Primary Power Supplies

For **non-PoE models**, all primary supplies are internal:

Models: OS6250-8M/24M/24 OS6250-24MD	Input Voltage <ul style="list-style-type: none">• AC• DC (-48V)
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Internal power supply model

For **PoE model**, there is one AC PoE supply option, external to the chassis

Models: OS6250-P24	For PoE: <ul style="list-style-type: none">• 225W AC
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225W w/shelf – direct connection

- A power shelf is used to hold the 225W
 - Shelf/supply plugs directly in the back of the unit
 - total unit + shelf depth is ~ 44.6 cm/17.56in

OR

- Attach shelf/supply/unit with the remote power cable for a 24 port 1U configuration

OS6250 - Back-up Power Supplies

Product Description

- For **non-PoE models:**

OS6250-BP	AC 42W Brick Backup Power Supply
OS6250-BP-D	DC 30W Brick Backup Power Supply

- A power shelf holds one backup 42W or 30W supply:

- Shelf/supply plug directly in the back of the unit
- total unit + shelf depth is 44.6 cm/17.56in

Or

- Attach shelf/supply/unit with the remote power cable for a 24 port 1U configuration

- For **PoE models:**

OS6250-BP-P	Standard PoE 225W Power Supply
--------------------	--------------------------------

- A power shelf is used to hold one 225W (backup)

- A shelf and remote cable are provided with the OS6250-BP-P bundle for installation in a side by side or above the unit configuration
- For 48 PoE ports, with power redundancy
- Total width 19 total unit + shelf depth is 44.6 cm/12.56in



OS6250-BP brick power supply



OS6250-BP-D brick power supply



*2U configuration: the primary and backup PS on top of the unit
Depth: 27 cm (10.63 in)*

OS6250

Mounting Options (non-PoE)

- For a single unit in a rack, non-PoE:



Customer must order an OS6250-RM-19 to mount a single unit in a 19" rack. All hardware brackets are included as part of the both the switch and rack mount kits.

- Two units in a rack, non-PoE (two units ordered separately) or BOS6250-48 bundle



All hardware brackets are included as part of both switches. Ear brackets mounted on outside of units, sliding brackets between the units.

OS6250

Mounting Options (PoE units - 1RU configuration)

- For a single PoE unit in a rack:



Customer may use the dual purpose mounting tray to mount a single unit in a 19" rack. The PoE supply secures to the side tray and may be connected to the switch unit using the supplied DB-15 remote connection cable.

- Two PoE units in a rack or BOS6250-P48 bundle.



Power supply & tray mount to rear of chassis.

Customer may directly connect power supplies and trays to the back of the units.

OS6250

Mounting Options (PoE units - 2RU configuration)

- Two single PoE units or a BOS6250-P48 bundle in a 2 RU rack configuration.



Power supply & tray mount above the two switch units (ie 2RU config)

Customer may place the power supplies and trays in a separate 1U space above or below the switches, connecting to the switches using the supplied DB-15 remote connection cable.

Two trays, hardware brackets and DB-15 cable are included with the switch ship kit to accomplish the this configuration.

Ideal for a depth constraint area.

