Alcatel-Lucent OmniAccess 4104 Series Controller

Versatile and cost-effective branch networking

The Alcatel-Lucent OmniAccess 4104 Series controller provides high-performance WLAN and security functionality in a compact and cost-effective form factor. Ideally suited for branch and small campus networks. The 4104 Series controller serves a key role for distributed enterprises by unifying WLAN, LAN, WAN and security.

High performance and reliability
For distributed enterprises with increasing performance and bandwidth needs, the OmniAccess 4104 is designed with scale and flexibility, and equipped with plenty of horsepower.

The OmniAccess 4104 provides connectivity for up to 2,048 users or client devices at up to 2 Gbps of firewall throughput or up to 4 Gbps of wired bridged throughput. These capabilities are up to 40 times the client density and 10 times the maximum throughput of typical WAN appliances.

For enhanced resiliency and high availability, the OmniAccess 4104 can be clustered together with other controllers at each branch.

IoT and integration ready
The OmniAccess 4104 includes flexible connectivity options, with four Ethernet ports that can be used as access/WAN uplinks, a USB 3.0 port for cellular third-party connectivity, and an integrated IoT radio that supports Bluetooth 5.

The OmniAccess 4104 controller also uses integrated device profiling to improve client visibility, and works with ClearPass Policy Manager or ClearPass Device Insight to provide advanced user, device and IoT policy management and insights.

Key features
• Up to 10 times the performance and 40 times the client density of typical same size WLAN appliances.
• Unified policy enforcement for wired and wireless traffic through Dynamic Segmentation.
• Visibility into over 3,000 applications with no added hardware.
**Microsoft features**

OmniAccess integration with Microsoft enables unique application intelligence that detects Microsoft 365, Teams, and Skype for Business traffic and then prioritizes them over less critical applications. Through management interfaces on AOS-W, and OmniVista Ov3600 Air Manager, IT can visualize call quality metrics such as MOS, latency, jitter, and packet loss for additional insights.

**Enhanced capabilities**

**Policy Enforcement Firewall**

The OmniAccess 4104 includes a Layer 4-7 stateful firewall with PEF to deliver a consistent user, device, and application awareness across WLAN, LAN, and WAN. When deployed alongside ClearPass Policy Manager, policies are automatically enforced to simplify SSID, VLAN and policy management.

**Application visibility and control**

Deep Packet Inspection (DPI) technology, which is a component of PEF, 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.

**High Availability**

The OmniAccess 4104 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 Master. This increases performance and scale for enhanced resiliency.

**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, Skype for Business, Wi-Fi Calling, FaceTime, SIP, Jabber, Spark and more.

**Technical specifications**

**Performance and capacity**

- **Mobility Controller Deployment Mode**
  - 4104
- **Maximum campus or remote Access Point**
  - 32
- **Maximum concurrent users/devices**
  - 2,048
- **Maximum VLANs**
  - 4,096
- **Active firewall sessions**
  - 64K
- **Concurrent GRE tunnels**
  - 544
- **Concurrent IPsec sessions**
  - 2,048
- **Concurrent SSL sessions**
  - 2,048
- **Concurrent tunneled ports**
  - 2,048
- **Firewall throughput**
  - 4 Gbps
- **Wired bridged throughput**
  - 4 Gbps
- **Encrypted throughput 3DES**
  - 4 Gbps
- **Encrypted throughput AES-CBC-256**
  - 4 Gbps
- **Encrypted throughput AES-CCM**
  - 2 Gbps
- **Encrypted throughput AES-GCM-256**
  - 4 Gbps

**Interfaces and indicators**

- **Form factor/footprint**
  - Desktop/Fanless2 Optional Mount Rack Tray
- **Ports**
  - 10/100/1000BASE-T
- **USB 3.0 Type-A**
- **System status LED**
- **WAN ports status LED**
- **LAN ports status LED**
- **Gateway mode LED**
- **Central connectivity status LED**
- **LTE status LED**
- **Micro USB, RJ45 console port**

1. LED utilized by the Gateway solution
2. 1RU can support two 4104 gateways side-by-side using an optional mount kit.

**Physical**

- **Dimensions (HxWxD)**
  - 3.82 cm x 19.85 cm x 15.31 cm (1.5” x 7.815” x 6.03”)
- **Weight**
  - 1.143 Kg (2.519 lbs)

