

# ExtremeWireless™ WiNG 7502 802.11ac Access Point

Enterprise-class Wall Plate 802.11ac Access Point

## BENEFITS

### COMPREHENSIVE MOBILE DEVICE SUPPORT

- Dual 802.11n and 802.11ac Radios
- Supports 2.4 and 5 GHz Devices

### SUPERIOR WI-FI PERFORMANCE

- Enterprise-class Wireless
- Adaptive RF Power
- Automatic Channel Selection

### EASY INSTALLATION

- Mount the Bracket and Snap into Place
- 802.3af/at Eliminates Expensive Cabling
- True Zero-Touch Provisioning

### STANDARD 802.3AF/AT

- Virtual Controller Mode
  - One 7502 AP Can Adopt Up to 24 Additional 7502 APs
- Stand-alone Mode
  - 7502 AP Can Be Managed Individually
- Managed by controller
  - Large networks of AP 7502s can be managed centrally via a controller
- Extreme Azara Cloud

### SUPPORT

- Reduce Risk
- Lower Capital Investment
- Reduce Operational Costs



## Product Overview

### EASILY DELIVER COST-EFFECTIVE HIGH-PERFORMANCE WIRELESS CONNECTIVITY IN PUBLIC-FACING MICRO-CELL ENVIRONMENTS

Whether you are responsible for a hotel, an assisted living facility, dormitory housing, or an apartment complex, you are challenged with providing high-speed Internet access in a challenging environment with many rooms — rooms with RF-blocking walls, floors, and doors. You need a cost-effective way to provide the dependable desktop-style wireless speeds your users expect in-room on however many consumer mobile devices they may own — including 2.4 GHz and the newer 5 GHz smartphones and tablets. To further complicate the challenge, today's users are watching videos, making video calls, and posting on multimedia-heavy social networking websites on their mobile devices — all bandwidth-heavy applications that require a latency- and jitter-free connection.

Introducing the easiest way to solve these big business problems: the ExtremeWireless WiNG AP 7502, a pocket-sized 802.11ac access point. The AP 7502 is purpose-built for public-facing micro-cell environments such as hotel and patient rooms, classrooms, and apartments. The dual 802.11n and 802.11ac radios, five internal antennas, plus a host of Extreme-only features provide a dependable high-performance wireless connection for every user and every mobile device in the room. Its revolutionary small size makes it easy to install anywhere, while the understated design allows it to easily hide in plain sight. Deployment couldn't be easier or faster — the AP 7502 can be installed in just a few minutes, with zero-touch automatic configuration. And locationing support, including Bluetooth® SMART, opens the door to a world of applications that can help provide users with a world-class experience that will put your organization a step above the competition.

## TWO RADIOS FOR COMPREHENSIVE MOBILE DEVICE SUPPORT

With its dual 802.11n and 802.11ac radios, the AP 7502 supports all the mobile devices that walk through your door, from legacy 2.4 GHz devices to today's new 5 GHz consumer smartphones. The next-generation 802.11ac radio empowers your network with fifth-generation Wi-Fi — more than double the throughput of 802.11n — helping to provide the capacity and speed your network needs to handle multiple devices running multiple bandwidth-hungry applications.

## SUPERIOR WI-FI PERFORMANCE

This little access point is equipped with big business features that provide your users with the seamless enterprise-class wireless services they expect. Two features that are optimized for micro-cell environments work hand-in-hand to eliminate RF interference and the resulting degradation of the quality of the wireless connection that can occur. Adaptive RF Power automatically detects nearby access points and adjusts output power as needed, while Automatic Channel Selection ensures the selection of an unused or least-used channel. And three features prevent too many users or traffic overload from reducing the quality of service on a specific AP 7502. Load balancing monitors the number of users on any specific access point, and when needed, works with RoamAssist to override any “client stickiness,” ensuring clients can roam to an access point that will provide a better signal. Pre-emptive roaming can work hand-in-hand with Roam Assist to provide a mobile-phone-style fast and seamless roaming experience.

## INSTALL IN JUST A FEW MINUTES

Installation is literally a snap – just mount the bracket wherever you'd like and snap the AP 7502 into the bracket. If desired, a decorative trim plate can be snapped on over the AP 7502 to add a more polished look for devices that are installed in visible areas. With 802.3af/at PoE support, the need to run expensive cabling to provide power to the AP 7502 is eliminated. And with true zero-touch provisioning, the AP 7502 is automatically discovered and configured — no hands-on required.