OS6250 - Supported SFPs

OS6250 - Gigabit SFPs

- SFP-GIG-EXTND
- SFP-GIG-LH40
- SFP-GIG-LH70
- SFP-GIG-LX
- SFP-GIG-SX
- SFP-GIG-T
- SFP-GIG-BX-D
- SFP-GIG-BX-U

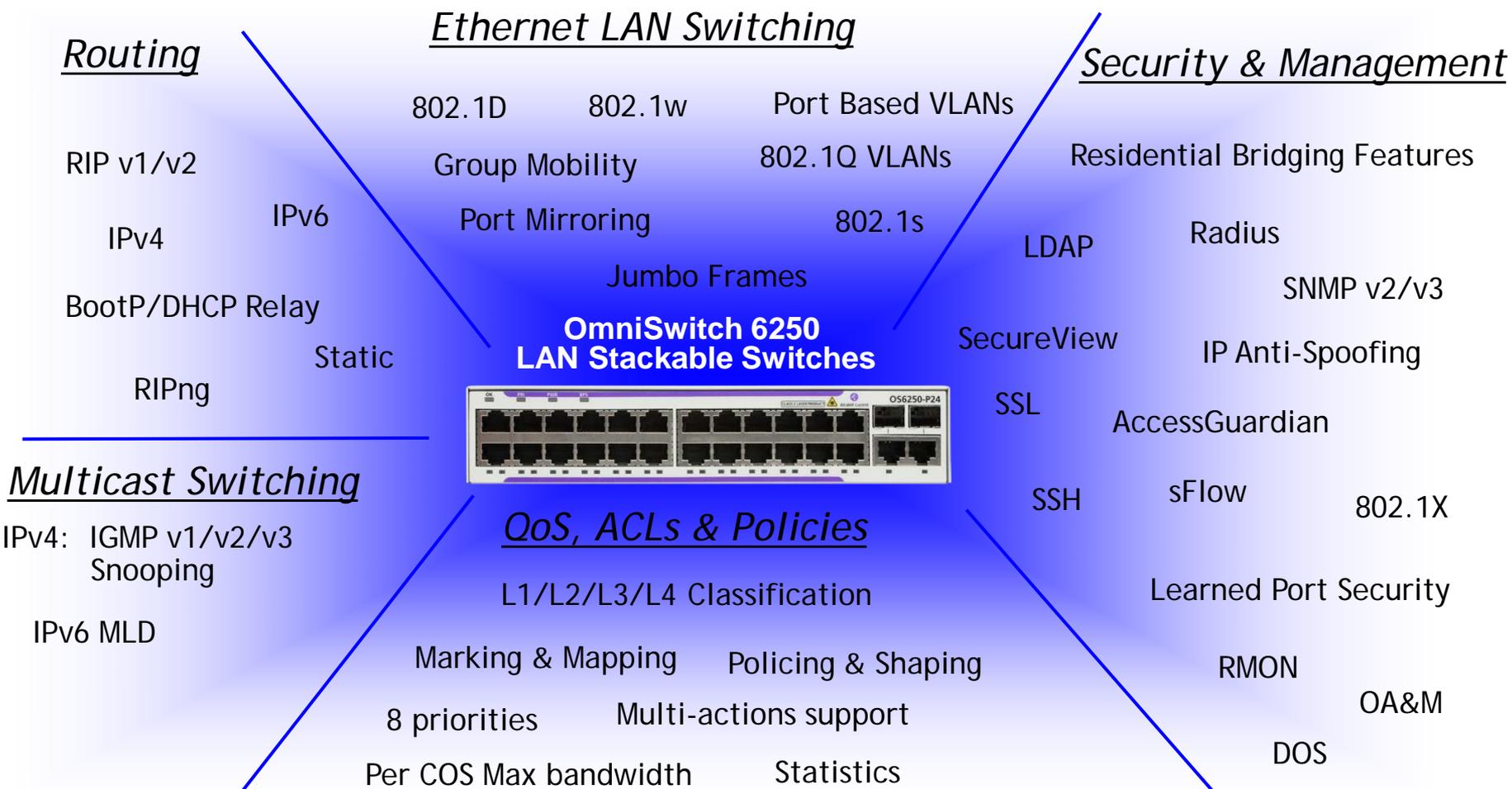
OS6250 - 100 Mb SFPs

- SFP-100-BX20LT
- SFP-100-BX20NU
- SFP-100-LC-MM
- SFP-100-LC-SM15
- SFP-100-LC-SM40

*See transceiver price list for pricing

4. Software Details

OmniSwitch 6250 Family - Software Overview



Integrated AOS Operating System with comprehensive set of advanced features

OmniSwitch 6250 Family - SW Support Detailed Overview

VLANs

- IEEE 802.1Q
- Port based
- Dynamic VLAN

Spanning Tree

- IEEE 802.1s
- IEEE 802.1w, RRSTP
- IEEE 802.1D

Multicast switching

- IPv4: IGMP v1/v2/v3 Snooping
- IPv6 MLD
- 1k IPv4 Multicast groups
- 512 IPv6 Multicast groups

Misc.

- Port monitoring/mirroring
- Jumbo frames (9K)
- BootP/DHCP Relay
- TFTP

QoS / ACLs / Policies

- Classification on L1/L2/L3/L4
- 8 internal priorities
- 802.1p/ToS/DiffServ marking
- Per COS Max bandwidth
- Statistics (# of packets, # of bytes)
- Policing/Shaping
- Multi-level classification ability

Security / Management

- IEEE 802.1x MAC bases
- IP Anti-Spoofing
- Learned Port Security
- sFlow[®], RMON (4 groups)
- SNMP v2/v3
- SSH, SSL, Radius, LDAP

Bridging Features

- DHCP Option 82 (configurable)
- DHCP Snooping
- IP Anti-Spoofing based on DHCP snooping
- Port Mapping (Private VLANs)

Layer 2

- 16k MACs
- 4k VLAN
- 64 STP instances

IPv4\IPv6

- RIP (v1/v2) & RIPng
- 1K(IPv4), 512(IPv6) RIP routes
- 1K(IPv4), 512(IPv6) Static routes
- L3 host table: 1K IPv4 and 512 for IPv6
- 128 RIP interfaces
- 16 RIPng interfaces

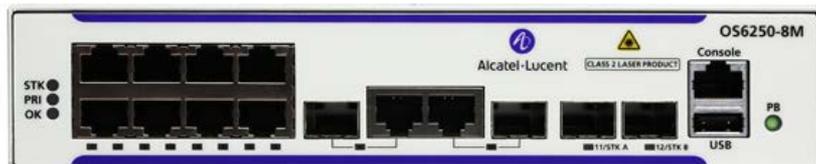
MEF Certified*

- MEF 9 - UNI Ethernet Services
- MEF 14 - Ethernet Traffic Management
- MEF 21 - Ethernet OAM

Metro Ethernet Features (M models only)

- Ethernet Services (vlan stacking)
- Ethernet OAM (802.3ah and 802.1ag)
- Tri-Color Marking QOS and statistics
- DHCP Option 82 (configurable)
- Ingress rate limiting per ethernet service
- Egress shaping per port/queue
- Port Mapping (Private VLANs)
- IPTV Multicast Vlan for ethernet services

* Check Certification Status



OS6250 Routing Strategy

Supports both IPv4 and IPv6 routing

- RIP (v1/v2) & RIPng

Reduced table sizes versus OS6850

- 1K(IPv4), 512(IPv6) RIP routes
- 1K(IPv4), 512(IPv6) Static routes

Reduced L3 host table:

- 1K IPv4 and 512 for IPv6

Reduced configurable interfaces versus OS6850

- 128 RIP interfaces
- 16 RIPng interfaces

No advanced routing features are available on OS6250 6.6.1 R01

- No Advanced Routing (OSPF, BGP, IS-IS)
- No Multicast Routing (DVMRP, PIM)
- No Routing Redundancy (VRRP)

Position the OmniSwitch 6250 for environments requiring L2+ with basic L3 features

Software Details - New Features Overview (Major)

- **Ingress rate limiting via Ethernet Services (VLAN Stacking):**

Ingress rate limiting/policing per service.

