

# ALCATEL-LUCENT OMNIACCESS 4X50 SERIES CONTROLLERS

## NEXT-GENERATION WIRELESS LAN CONTROLLERS

The Alcatel-Lucent OmniAccess® 4x50 series Wireless LAN (WLAN) Controller is a next-generation networking platform, optimized for mobile application delivery to ensure the best mobility experience over Wi-Fi®.

With a new central processor that employs eight cores with four threads each, it is the equivalent of 32 virtual CPUs. As a result, the OmniAccess 4x50 WLAN series supports 32,000 mobile devices and performs stateful firewall policy enforcement at 40 Gb/s – plenty of capacity and speed for BYOD and devices compliant with IEEE 802.11ac.



**OAW-4550**



**OAW-4450**

New levels of visibility are provided by the unique Alcatel-Lucent AppRF technology. With AppRF, IT can see applications by user, including the top web-based applications like Facebook and Box.

The OmniAccess 4x50 WLAN series also manages authentication, encryption, VPN connections, IPv4 and IPv6 Layer 3 services, the Policy Enforcement Firewall™, Adaptive Radio Management™, and RFProtect™ spectrum analysis and wireless intrusion protection.

Clustering and centralized management enable the deployment of large networks with hundreds of Controllers with minimal staff. A master Controller can manage local Controllers, while OmniVista® network management provides enterprise-wide clarity and control through real-time monitoring, historical reporting and troubleshooting.

### **BENEFITS**

- Maintain uninterrupted network operations
- Provide sufficient cooling and rapid time to repair
- Provide maximum reliability and uptime
- Provide connections for high availability

### **FEATURES**

- The OA4550/OA4650/OA4750 supports dual, field-replaceable redundant power supplies
- The OA4550/OA4650/OA4750 includes a field-replaceable fan tray with multiple fans, providing sufficient cooling and rapid time to repair.
- Solid state drives
- The OA4550/OA4650/OA4750 supports two dual-media ports: 1000Base-X or 10/100/1000Base-T

## TECHNICAL SPECIFICATIONS

### Performance and capacity

**Table 1. Performance and capacity by model**

FEATURES	OMNIACCESS 4450	OMNIACCESS 4550	OMNIACCESS 4650	OMNIACCESS 4750
Maximum APs (licenses)	256	512	1024	2048
Maximum RAPs	256	512	1024	2048
Maximum concurrent devices	8,192	16,384	24,576	32,768
VLANs	2,048	4094	4094	4094
Concurrent GRE tunnels (System BSSIDs)	8,192	8192	16,384	32,768
Concurrent tunneled ports	4,096	8192	12,288	16,384
Concurrent IPSec sessions	4,096	16,384	24,576	32,768
Concurrent SSL fallback sessions	4,096	8192	8192	8192
Active firewall sessions (Concurrent sessions)	1,000,000	2,015,291	2,015,291	2,015,291
Wired throughput (large packets)	12 Gbps	20 Gb/s	40 Gb/s	40 Gb/s

#### Interfaces and indicators

- 4550/4650/4750 has four 10GBASE-X (SFP+) ports
- 4450 has two 10GBASE-X and four dual-media (1000BASE-X or 10/100/1000BASE-T) ports
- Two dual-media ports (1000BASE-X or 10/100/1000BASE-T)
- One USB 2.0
- Console (TIA/EIA-232) RJ-45 or mini-USB
- LINK/ACT and status LEDs
- Management/status LEDs
- LCD panel and navigation buttons
- Expansion slot (reserved for future use)

#### Physical characteristics

- 4550,4650,4750
  - Height: 4.4 cm (1.75 in)
  - Width: 44.5 cm (17.5 in)
  - Depth: 44.5 cm (17.5 in)
  - Weight (with one AC power supply installed): 7.45 kg (16.43 lb)
- 4450
  - Height: 4.4 cm (1.75 in)
  - Width: 33.4 cm (13.1 in)
  - Depth: 44.2 cm (17.4 in)
  - Weight (with one AC power supply installed): 4.95 kg (10.19 lb)

#### Environmental characteristics

- Operating:
  - Temperature: 0°C to 40°C (+32°F to +104°F)
  - Humidity: 5% to 95% non-condensing
- Storage and transportation:
  - Temperature: -40°C to +70°C (-40°F to +158°F)
- Operating altitude: 3048 m (10,000 ft)
- Acoustic noise\* (with AC power supply):
  - OmniAccess 4450: 49.0 dBA
  - OmniAccess 4550: 46.9 dBA
  - OmniAccess 4650: 46.9 dBA
  - OmniAccess 4750: 54.7 dBA

