

Alcatel-Lucent Enterprise OmniAccess 4240 Series Campus Gateway

Enterprise-class Wi-Fi performance and reliability at scale

The Alcatel-Lucent Enterprise 4240 Series Campus Gateway delivers enhanced Wi-Fi scalability and security to meet demands at the Edge.



Engineered for mission-critical environments, the 4240 Series delivers high performance, seamless roaming, 24x7 reliability, and always-on connectivity – even during upgrades. Unlike other Edge appliances, the 4240 Series provides consistent policy enforcement across wired and wireless and dynamic segmentation for any user or device – even IoT.

Enterprise-class performance

For medium and large enterprises who require high performance and 24x7 reliability, the 4240 Series Campus Gateway is designed to scale to meet today's and future demands. The 4240 Series Gateway builds upon Alcatel-Lucent Enterprise's legacy 4000 Series Gateways to provide next-generation connectivity for up to 2,048 APs and 32,000 devices.

To ensure high availability, the 4240 Series Gateway supports live upgrades and multiple gateways can be clustered together at each location for business continuity. Zero touch provisioning eliminates the need for on-site IT support.

Investment protection

The Alcatel-Lucent Enterprise 4240 Series Campus Gateway eliminates the need for overprovisioning or frequent hardware refreshes by allowing enterprises to use tier-based pricing to unlock higher capacity levels. New to the 4240 Series Gateway is a flexible capacity license model. Enterprises can opt for hardware only (20 Gbps total throughput, 512 APs/16K devices) or for greater capacity they can add silver perpetual licenses (30 Gbps total throughput, 1K APs/24K devices) or gold perpetual licenses (40 Gbps total throughput, 2K APs/32K devices).

Powerful security enforcement

Alcatel-Lucent Enterprise 4240 Series Campus Gateways deliver consistent policy enforcement across wired and wireless via dynamic segmentation. Traffic is tunneled to the gateway where granular rules are applied for any user, location, application, or device type – including IoT. For example, traffic can be segmented based on a defined set of user types such as guest, contractor, or employee to provide greater levels of security.

To deliver unified policy enforcement, the 4240 Series Campus Gateways rely on a built-in Layer 4-7 stateful firewall known as the policy enforcement firewall (PEF). It streamlines policy management by working across WLAN, LAN, and WAN. When deployed alongside Alcatel-Lucent Enterprise ClearPass Policy Manager, policies are automatically enforced to simplify SSID, VLAN, and policy management.

Datasheet

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Advanced capabilities

Seamless roaming

Users often experience delays and application disconnects when they move from one subnet to another, for example on a large campus. This is caused by the designation of a single subnet per building, which restricts the roaming domain to a specific building. When roaming across buildings, application persistence is lost and new sign ons are required. The 4240 Series Gateway supports tunneling so that two disparate networks can connect directly to one another, bypassing normal routing rules and allowing a station to maintain the same Layer 3 address when roaming throughout a multi-VLAN network to improve the mobile user experience.

Quality of Service

Deep Packet Inspection provides greater application visibility and control. As a part of the policy enforcement firewall, the gateway consistently evaluates and optimizes performance and usage policies for over 3,000 applications. This ensures the highest possible Quality of Service (QoS) – even for encrypted traffic.

Redundancy and Clustering

The 4240 Series can be deployed with N+1 or NxN redundancy and can also join a controller cluster when deployed as a Mobility Controller managed by Mobility Conductor. This increases performance and scale for enhanced resiliency. Simple to use, mobile provisioning allows on-site personnel to use a mobile app to onboard gateways. A central IT team can verify device location, licenses, and status with no additional steps required.

Unified Communications and Collaboration (UCC)

Visualize and troubleshoot networks based on call quality metrics such as MOS, latency, jitter, and packet loss. Supported applications include Teams, Zoom, Skype, Wi-Fi Calling, FaceTime, SIP, Jabber, Spark, and more.

In addition, Alcatel-Lucent Enterprise's integration with Microsoft enables unique application intelligence that detects Microsoft 365 (Office 365), Teams, and Skype for Business traffic and then can prioritize them over less business-critical applications.

IoT and Integration Ready

To support IoT and integrate with your existing infrastructure, the 4240 Series Gateways offers integrated device profiling. This improves client visibility and works with ClearPass Policy Manager to provide advanced user, device, and IoT policy management and insights.

