

# Altitude 4511

## Wallplate Access Point



### Highlights

The Altitude™ 4511 wallplate access point (AP) is an innovative mobility solution which provides powerful Wi-Fi for college campuses and Multiple Dwelling Units (MDUs) such as dormitories, apartment complexes, hotels and hospitals. Its modular design and innovative form factor eases installation, snapping into place in minutes instead of hours. Built on operational and architectural flexibility, the Altitude 4511 AP provides high-performance and powerful coverage as well as scalable deployment options that can lower costs.

### Key Features

- Small, compact size
- Uses existing CAT 5 infrastructure
- Snaps easily onto existing wallplate
- High-power 26dBm antenna
- IEEE 802.11n technology
- Integrated controller

### Overview

Conventional access points designed to support MDUs require careful planning and often take time to deploy – involving the drilling of holes, pulling cables and installing mounting brackets. These APs are typically installed in hallways, with firewalls, concrete, rebar, mirrors, plumbing and bathroom tile contributing to attenuation factors that result in poor signal quality. Additionally, because these APs are functionally limited in terms of service and management scale, most often, IT personnel running smaller MDUs choose to install a few independent APs and use an RF switch to manage them. This results in management complexity and added costs.

The Altitude 4511 wallplate access point has been designed specifically to address these challenges with the following unique set of features:

- Fast, snap-on installation using existing CAT 5/6 cabling and universal mounting bracket
- Snap-in keystone ports for service scale – providing connections for additional wired services such as VoIP phones and coaxial cable
- SMART RF dynamic channel and radio power adjustment which provides excellent radio performance
- Intelligent controller AP code that provides scalable centralized management of up to 25 Altitude 4511 access points without the need of a costly wireless controller
- 802.11 a/b/g/n 2x2 multiple-input and multiple-output (MIMO) custom-designed radio which provides 26 dBm performance

### Modular Design for Easy Installation and Expansion

The Altitude 4511 access point utilizes existing CAT 5/6 cabling in the walls, making installation faster and easier. Using the universal mounting brackets, installation can be performed on any wall surface or a structured wiring telecom box in minutes. Also included with the Altitude 4511 AP is an optional second RJ-45 Ethernet port utilizing a pass-through (keystone) cable. You can also add a three-port Ethernet module (sold separately) to the front of the device. The keystone port can also be used to extend a full-power, Gigabit Ethernet, Power over Ethernet (PoE) port or any other standard keystone-compatible optional cabling including TV-coax, RJ-11, fiber, or Leviton QuickPort modular connectors. These features allow hotels, for example, to provide multiple services such as voice, IPTV

and wired LAN access using a single access point. Because the installation process is simple and repeatable across multiple properties and does not require expert training, IT managers can expect to lower their deployment costs.

### Operational Flexibility for High Performance and Coverage

The Altitude 4511 access point comes with the native SMART RF technology that ensures top radio performance and coverage without operator intervention. A single Altitude 4511 AP utilizes the 802.11n MIMO technology and through its optimized design, can provide coverage of up to three to ten rooms from any CAT 5/6 wiring location. Seamless and automatic failover capabilities ensure high-quality user sessions, as the access points adjust their power to compensate for the loss of neighboring access points. The Altitude 4511 supports current 802.11a/b/g/n devices, providing secure

user sessions through role-based access control, support for 802.1x on both wireless and wired ports, intrusion prevention and fast roaming.

### Scalable Deployment Options that Reduce Costs

The Altitude 4511 can operate as an intelligent controller, providing scalable and centralized management of up to 25 Altitude 4511 access points by utilizing the self-optimizing intelligent controller AP software. This allows IT managers to lower their costs by eliminating the need for a dedicated controller to manage the access points.

Additionally, each Altitude 4511 can be repurposed to operate as a Motorola® AirDefense® sensor for advanced spectrum analysis and connectivity troubleshooting in real time. This further reduces costs since it eliminates the need to place separate, dedicated sensors.

