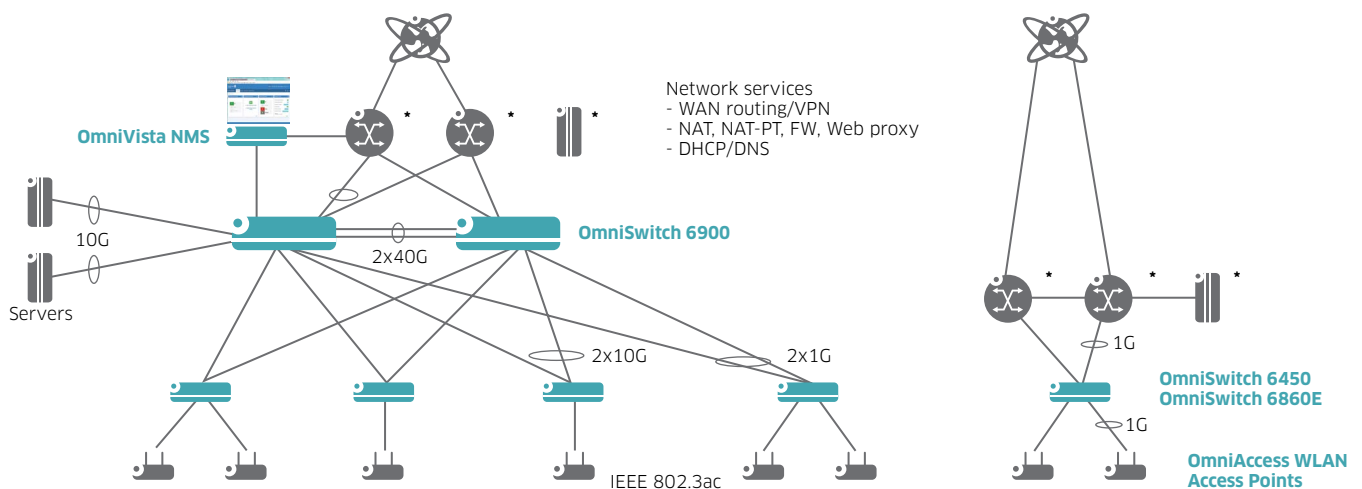


Alcatel-Lucent Universal Network on Demand service on premise

The Alcatel-Lucent Universal Network on Demand service provides a subscription based Alcatel-Lucent Enterprise LAN and Wi-Fi network infrastructure on end users' premises. It enables authorized partners to deploy, operate and maintain the network under a pay-per-use pricing model. The appeal of this consumption-based model is that expenses are both operational and in line with actual network usage requirements; they are not a sunk capital outlay. Universal Network on Demand comes as a subscription that provides flexibility in duration as well as size of a network infrastructure. The subscription's invoices will vary based on actual daily network usage. Network on Demand brings together field proven network equipment with the benefits of consumption based payment. Authorized partners have full access to detailed usage information. This enables these partners not only to invoice network usage based on consumption but also turn managed services into a consumption model.

Figure: Examples of typical network deployment models



Service and support

During a service subscription, Business Partners accredited for the Alcatel-Lucent Campus Network On Demand Service can obtain 24/7 support through the Technical Assistance Center for all hardware and software issues. Support services include bug fixes, software upgrades and advanced hardware replacement. Customer service and support to Business Partners' customers is depending on individual agreed contracts and service levels.

Product facts

The Universal Network on Demand Service comes with an online ordering tool. This tool provides assisted configuration pricing and quotation. The following is a list of on-premise equipment and goods that is available through the Universal Network on Demand Service.

OmniSwitch® 6900-X72



The OmniSwitch 6900 Stackable LAN switch model X72 is built on a compact, high-density 10 gigabit Ethernet (GigE) and 40 GigE platform. In addition to high performance and extremely low latency, it offers OpenFlow™, Shortest Path Bridging (SPB), Quality of Service (QoS), layer-2 and layer-3 switching. In addition it offers system and network level resiliency. It is a perfect fit for a highly redundant LAN core and Top of Rack in the Data Center in the customer's network.