#### Power

- 350 W AC power supply:
  - AC input voltage: 100 V AC to 240 V AC
  - AC input current: 5 A to 2.5 A
  - AC input frequency: 50 Hz to 60 Hz
  - Weight: 1.3 kg (2.8 lb)
- Maximum power consumption:
  - OmniAccess 4450: 75.2 watts
  - OmniAccess 4550: 110 W
  - OmniAccess 4650: 125 W
  - OmniAccess 4750: 165 W
  - Maximum (using USB, no PoE): 8.0 W
  - Maximum (using USB, full PoE): 26 W

#### Regulatory and safety compliance EMC/EMI

- United States: FCC Part 15 Class A CE
- Canada: Industry Canada Class A
- Japan: VCCI Class A
- Europe:
  - EN 55022 Class A (CISPR 22 Class A)
  - EN 55024
  - EN 61000-3-3 Limits
  - EN 61000-4-2 Electrostatic Discharge
  - EN 61000-4-3 Radiated Immunity
  - EN 61000-4-4 Fast Transients
  - EN 61000-4-5 Surge Transients
  - EN 61000-4-6 Conducted Immunity
  - EN 61000-4-8 Power Frequency Magnetic Field
  - EN 61000-4-11 Voltage Dips, Short Interruptions and Voltage Variations
- Australia/New Zealand: AS/NZS 3548

#### Safety:

- United States: UL 60950, EN60950
- Canada: CAN/CSA 22.2 #60950
- CE mark, cTUVus, CB, C-tick, Anatel, NOM, MIC

#### Regulatory SKU Information

- 4550: ARCN0100
- 4650: ARCN0101
- 4750: ARCN0102
- 4450: ARCN7205

#### Minimum AOS-W Release

- 4550: 6.2.0.0
- 4650: 6.2.0.0
- 4750: 6.2.0.0
- 4450: 6.4.3.0

\*Sound power per ETSI 300 753 in accordance with ISO 7779

## ORDERING INFORMATION

PART NUMBER	DESCRIPTION
<b>OMNIACCESS 4x50 series WLAN controllers</b>	
OAW-4450-RW	Alcatel-Lucent OmniAccess 4450, two 10GBase-X (SFP+), one 350 W AC power supply, unrestricted regulatory domain. These products are considered rest-of-world products and must not be deployed in the United States or Israel.
OAW-4450-US	Alcatel-Lucent OmniAccess 4750, two 10GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - US.
OAW-4450-IL	Alcatel-Lucent OmniAccess 4450, two 10GBase-X (SFP+), one 350 W AC power supply, unrestricted regulatory domain. restricted regulatorydomain - IL.
OAW-4450-JP	Alcatel-Lucent OmniAccess 4450, four 10GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - JP.
OAW-4550-JP	Alcatel-Lucent OmniAccess 4550, four 10GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - JP.
OAW-4650-JP	Alcatel-Lucent OmniAccess 4650, four 10GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - JP.
OAW-4750-JP	Alcatel-Lucent OmniAccess 4450, four 10GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - JP.
OAW-4550	Alcatel-Lucent OmniAccess 4550, four 10GBase-X (SFP+), one 350 W AC power supply, unrestricted regulatory domain. These products are considered rest-of-world products and must not be deployed in the United States or Israel.
OAW-4550-IL	Alcatel-Lucent OmniAccess 4550, four 10GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - IL
OAW4550-US	Alcatel-Lucent OmniAccess 4550, four 10GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - US
OAW-4650	Alcatel-Lucent OmniAccess 4650, four 10GBase-X (SFP+), one 350 W AC power supply, unrestricted regulatory domain. These products are considered rest-of-world products and must not be deployed in the United States or Israel.
OAW-4650-IL	Alcatel-Lucent OmniAccess 4650, four 10GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - IL.
OAW-4650-US	Alcatel-Lucent OmniAccess 4650, four 10GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - US.
OAW-4750	Alcatel-Lucent OmniAccess 4750, four 10GBase-X (SFP+), one 350 W AC power supply, unrestricted regulatory domain. These products are considered rest-of-world products and must not be deployed in the United States or Israel.
OAW-4750-IL	Alcatel-Lucent OmniAccess 4750, four 10GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - IL.
OAW-4750-US	Alcatel-Lucent OmniAccess 4750, four 10GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - US.
<b>OMNIACCESS 4x50 series WLAN controller accessories</b>	
PSU-350-AC	OmniAccess field-replaceable power supply - 350 W for OAW 4X50
HW-4x50-FT	Field-replaceable fan tray for OAW 4x50
SPR-ESBLNK	Expansion slot blank panel for OAW 4x50
PSU-350-DC	OmniAccess 350W DC (-48V DC) Power Supply. May be used as a redundant power supply or field-replaceable spare for 4x50 Series Mobility Controllers.
SFP-LX	OmniAccess 1000BASE-LX SFP; 1310nm pluggable GbE optic; LC connector; up to 10,000 meters over single-mode fiber
SFP-SX	OmniAccess 1000BASE-SX SFP; 850nm pluggable GbE optic; LC connector; up to 270 meters over multi-mode fiber (Type FDDI/OM1) and up to 550 meters over multi-mode fiber (Type OM2)
SFP-TX	OmniAccess 1000BASE-T SFP; copper GbE pluggable; RJ45 connector; up to 100 meters over Category-5, 5e, 6 and 6a unshielded twisted pair cable
DAC-SFP-10GE50CM	OmniAccess 50cm length, 10GbE SFP+ direct attach cable (DAC); copper Twinax connectors on both ends for interconnect between devices. For use with 4x50 10GbE ports only
DAC-SFP-10GE-1M	OmniAccess 1m length, 10GbE SFP+ direct attach cable (DAC); copper Twinax connectors on both ends for interconnect between devices. For use with 4x50 10GbE ports only