Ability to set the following ingress traffic control parameters:

CIR: Committed Information Rate

CBS: Committed Burst Size

PIR: Peak Information Rate

PBS: Peak Burst Size

- **QOS Captive Portal:**

Now delivered as an explicit, web-based user authentication option in addition to already available authentication methods (802.1x, MAC, rule-based), and safely allows controlled network access for endpoint devices. It is particularly useful for guest users and non-802.1x devices.

- **Loopback Detection:**

This feature can detect and prevent L2 forwarding loops on ports in the absence of other loop-detection mechanisms like STP/RSTP/MSTP or when the mechanism can't detect it. Typically, enabled in Metro Ethernet Access deployments, at the very edge, to prevent customer induced network loops.

- **Tri-Color Marking:**

Support for per policing/rate limiting and accounting. For each policer configured in the policy engine, OS6250 has the ability to count the number of packets (or bytes) being conformant to the green/yellow/red marking.

- **L2VPN Services (L2 transparency - L2TP):**

Using Ethernet Services in a Metro Ethernet Access deployment, control customer vlan (cvlan) L2 control protocols (pass or discard) across the service provider vlan (svlan) network.

L2 protocols include: [STP | GVRP | AMAP | 802.3AD | 802.1X | 802.1AB]

- **Ethernet OAM (802.3ah):**

IEEE standard 802.3ah provides support for link layer OAM for Ethernet in the First Mile (EFM) or LINK OAM. The Operations, Administration, and Maintenance (OAM) sub layer, provides mechanisms useful for monitoring link operation such as remote fault indication and remote loopback control.

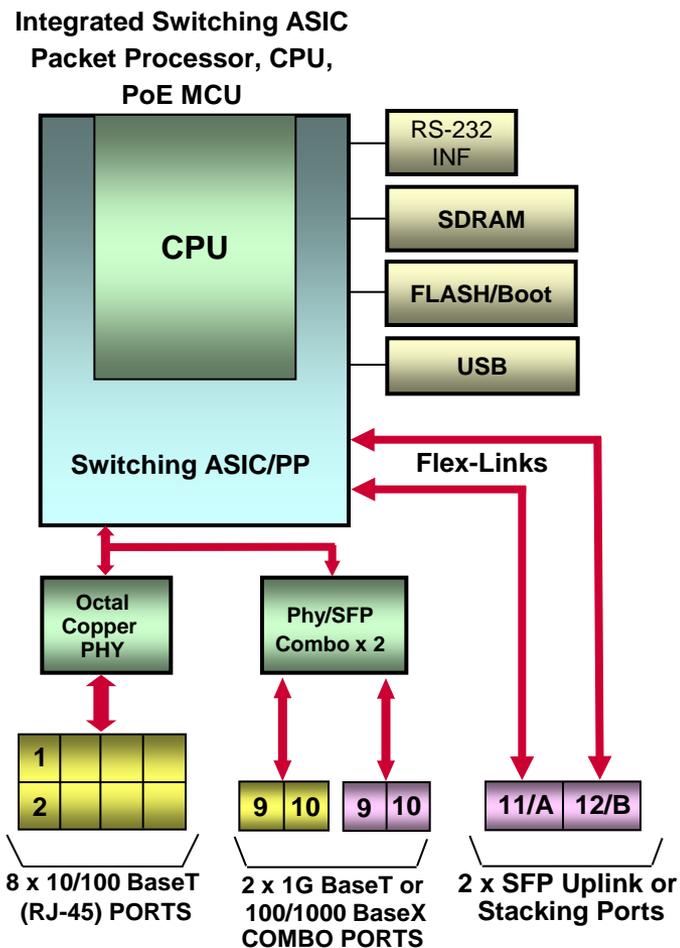
Minor feature enhancements:

- QOS statistics per port (pass, drop, percentage BW)
- QOS statistics per service (port/vlan)
- 802.3x Flow Control
- IGMP Max Group setting per port
- Disable MAC learning per port

- Port Binding mobile rules
- VRRP, VRRPv3
- Advanced routing protocols: OSPF, OSPFv3, BGP, ISIS
- IP Multicast routing protocols: DVMRP, PIM
- Server Load Balancing (SLB)
- L3 High Availability / Cluster- Static ARP with multicast mac-address
- Ipv6 Sec
- IPX
- AVLAN
- Traffic Anomaly Detection - Network Security (aka Etherbreaker)*
- IP Tunnels (IpIp, GRE, Ipv6)
- QMR, HIC and User Network Profile based on 6.3.4 policy lists.*