The OmniSwitch 6900-X72 is part of the OmniSwitch 6900 family of switches. For more information, please visit: <http://enterprise.alcatel-lucent.com/?product=OmniSwitch6900&page=overview>

Family	OmniSwitch 6900
NoD Model Reference	POS6900-X72F-XX
10GBase SFP+ ports	48
40GBase QSFP ports	6
Switch capacity	1.44 Tb/s
Stack ports	n/a
Max units in Virtual Chassis	6
AC Power Supplies	2
AC Field replaceable power supply	yes
Power consumption	242W
PoE budget	n/a
Airflow	Front to Back
Width	44 cm (17.32 inch)
Depth	55.9 cm (22.0 inch)
Height	4.4 cm (1.73 inch)
Operating Temperature	0-45°C (32-113°F)
Operating Humidity	5-95% non-condensing
Operating humidity	5% to 95% non-condensing
Storage humidity	5% to 95% non-condensing

OmniSwitch 6450-P48, 6450-P24 and 6450-P10



OmniSwitch 6450-P48



OmniSwitch 6450-P24



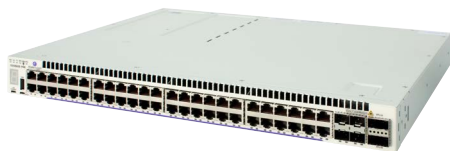
OmniSwitch 6450-P10

The OmniSwitch 6450 Stackable LAN switch models P48X, P24X and P10 are built on a modern stackable Gigabit Ethernet LAN access platform. They support Power over Ethernet plus (PoE+) across all RJ-45 based Gigabit Ethernet access ports. Both the P48X and P48X model have two 10 Gigabit Ethernet ports for uplinks. All models support, Access Control, QoS and layer-2 switching. It is a perfect fit for standard LAN access for both PoE powered and self-powered devices anywhere in the customer premises.

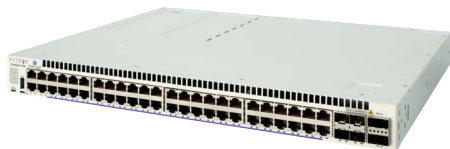
The OmniSwitch 6450-P48X, 6450-P24X and 6450P10 are part of the OmniSwitch 6450 family of switches. For more information, please visit: <http://enterprise.alcatel-lucent.com/?product=OmniSwitch6450&page=overview>

Physical characteristics			
Family	OmniSwitch 6450		
NoD Model Reference	POS6450-P48-XX	POS6450-P24-XX	POS6450-P10-XX
1000BaseT PoE+ ports	48	24	8
10GBase SFP+ ports	2	2	0
1000BaseX Combo ports	0	0	2
Stacking ports	2 (20Gb/s)	2 (20Gb/s)	2 (1 Gb/s)
Switch capacity	176 Gb/s	128 Gb/s	20 Gb/s
Max units in Virtual Chassis	8	8	4
AC Power Supplies	1	1	1
AC Field replaceable power supply	no	no	no
Power consumption	77 W (w/o PoE)	41 W (w/o PoE)	16 W (w/o PoE)
PoE budget	780 W	410W	115 W
Airflow	Side to Side	Side to Side	Fan Less
Width	44 cm (17.32 inch)	44 cm (17.32 inch)	21.5 cm (8.5 inch)
Depth	39.1 cm (15.4 inch)	31.2 cm (12.3 inch)	29.21 cm (11.5 inch)
Height	4.4 cm (1.73 inch)	4.4 cm (1.73 inch)	4.4 cm (1.73 inch)
Operating Temperature	0-45°C (32-113°F)	0-45°C (32-113°F)	0-45°C (32-113°F)
Operating Humidity	5-95% non-condensing	5-95% non-condensing	5-95% non-condensing

OmniSwitch 6860E-P48 and 6860E-P24



OmniSwitch 6860E-P48



OmniSwitch 6860E-P24

The OmniSwitch 6860E Stackable LAN switch models P48X, P24X and P10 are built on a modern stackable Gigabit Ethernet LAN access platform. They support Power over Ethernet plus (PoE+) across all RJ-45 based Gigabit Ethernet access ports. Both the P48X and P24X model have four 10 Gigabit Ethernet ports for uplinks. Both models support, Access Control, QoS and layer-2/3 switching. In addition, they support application visibility for predictive analysis of application behavior in the networks. With their redundant power supplies, they are a perfect fit for enhanced LAN access in the campus network.