DAC-SFP-10GE-3M	OmniAccess 3m length, 10GbE SFP+ direct attach cable (DAC); copper Twinax connectors on both ends for interconnect between devices. For use with 4x50 10GbE ports only
DAC-SFP-10GE-5M	OmniAccess 5m length, 10GbE SFP+ direct attach cable (DAC); copper Twinax connectors on both ends for interconnect between devices. For use with 4x50 10GbE ports only
DAC-SFP-10GE-7M	OmniAccess 7m length, 10GbE SFP+ direct attach cable (DAC); copper Twinax connectors on both ends for interconnect between devices. For use with 4x50 10GbE ports only
PSU-PWBLNK	Blank face plate for unpopulated power supply intake for OAW 4x50
SPR-RK-MNT	Rack mount kit for OAW 4x50
SPR-4RK-MNT	Four corner rack mount for OAW 4x50
SPR-WL-MNT	Wall mount kit for OAW 4x50 Series WLAN Controller
DAC-SFP10GE-50C	50 cm Direct Attach cable; 10G SFP+ (stacking and passive optics) for OAW 4X50
DAC-SFP10GE-xM	"X" m Direct Attach cable; 10G SFP+ (stacking and passive optics) for OAW 4X50
SFP-10GE-SR	OmniAccess SFP+ 10GBase-SR 850 nm serial pluggable SPF+ optic (LC), target range 300 m over MMF, LC Connector for OAW 4X50
SFP-10GE-LR	OmniAccess SFP+ 10GBase-LR 1310 nm serial pluggable SFP+ optic (LC) for up to 10 km over SMF, LC Connector for OAW 4X50
SFP-10GE-LRM	OmniAccess SFP+ 10Base-LRM 1310 nm serial pluggable SFP+ optic (LC) target range 300 m over MMF, LC Connector for OAW 4X50
<b>Software licenses*</b>	
OAW-AP-LAP2048	OmniAccess WLAN Access Point License (2048 Access Points)
OAW-APPEFNG2048	OmniAccess WLAN Policy Enforcement Firewall (2048 AP License)
OAW-AP-RFP2048	OmniAccess WLAN RF Protect License including WIP and Spectrum (2048 AP support)
OAW-4550-PEFV	OmniAccess WLAN Policy Enforcement Firewall for OAW 4550 controller (VIA/VPN users)
OAW-4650-PEFV	OmniAccess WLAN Policy Enforcement Firewall for OAW 4650 controller (VIA/VPN users)
OAW-4750-PEFV	OmniAccess WLAN Policy Enforcement Firewall for OAW 4750 controller (VIA/VPN users)
OAW-4450-PEFV	OmniAccess WLAN Policy Enforcement Firewall for OAW 4450 controller (VIA/VPN users)

\*All licenses for the OmniAccess 6000 Wireless LAN Switch are applicable to the OmniAccess 4X50 Series WLAN Controller as well.

## Warranty

- Hardware: 1 year parts/labor\*
- Software: 90 days\*

\*Extended with support contract