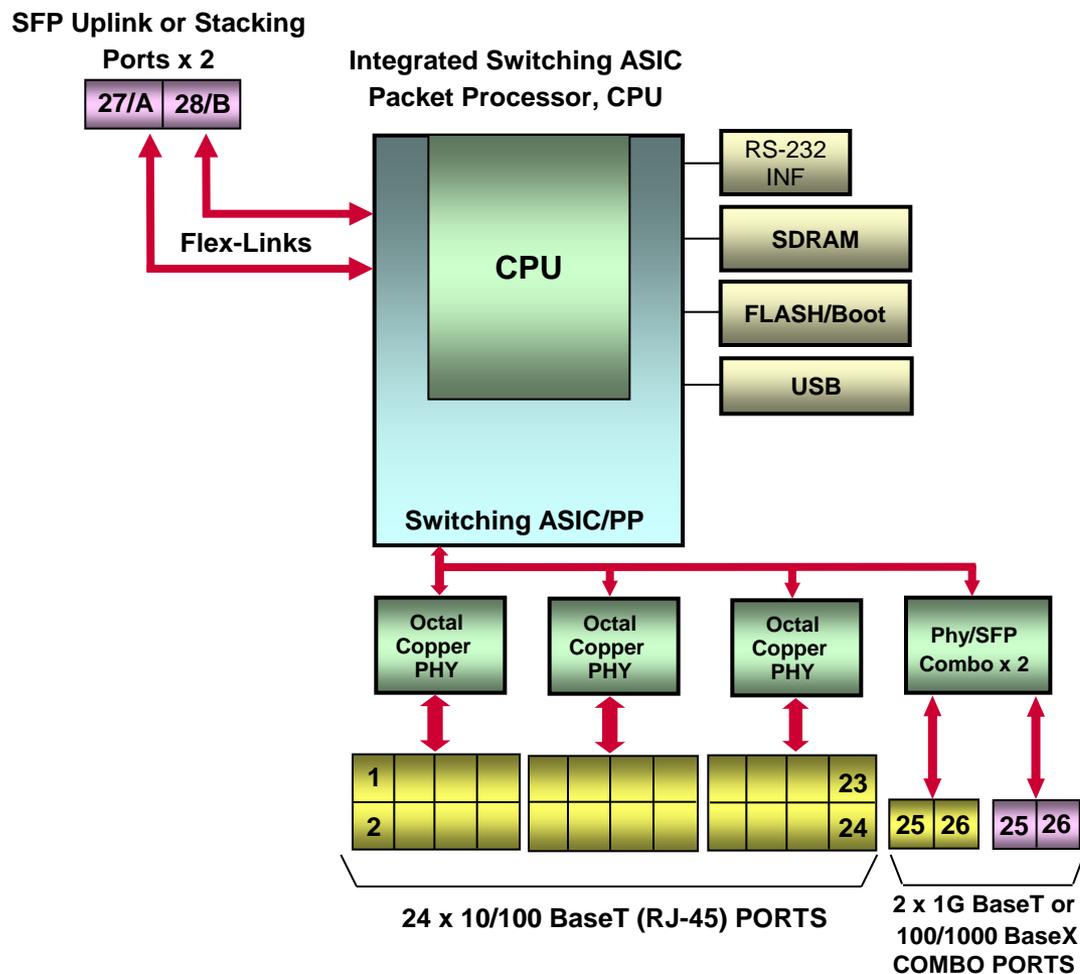
* Check for future release availability

5. Internal Architecture



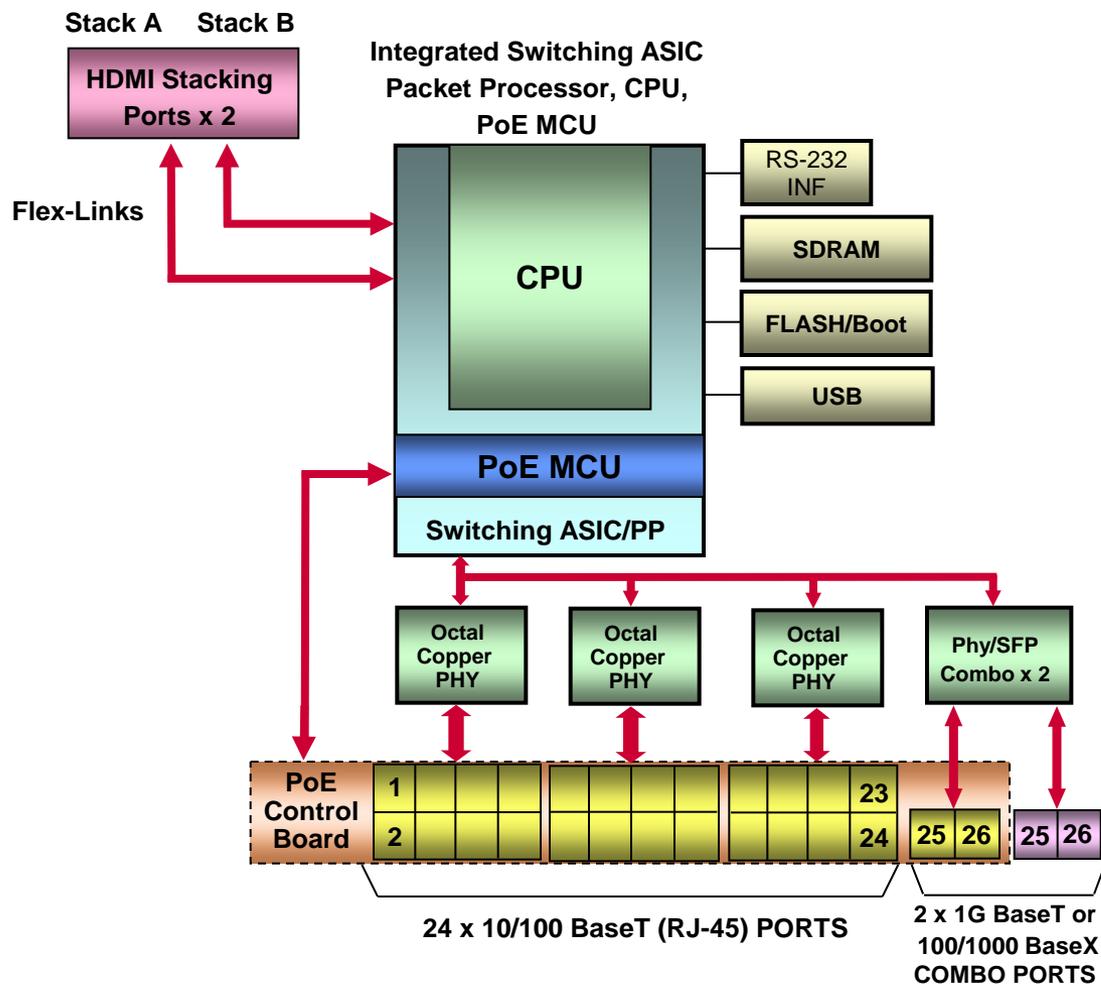
- CPU - 800MHz Ferocean ARM
- 256M SDRAM
- 128M NAND flash
 - 120MB file system
 - 8MB boot flash
- RJ45 console port
- USB (not used)
- Power Supply:
 - Uses internal 42W AC supply