The OmniSwitch 6860EP48X and 6860EP24X are part of the OmniSwitch 6860 family of switches. For more information, please visit: <http://enterprise.alcatel-lucent.com/?product=OmniSwitch6860E&page=overview>

Physical characteristics		
Family	OmniSwitch 6860	
NoD Model Reference	POS6860E-P48-XX	POS6860E-P24-XX
1000BaseT PoE+ ports	48	24
10GBase SFP+ ports	4	4
Stack ports	2 (40Gb/s)	2 (40Gb/s)
Switch capacity	264 Gb/s	224 Gb/s
Max units in Virtual Chassis	8	8
AC Power Supplies	2	2
AC Field replaceable power supply	yes	yes
Power consumption	73 W (w/o PoE)	65 W (w/o PoE)
PoE budget	1500 W	900 W
Airflow	Front to Back	Front to Back
Width	44 cm (17.32 inch)	44 cm (17.32 inch)
Depth	35 cm (13.78 inch)	35 cm (13.78 inch)
Height	4.4 cm (1.73 inch)	4.4 cm (1.73 inch)
Operating Temperature	0-45°C (32-113°F)	0-45°C (32-113°F)
Operating Humidity	5-95% non-condensing	5-95% non-condensing
Operating Humidity	5-95% non-condensing	5-95% non-condensing

OmniAccess WLAN 4030, 4550 and 4750XM



OmniAccess WLAN 4030



OmniAccess WLAN 4550



OmniSwitch WLAN 4750XM

The OmniAccess 4030, 4550 and 4750XM are modern wireless LAN controllers that manage large Wi-Fi networks. They offer enhanced firewall and Wi-Fi protection capabilities activated by Enforcement Firewall Next Generation (PEFNG) and Wireless Intrusion Protection (WIP) licenses. With sufficient capacity to manage all access points and high availability, it is a perfect fit for controlling Wi-Fi access in the larger campus networks.

The OmniAccess 4030, 4550 and 4750XM are part of the OmniAccess WLAN family. For more information on this controller and the WIP and PEFNG licenses, please visit: <http://enterprise.alcatel-lucent.com/docs/?id=24339>

Physical characteristics			
Family	OmniAccess WLAN Controller		
NoD Model Reference	POAW-4030	POAW-4550	POAW-4750XM
1000BaseX Combo ports	8	0	0
10GBase SFP+ ports	0	4	4
AC Power Supplies	1	1	1
AC Field replaceble power supply	no	no	no
Power consumption	55 W	110 W	165 W
WLAN standard	IEEE 802.11a,b,g,n,ac	IEEE 802.11a,b,g,n,ac	IEEE 802.11a,b,g,n,ac
Maximum Controlled Aps	64	512	2048
Max users/devices	4096	16384	32768
Max Firewall Sessions	65536	2015291	2015291
Mounting brackets	included	included	included
Restricted Domains	USA, Japan, Israel, None	USA, Japan, Israel, None	USA, Japan, None
Width	31 cm (12 inch)	44.5 cm (17.5 inch)	44.5 cm (17.5 inch)
Depth	21 cm (8.3 inch)	44.5 cm (17.5 inch)	44.5 cm (17.5 inch)
Height	4.4 cm (1.7 inch)	4.4 cm (1.7 inch)	4.4 cm (1.7 inch)
Operating Temperature	0-40°C (32-104°F)	0-40°C (32-104°F)	0-40°C (32-104°F)
Operating Humidity	5-95% non-condensing	5-95% non-condensing	5-95% non-condensing