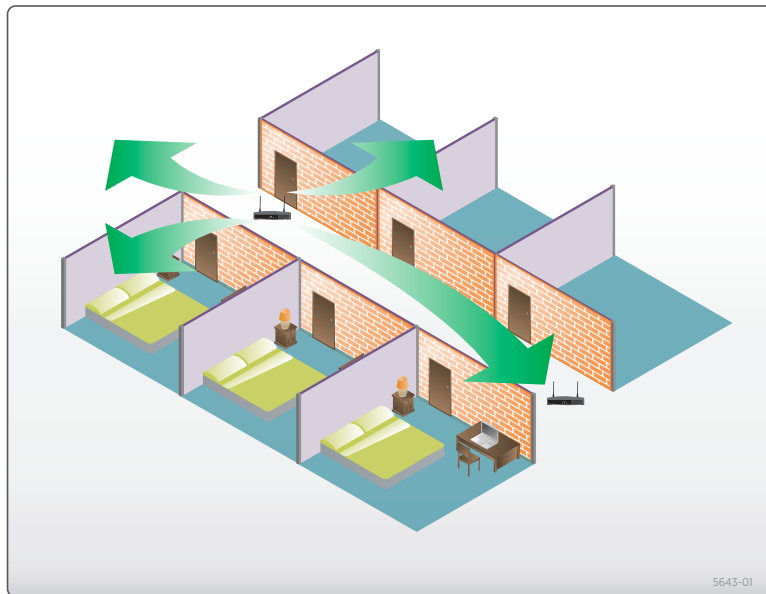


Figure 1: Traditional Wireless Access Point Placement in the Hallway

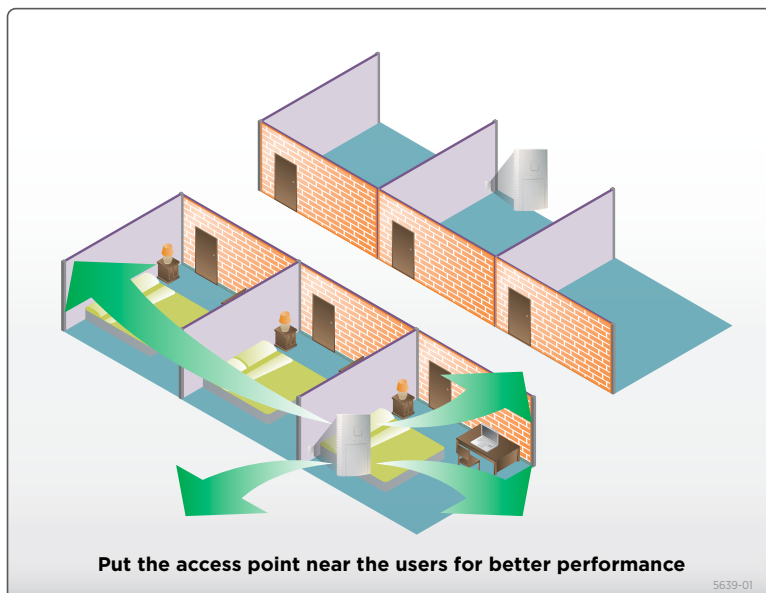


Figure 2: New Altitude 4511 Access Point Placement in the Room



## Technical Specifications

Physical Specifications
Dimensions: 5" x 2.95" x 1" (12.8 cm x 7.5 cm x 25.4 cm)
Unit weight: 12 oz (0.34 Kg)
Mounting options: Universal mounting bracket for worldwide telecom plates; over a telecom wallplate or flush surface mount
Wireless interface: Single radio; 802.11 a/b/g/n; 2 Ghz or 5.2 Ghz
LAN Ethernet port: IEEE 802/3 10/100 Mb auto-sensing via 8-pin header
Uplink LAN Ethernet: IEEE 802/3 10/100 Mb auto-sensing
Snap-in port: Supports any Keystone or QuickPort® style connector
Power Specifications
AP+1 LAN port -6.5W typical, AP+4 LAN ports -9W
802.3af compliant uplink LAN port or 48V external power supply
Wireless Specifications
Medium: DSSS, OFDM, MIMO
Standards: 802.11a, 802.11b, 802.11g, 802.11n
Data Rates: <ul style="list-style-type: none"> <li>802.11b: 1,2,5.5, 11 Mbps</li> <li>802.11g: 6,9,12,18,24,36,48,54 Mbps</li> <li>802.11a: 6,9,12,18,24,36,48,54 Mbps</li> <li>802.11n: MCS 0-15 up to 300 Mbps</li> </ul>
Operating Channels: <ul style="list-style-type: none"> <li>2.4 Ghz: Chan 1-13 (2412 – 2472 Mhz)</li> <li>5.2 Ghz: All channels from 5150 Mhz to 5850 Mhz</li> <li>Actual operating frequencies depend on national regulatory limits</li> </ul>
Transmit Power Settings: 6 dBm to 20 dBm, in 1 dB increments; Actual Transmit power dependent on national regulatory limits
Receiver Sensitivity: <ul style="list-style-type: none"> <li>802.11b: 1 Mb, -93 dBm</li> <li>802.11g: 54 Mb, -78 dBm, 2.4Ghz</li> <li>802.11n: MCS15 40 Mhz, -69 dBm;</li> <li>802.11a: 54Mb, -79 dBm, 5.2Ghz;</li> <li>802.11n: MCS15 40 Mhz, -69 dBm</li> </ul>
Antenna Configuration: Two internal omni-directional antennas, 3.5 dBi peak
1x2 or 2x2 MIMO operation

WLAN Networking and Security
BSS: 8 BSSIDs, 16 SSIDs
Virtual AP: Beacon, en/dis client isolation, SSID, authenc, bitrate, VID
4000 VLANs; VIDs 1 – 4095
AP Management: Encrypted management protocol
WEP statc, WEP Dynamic (802.1x)
WPA/TKIP/AES Personal and Enterprise, all EAP types
Regulatory Compliance
FCC 15.247, 15.407/EN 300 328, EN 301 893
UL EU EN 60950-1 2nd Ed, ANZ C-Tick
FCC Part 15 Subpart B, EN55022: 2006 +A1: 2007, ICES – 003 (Class B)
EN 550024: 1998 + A1: 2001 + A2: 2003
EU RoHS Directive 2002/95/EC
CE, IC, FCC, TELEC
Environmental
0° – 40° degrees Celsius, 5% to 90% non-condensing
Warranty
<a href="http://www.extremenetworks.com/services/warranty.aspx">http://www.extremenetworks.com/services/warranty.aspx</a>

## Ordering Information

Part Number	Description
15761	Altitude 4511 Single radio 802.11a/b/g/n Wallplate AP 2x2 MIMO. Low profile. One Ethernet PD uplink port, one FE LAN port included. US-only version supports FCC channel set.
15762	Altitude 4511 Single radio 802.11a/b/g/n Wallplate AP 2x2 MIMO. Low profile. One Ethernet PD uplink port, one FELAN port included. WR version supports individual country channel sets as required.
KT-6511-0000D-WR	Optional Three-port Fast Ethernet Module for Altitude 4511.



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