OS6250-24M and MD



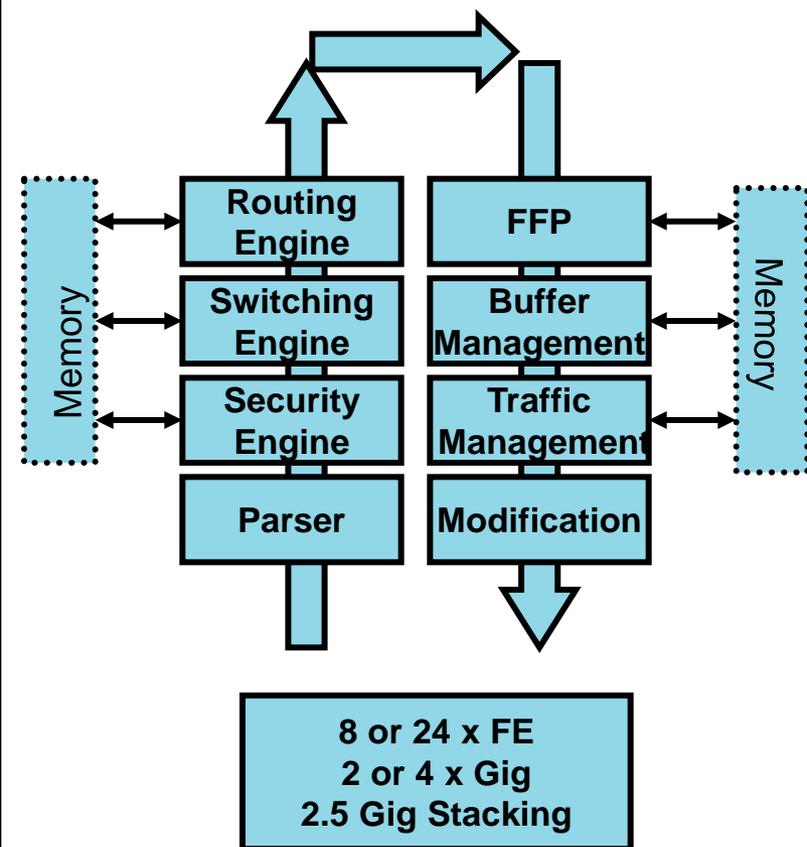
- CPU - 800MHz Ferocean ARM
- 256M SDRAM
- 128M NAND flash
 - 120MB file system
 - 8MB boot flash
- RJ45 console port
- USB (not used)
- Power Supply:
 - Non-PoE uses internal 42W AC supply

OS6250-24 and -P24 Internal Architecture



- CPU - 800MHz Ferocean ARM
- 256M SDRAM
- 128M NAND flash
 - 120MB file system
 - 8MB boot flash
- RJ45 console port
- USB (not used)
- Power Supply:
 - Non-PoE uses internal 42W AC supply
 - PoE external 225W AC supply

Inside the Forwarding Engine -building blocks



Parser: 256 bytes of the packet examined
Saves info needed by various search engines