OmniAccess AP205 and IAP205



OmniAccess AP205



OmniAccess IAP205

This compact dual-radio access point comes in two flavors:

- AP-205, operation is dependent on a central Wireless LAN Controller and license activation
- IAP-205, operation is independent of a separate Wireless LAN Controller or license activation

These compact dual-radio access points delivers wireless data rates of up to 867 Mb/s to devices working in the 5 GHz band with 802.11ac technology. They leverage two spatial multiple-input and multiple-output (MIMO) streams. They also simultaneously support 2.4 GHz 802.11n clients with data rates of up to 300 Mb/s. Both models have four integrated omni-directional downtilt antennas. Powering these access points made easy by Power over Ethernet.

The OmniAccess AP205 an IAP205 are part of the OmniAccess WLAN family. For more information, please visit:

<http://enterprise.alcatel-lucent.com/docs/?id=24269>

Physical characteristics		
Family	OmniAccess WLAN Access Points	
NoD Model Reference	POAW-AP205	POAW-IAP205
WLAN standard	IEEE 802.11a,b,g,n,ac	IEEE 802.11a,b,g,n,ac
Wi-Fi Radios	2	2
Bluetooth Radio	0	0
MIMO	2x2	2x2
MU-MIMO	no	no
Integrated Antennas	4 omni directional	4 omni directional
1000BaseT ports	1	1
PoE power consumption	12.5 W	12.5 W
Mounting brackets	included	included
Restricted Domains	Controller based	USA, Japan, Israel, None
Width	15 cm (5.9 inch)	15 cm (5.9 inch)
Depth	15 cm (5.9 inch)	15 cm (5.9 inch)
Height	4.2 cm (1.7 inch)	4.2 cm (1.7 inch)
Operating Temperature	0-40°C (32-104°F)	0-40°C (32-104°F)
Operating Humidity	5-95% non-condensing	5-95% non-condensing

OmniAccess AP325 and IAP325



OmniAccess AP325



OmniAccess IAP325

This compact dual-radio access point comes in two models:

- AP325, operation is dependent on a central Wireless LAN Controller and license activation
- IAP325, operation is independent of a separate Wireless LAN Controller or license activation

These multifunctional dual-radio access points deliver wireless data rates of up to 1,733 Mb/s to Wi-Fi devices operating in the 5 GHz band with 802.11ac technology. They leverage four spatial multiple-input and multiple-output (MIMO) streams. Both models support at the same time devices working in the 2.4 GHz band with data rates of up to 800 Mb/s. In addition they are equipped with a Bluetooth Low Energy (BLE) beacon for specific applications. They are equipped with eight integrated omni-directional down-tilt antennas. These Access points can be connected to the LAN by either one or two Ethernet connections. These AP models' Ethernet connections can be aggregated. Powering these access points is made easy by the use of Power over Ethernet on either Ethernet connection.

The OmniAccess AP325 and IAP325 are part of the OmniAccess WLAN family. For more information, please visit:

<http://enterprise.alcatel-lucent.com/docs/?id=24269>

Physical characteristics		
Family	OmniAccess WLAN Access Points	
NoD Model Reference	POAW-AP325	POAW-IAP325
WLAN standard	IEEE 802.11a,b,g,n,ac	IEEE 802.11a,b,g,n,ac
Wi-Fi Radios	2	2
Bluetooth Radio	1	1
MIMO	4x4	4x4
MU-MIMO	4 streams	4 streams
Integrated Antennas	8 omni directional	8 omni directional
1000BaseT ports	2	2
PoE power consumption	20 W	20 W
Mounting brackets	included	included
Restricted Domains	Controller based	
USA, Japan, None		
Width	20 cm	20 cm
Depth	20 cm	20 cm
Height	5.7 cm	5.7 cm
Operating Temperature	0-50°C (32-122°F)	0-50°C (32-122°F)
Operating Humidity	5-95% non-condensing	5-95% non-condensing

OmniAccess WLAN license

For each dependent access point to operate and provide enhanced firewall and Wi-Fi protection capabilities an operational, Policy Enforcement Firewall Next Generation (PEFNG) and Wireless Intrusion Protection (WIP) license are required.