**Environmental range**

- **Operating temperature**
  - 0° C to 40° C (32° C to 104° F)
- **Storage temperature**
  - -40° C to 70° C (-40° F to 158° F)
- Operating humidity
  ~ 10% to 90% (RH), non-condensing
- Storage humidity
  ~ 10% to 95% (RH), non-condensing
- Operating altitude
  ~ 10,000 feet
- Acoustic noise
  ~ 0 dBA (fan less)
- Cooling
  ~ Conduction cooling
- Maximum Power Consumption
  ~ 25W (with USB)
- Power source
  ~ 12v DC, 2.5A AC-to-DC power adapter

**Power adapter specifications**

**Features**
- Input voltage range
  ~ 90 VAC to 264 VAC
- Output voltage
  ~ +12VDC, 2.5A
- Input frequency
  ~ 47-63 Hz
- AC line input current (steady state)
  ~ 1.0A
- Operating temperature
  ~ -0° to +40° C
- Cooling
  ~ None
- Weight
  ~ 0.28 kg (.61 lbs)

**Regulatory and safety compliance**

- Regulatory SKU information
  - ARCN4104
- Minimum Software Versions
  - AOS-W 8.5.0.0 in Mobility Controller mode
  - Wi-Fi 6 (802.11ax), AOS 8.5;
  - Wi-Fi CERTIFIED WPA3™, AOS 8.5;
  - WI-FI CERTIFIED Enhanced Open™, AOS 8.5
- Safety certifications
  - UL 60950-1 Second Edition
  - CAN/CSA-C22.2 No. 60950-1
  - EN 60950:2005
  - IEC 60950-1 Second Edition
  - EN/IEC 62368-1 2nd Edition
  - NOM (obtained by partners and distributors)
- Electromagnetic emissions certifications
  - FCC Part 15 Class B
  - CISPR32 Class B
  - EN55032 Class B
  - ICES-003 Class B VCCI Class B
  - EN61000-3-2
  - EN61000-3-3
  - EN55024, EN301 489-1/-17
  - KN32 Class B (4104, KN35, 301 489-1/-17)
  - CNS13438 Class B
  - Telco
  - Common Language Equipment Identifier (CLEI) Code
- Wireless certifications
  - FCC/ISED
  - RED Directive 2014/53/EU
  - Others: MIC, NCC, ANATEL, COFTEL, CCC

**Service and warranty information**

- Hardware: 1 year parts/ labor, can be extended with support contract
- Mobility Controller Software: 90 days, can be extended with support contract

**Ordering information**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OmniAccess 500 Series Unified Access Points</strong></td>
<td></td>
</tr>
<tr>
<td>OAW-4104-EG</td>
<td>OmniAccess 4104 (EG) 4-Port 10/100/1000BASE-T Branch Controller, 2K Clients - 32 APs</td>
</tr>
<tr>
<td>OAW-4104-IS</td>
<td>OmniAccess 4104 (IS) 4-Port 10/100/1000BASE-T Branch Controller, 2K Clients - 32 APs</td>
</tr>
<tr>
<td>OAW-4104-JP</td>
<td>OmniAccess 4104 (JP) 4-Port 10/100/1000BASE-T Branch Controller, 2K Clients - 32 APs</td>
</tr>
<tr>
<td>OAW-4104-RW</td>
<td>OmniAccess 4104 (RW) 4-Port 10/100/1000BASE-T Branch Controller, 2K Clients - 32 APs</td>
</tr>
<tr>
<td>OAW-4104-US</td>
<td>OmniAccess 4104 (US) 4-Port 10/100/1000BASE-T Branch Controller, 2K Clients - 32 APs</td>
</tr>
<tr>
<td><strong>Accessories</strong></td>
<td></td>
</tr>
<tr>
<td>OAW-4104-MNT-19</td>
<td>OmniAccess 4104-MNT-19 4104 Series 19-inch Rack Mount Kit</td>
</tr>
<tr>
<td>AP-AC-12V30B</td>
<td>OmniAccess 12V/30W AC-to-DC Desktop Style Power Adapter with Type B DC plug 2.1/5.5/9.5mm circular, 90-degree angled. (Note does not include country specific AC power cord PWR-CORD-xx).</td>
</tr>
</tbody>
</table>

~ EN 60950:2005
~ IEC 60950-1 Second Edition
~ EN/IEC 62368-1 2nd Edition
~ NOM (obtained by partners and distributors)

www.al-enterprise.com The Alcatel-Lucent name and logo are trademarks of Nokias used under license by ALE. To view other trademarks used by affiliated companies of ALE Holding, visit www.al-enterprise.com/en/legal/trademarks-copyright. All other trademarks are the property of their respective owners. The information presented is subject to change without notice. Neither ALE Holding nor any of its affiliates assumes any responsibility for inaccuracies contained herein. © Copyright 2019 ALE International, ALE USA Inc. All rights reserved in all countries. DIO19110702-en (November 2019)