Security Engine: HW Authentication capable
DoS attack detection

L2 Switching: VLAN assignment, L2 unicast and multicast lookups

L3 Routing: Src/Dst IPv4 and v6 unicast/multicast lookups, Longest Prefix match

TCAM: ACL, DiffSrv, and QoS type of applications

Buffer Mgmt: Mirroring, Trunking, Admission Control

Traffic Mgmt: Queuing, Scheduling, Shaping

Modification: VLAN Translation, Tunneling, L3 Routed Packet modification

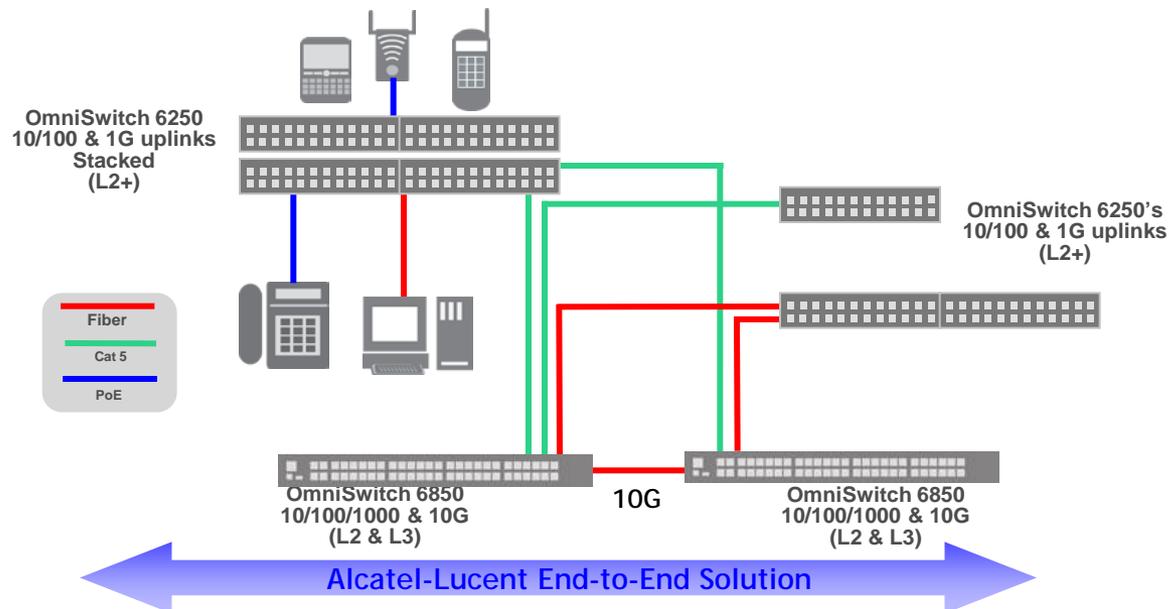
6. Deployments

Alcatel-Lucent Enterprise - OS6250 Edge Network Solution

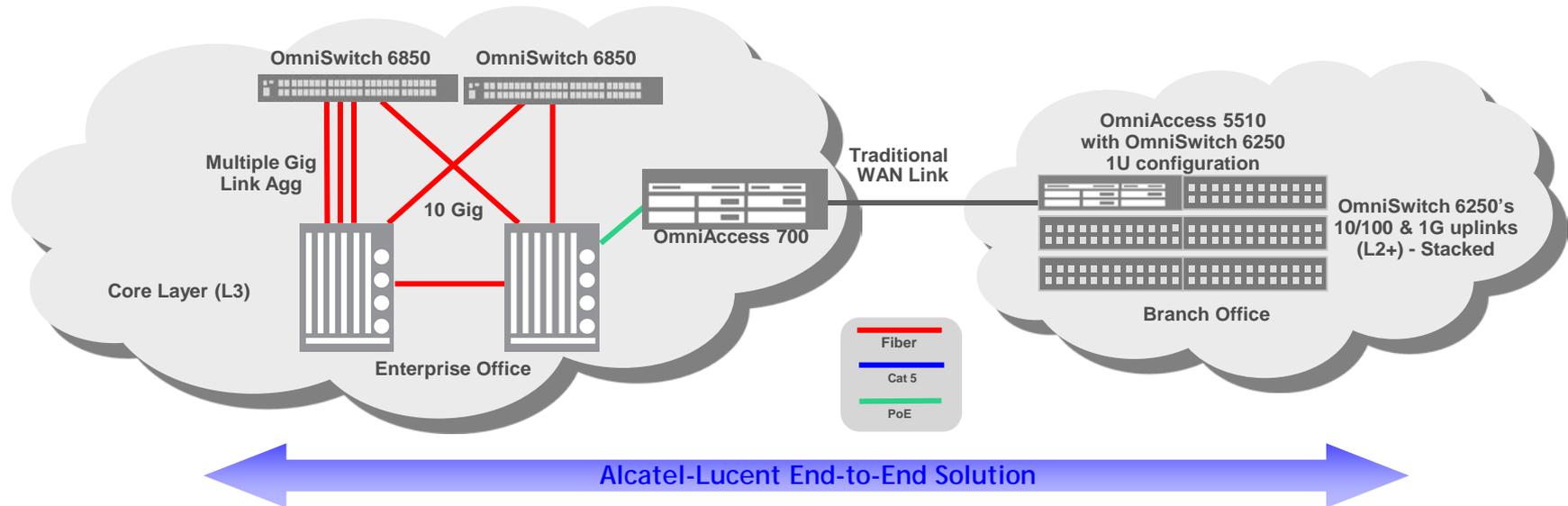
- **Perfect edge solution** where compact fixed form factor, flexibility, scalability, value pricing, and extensive features are needed and where gigabit speeds are not required
- **Advanced security** incorporating admission control and intrusion containment for the edge where comprehensive network protection begins



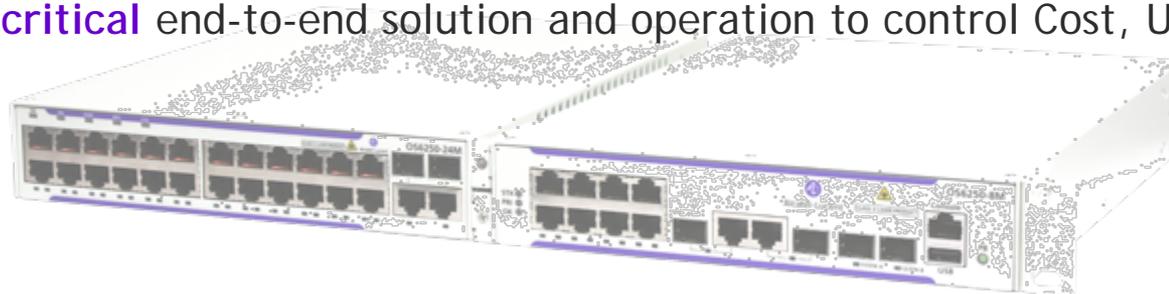
- **Familiar end-to-end management** can be accomplished with Alcatel-Lucent's recognizable CLI, WEB interfaces and NMS allowing quick adoption and low turn up costs