The OmniAccess 4030, 4550 and 4750XM are part of the OmniAccess WLAN family. For more information on this controller and the WIP and PEFNG licenses, please visit: <http://enterprise.alcatel-lucent.com/docs/?id=24339>

Family	OmniAccess Dependent Access Point Licenses		
NoD Model Reference	POAW-AP-LAP	POAW-AP-PEFNG	POAW-AP-RFP
Access Points Supported	POAW-AP205, POAW-AP325		
Wireless LAN Controller Support	POAW-4030, POAW-4450, POAW-4750XM		

Transceivers and cables

Optical transceivers						
NoD Model Reference	PSFP-GIG-SX	P-SFP-GIG-LX	P-SFP-10G-SR	P-SFP-10G-LR	QSFP-40G-SR	QSFP-40G-SR
Dimension Standard	SFP	SFP	SFP+	SFP+	QSFP+	QSFP+
Connector Type	LC	LC	LC	LC	MPO	LC
Standards Supported	1000BASE-SX	1000BASE-LX	10GBASE-SR	10GBASE-LR	40GBASE-SR4	40GBASE-LR4
Optical Fiber Type	Multi Mode Fiber	Single Mode Fiber	Multi Mode Fiber	Single Mode Fiber	Multi Mode Fiber	Single Mode Fiber
Wavelength 850 nm	850 nm	1310 nm	850 nm	1310 nm	850 nm	1310 nm
Optical Power Output	-9.5 to -4 dBm	-9.5 to -3 dBm	-7.3 to -1.3 dBm	-8.2 to -0.5 dBm	-7.6 to 2.4 dBm	-7.0 to 2.3 dBm
Receiver Sensitivity	-17 dBm	-20 dBm	-11.1 dBm	-12.6 dBm	-5.4 dBm	-11.5 dBm
Transmission Distance	~ 275 m (62/125µm)					
~ 500 m (50/125µm)	~ 10 km	~ 300 m	~ 10 km	~ 100 m (OM3)		
~ 50 m (OM4)	~ 10 km					
Operating Temperature	0-70°C (32-158°F)	0-70°C (32-158°F)	0-70°C (32-158°F)	0-70°C (32-158°F)	0-70°C (32-158°F)	0-70°C (32-158°F)

Cables					
NoD Model Reference	POS6450S-CBL-60	POS6450S-CBL-1M	POS6860-CBL-40	POS6860-CBL-40	QSFP-40G-C7M
Application	Stack Cable	Stack Cable	Stack Cable	Stack Cable	40G DAC Cable
Connector Type	Proprietary	Proprietary	Proprietary	Proprietary	QSFP+
Length	60 cm	1 meter	40 cm	1 meter	7 meter
Supported Switch	POS6450-P24X, POS6450-P48X	POS6860E-P24, POS6860E-P48	POS6900-X72F		
Operating Temperature	0-70°C (32-158°F)				

OmniVista® 2500 Network Management System (NMS) appliance



This appliance is supplied with every Universal Network on Demand service purchased to enable the provision of authorized partners' managed services. The authorized partner has the option to grant access to the Network Management system to their end customers. By enabling customer access not only the partner but also their customers have the ability to look at the network topology and status, as well as generate predictive analysis reports of the network's data and application transport statistics.

For more information on OmniVista 2500 NMS, please visit:
<http://enterprise.alcatel-lucent.com/?product=OmniVista2500NetworkManagementSystem&page=overview>

Family	Network Management
NoD Model Reference	POV2500-CPE-XX
Processor	Intel Xeon E5
Gigabit Ethernet Ports	2
Hard Disks	2
AC Field replaceable power supply	2
Airflow	Front to back
Width	44 cm (17.1 inch)
Depth	61 cm (23.9 in)
Height	4.3 cm (1.7 inch)
Operating Temperature	0-35°C (32-95°F)
Operating Humidity	8% - 90% non condensing