Technical specifications

PERFORMANCE AND CAPACITY	BASE HARDWARE	WITH SILVER LICENSE	WITH GOLD LICENSE
Replaces	OAW-4550	OAW-4650	OAW-4750XM
Maximum campus or remote access points	512	1,024	2,048
Maximum concurrent users/devices	16,384	24,576	32,768
Maximum VLANs	4,096	4,096	4,096
Active firewall sessions	2,015,291	2,015,291	2,015,291
Concurrent GRE tunnels	8,192	16,384	32,768
Concurrent IPsec sessions	16,384	24,576	32,768
Concurrent SSL sessions	8,192	8,192	8,192
Concurrent tunneled ports	8,192	12,288	16,384
Firewall throughput (Gbps)	20	30	40
Wired bridged throughput (Gbps)	20	30	40
Encrypted throughput GRE (Gbps)	20	30	40
Encrypted throughput 3DES (Gbps)	20	27	29
Encrypted throughput AES-CBC-128 (Gbps)	20	30	38
Encrypted throughput AES-CBC-256 (Gbps)	20	30	39
Encrypted throughput AES-CCM (Gbps)	20	28	30
Encrypted throughput AES-GCM-128 (Gbps)	20	30	40
Encrypted throughput AES-GCM-256 (Gbps)	20	30	40

INTERFACES AND INDICATORS

Form factor	1 RU
Interface	4x SFP28
Out of band management port	1x RJ45
Console port	USB-C, RJ45
USB 3.0 Type-A	2
LCD display	1
Power LED	Yes
Status LED	Yes
Peered LED (reserved for future use)	Yes
Expansion slot (reserved for future use)	1
Power supply slots	1 + redundant
Fan trays	5

PHYSICAL

Dimensions (HxWxD)	1.73" x 17.40" x 15.60" (4.4 cm x 44.2 cm x 39.6 cm)
Weight	18.08 lbs (8.2 kg)
MTBF (hours 25C with fans and PSU)	185,301

ENVIRONMENTALS

Operating temperature	0°C to 40°C (32°F to 104°F)
Storage temperature	-40°C to 70°C (-40°F to 158°F)
Humidity/storage humidity	10% to 90% (RH)/10% to 95% (RH), non-condensing
Operating altitude	10,000 feet
Acoustic noise ¹	65.2 dBa (Typ)
Maximum heat dissipation (BTU/hour)	648 BTU/hr
Maximum power consumption	190W
Power source	550-watt power supply

POWER SUPPLY CERTIFICATIONS

Input voltage range	100 VAC to 240 VAC
Output voltage	12V
Input frequency	50-60 Hz
AC line input current (steady state)	7.1A
Operating temperature	0°C to 55°C
Cooling	Internal fan (air flow rear to front)
Weight	0.8 kg

REGULATORY AND SAFETY COMPLIANCE

Minimum supported software version	8.10
Regular SKU information	ARC�9240
Safety certifications	EN 62368-1, Ed.2:2014 UL 62368-1, 2nd edition CAN/CSA C22.2 No. 62368-1-14
Electromagnetic emissions certifications	FCC Part 15 Class B CISPR32 Class B EN55032 Class B ICES-003 Class B EN 61000-3-2 EN61000-3-3 EN55035 KN32 Class B/KN35 CNS13438 AS/NZS CISPR32 Class B VCCI Class B
Telco	Common Language Equipment Identifier (CLEI) code

Ordering information

PART NUMBER	DESCRIPTION
OAW-4240-EG	OmniAccess 4240 (EG) Campus Gateway 4xSFP28 1 Expansion Slot
OAW-4240-JP	OmniAccess 4240 (JP) Campus Gateway 4xSFP28 1 Expansion Slot
OAW-4240-RW-XX	OmniAccess 4240 (RW) Campus Gateway 4xSFP28 1 Expansion Slot
OAW-4240-IS	OmniAccess 4240 (IS) Campus Gateway 4xSFP28 1 Expansion Slot
OAW-4240-US	OmniAccess 4240 (US) Campus Gateway 4xSFP28 1 Expansion Slot
OAW-4240-SLV	OmniAccess 4240 AOS8 Silver Lic E-LTU
OAW-4240-GLD	OmniAccess 4240 AOS8 Gold Lic E-LTU
OAW-4240-MNT-19	OmniAccess W-4240-MNT-19 Spare Rack mount Kit for OAW-4240 Gateway
HW-4240-FT	HW-4240-FT 4240 Series Fan Tray
550-AC-PSU	550-AC-PSU Spare Power Supply for OAW-4240 Gateway

Service and warranty information

Hardware: 1 year parts/labour, can be extended with support

Mobility controller software: 90 days, can be extended with support contract