Alcatel-Lucent Enterprise - OS6250 Branch Office Solution

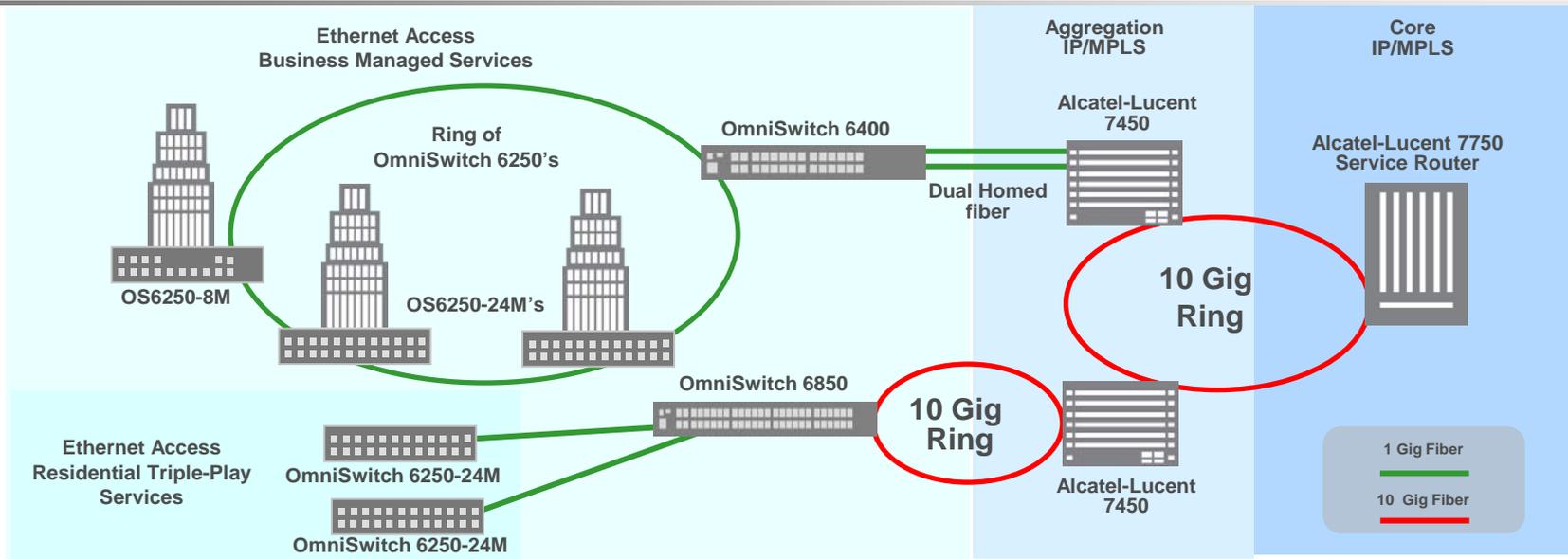


- **Ideal branch access solution** where compact fixed form factor, flexibility, scalability, value pricing and extensive features are required
- **Business-critical** end-to-end solution and operation to control Cost, Usage and Security



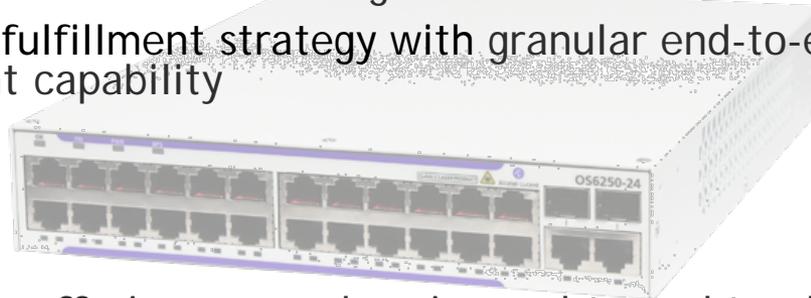
- **Complete solution** for the branch office when coupled with the OmniAccess™ 5510 Unified Services Gateway (USG) WAN access router

Alcatel-Lucent - OS6250 Ethernet Access Solution



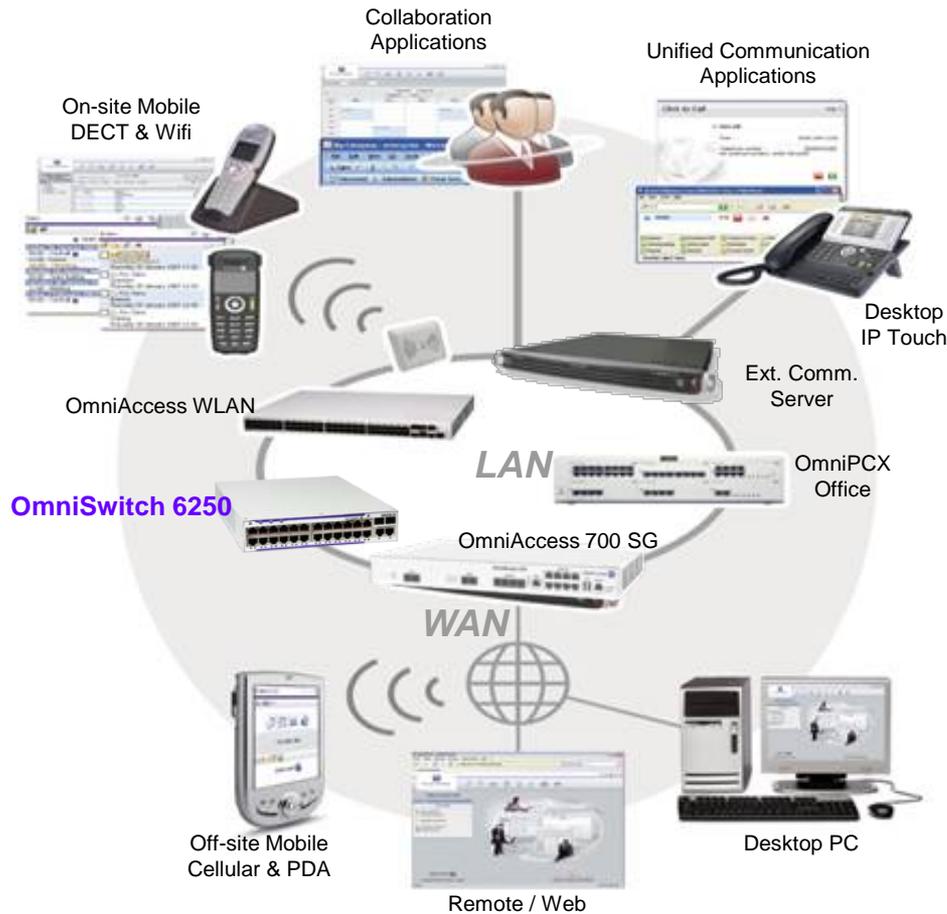
← Alcatel-Lucent End-to-End Solution →

- **Total Alcatel-Lucent solution** offering an end-to-end transport of triple play data, voice and video service networks for single and multi-tenant unit deployments
- **Comprehensive SLA** fulfillment strategy with granular end-to-end service level agreement fulfillment capability



- **Management friendly** offering comprehensive end-to-end troubleshooting using standards based Ethernet OAM extending all the way into the customer premises

Alcatel-Lucent - Small Business solution



- **Office Anywhere** innovation providing a *Dynamic Enterprise* networking at any location; telephony, internet communication, mobility and collaboration over broadband connections
- **Business-critical** end-to-end solutions and operations to control Cost, Usage and Security
- **Channel friendly** support and business models in partnership to enhance customer satisfaction.

Any Service, Any Device, Anywhere

6. Road Map

7. References

Budgetary pricelist (Metro Models)

Model #	Description				List Price	List Price
OmniSwitch 6250 Chassis		Sales Category	Service Category	Availability	USD	EURO
OS6250-8M	OS6250-8M Fast Ethernet chassis with AOS Metro software. Chassis provides 8 RJ-45 ports configurable to 10/100 BaseT, 2 SFP/RJ45 combo ports configurable to be 10/100/1000 BaseT or 100/1000 BaseX 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.	F	8	Standard	\$800	€615
OS6250-24M	OS6250-24M Fast Ethernet chassis with AOS Metro software. Chassis provides 24 RJ-45 ports configurable to 10/100 BaseT, 2 RJ45/SFP combo ports configurable to be 10/100/1000 BaseT or 100/1000 BaseX 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.	F	8	Standard	\$1,200	€923
OS6250-24MD	OS6250-24MD Fast Ethernet chassis with AOS Metro software. Chassis includes 24 RJ-45 ports configurable to 10/100 BaseT, 2 RJ45/SFP combo ports configurable to be 10/100/1000 BaseT or 100/1000 BaseX 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 DC power supply.	F	8	Standard	\$1300	€1,000

Budgetary pricelist (Enterprise Models)

Model #	Description				List Price	List Price
OmniSwitch 6250 Chassis		Sales Category	Service Category	Availability	USD	EURO
OS6250-24	OS6250-24 Fast Ethernet chassis with AOS Enterprise software. Chassis includes 24 RJ-45 ports configurable to 10/100 BaseT, 2 RJ45/SFP combo ports configurable to be 10/100/1000 BaseT or 100/1000 BaseX and two dedicated 2.5G HDMI stacking ports with internal AC supply.	F	8	Standard	\$900	€692
OS6250-P24	OS6250-P24 Fast Ethernet chassis with AOS Enterprise software. Chassis includes 24 PoE RJ-45 ports configurable to 10/100 BaseT, 2 SFP/POE RJ45 combo ports configurable to be 10/100/1000 BaseT or 100/1000 BaseX and two dedicated 2.5G HDMI stacking ports in a 1U by half rack form factor with external AC POE supply.	F	8	Standard	\$1,800	€1,385
BOS6250-48	Two OS6250-24 units with AOS Enterprise software bundled for side by side mounting in a 19" by 1U rack space providing a total of 48 Fast Ethernet and 4 RJ45/SFP combo ports.	F	8	Standard	\$1700	€1,308
BOS6250-P48	Two OS6250-P24 units with AOS Enterprise software bundled for side by side mounting within a 19" by 1U rack space for a total of 48 PoE Fast Ethernet ports and 4 PoE RJ45/SFP combo ports.	F	8	Standard	\$3,400	€2,615

Budgetary pricelist (6250 Accessories)

	Power Supplies	Sales Category	Service Category	Availability	List Price USD	List Price Euro
OS6250-BP	OS6250-BP 42W power brick AC backup power supply.	F	8	Standard	\$300	€231
OS6250-BP-P	OS6250-BP-P 225W AC POE backup power supply.	F	8	Standard	\$700	€538
OS6250-BP-D	OS6250-BP-D 30W DC power brick backup power supply.	F	8	Standard	\$400	€308
	Cables and Accessories					
OS6250-CBL-30	OS6250 30 centimeter long HDMI stacking cable.	F	0	Standard	\$100	€77
OS6250-CBL-60	OS6250 60 centimeter long HDMI stacking cable.	F	0	Standard	\$150	€115
OS6250-CBL-150	OS6250 150 centimeter long HDMI stacking cable.	F	0	Standard	\$200	€153
OS6250M-CBL-30	OS6250M 30 centimeter long SFP direct stacking cable.	F	0	Standard	\$300	€231
OS6250M-CBL-60	OS6250M 60 centimeter long SFP direct stacking cable.	F	0	Standard	\$400	€308
OS6250M-CBL-150	OS6250M 150 centimeter long SFP direct stacking cable.	F	0	Standard	\$500	€385
OS6250-DUAL-MNT	Replacement kit containing two mounting and sliding brackets. Hardware to mount two 6250 units in a 19" rack.	F	0	Standard	\$25.00	€19
OS6250-RM-19	Tray kit for mounting one OS6250 in a 19" rack.	F	0	Standard	\$75.00	€58

www.alcatel-lucent.com