## TAMPER-PROOF DESIGN

Since the AP 7502 is readily accessible to guests and patients, we made it virtually tamper-proof. Once the AP 7502 is snapped into its metal bracket that is mounted to the wall, it cannot be removed without a special tool. For additional security, you can also bolt the AP 7502 directly to the metal bracket with a special torque screw that also cannot be removed without a special tool. And to make the tiny AP 7502 even harder to spot, you can also turn off the status LED lights via the central controller.

## ROBUST LOCATIONING SERVICES

With integrated support for Bluetooth SMART, Wi-Fi locationing, and Apple's iBeacon, you can connect to user mobile devices

when they are in the room to extend special discounts and other valuable information, strengthening the customer relationship and providing a true competitive advantage. In addition, you can automatically track nearby assets that are enabled with locationing tags, allowing you to spend less time managing assets, yet have better visibility into asset location and status.

## COST-EFFECTIVELY POWER SECURITY CAMERAS AND MORE WITH POE PASSTHROUGH

Not only does the AP 7502 provide wireless connectivity, it can also power a wide variety of equipment. With 802.3af compatible PoE Out, you can easily provide power to an IP security camera, a Voice-over-IP phone, another access point, a dedicated environmental sensor and more, all without the expense of running power cables.

## EASY AND FLEXIBLE MANAGEMENT MODES

Choose the management mode that best meets the needs of your technology environment. The AP 7502 can be easily managed and adopted by an ExtremeWireless WiNG Controller. With virtual controller mode, one AP 7502 can adopt up to 24 additional AP 7502 access points by simply logging into one AP 7502 and clicking on a single checkbox — ideal for smaller organizations that don't require or want a wireless switch. In addition, the AP 7502 can also operate in stand-alone mode, where it can be managed individually, ensuring the continuation of wireless services — even if the connection to the centralized controller is lost.

## SUPPORT SERVICES BRING OUR EXPERTISE RIGHT TO YOUR DOOR

A respected leader in enterprise mobility, ExtremeNetworks provides services that allow you to benefit from the experience we've gained from working around the globe with many of the world's leading companies, in practically every vertical market. Our family of services can help you get and keep your WLAN up and running at peak performance, by providing the assistance you need at every phase of the network lifecycle — from planning and implementation to post-deployment everyday support. Not only can we help you tailor your network to meet your specific needs, we can also help you reduce risk, lower your capital investment, and reduce operational costs.

## THE AP 7502 MICRO-CELL ACCESS POINT — PROVIDING LOW-COST HIGH-PERFORMANCE WI-FI SERVICES IN GUEST ROOMS, PATIENT ROOMS, CLASSROOMS AND MORE

For more information, please visit [www.extremenetworks.com/wlan](http://www.extremenetworks.com/wlan) or access our global contact directory at [www.extremenetworks.com/contact](http://www.extremenetworks.com/contact).

# Specifications

PRODUCT FEATURES	
<b>PHYSICAL CHARACTERISTICS</b>	
Dimensions	3.5 in. L x 3.7 in. W x 1.35 in. H 90 mm L x 95 mm W x 35 mm H Extends into wall cavity .25 in./7 mm
Weight	0.5 lbs./0.23 kg
LEDs activity indication	Two single color status LEDs
<b>AVAILABLE INTERFACES</b>	
802.11 Wireless Interface	Dual Radio; 802.11a/b/g/n/ac 2.4GHz and 5.2GHz
Bluetooth LE Interface	Single BLE transceiver
LAN Ethernet ports	3 x IEEE 802.3 10/100Mb auto-sensing
Uplink LAN Ethernet	1 x IEEE 802.3 Gigabit Ethernet auto-sensing
<b>POWER SPECIFICATIONS</b>	
Access point	6.5w operating
PoE PD	802.3af, 802.3at
PoE PSE	802.3af when input is 802.3at; - 6.5W when input is 802.3af; no output when input is DC wall brick
<b>NETWORKING SPECIFICATIONS</b>	
BSS	8 BSSISDs; 16 SSIDs
Layer 2 and Layer 3	802.1Q, 802.1D, DHCP Server/client, BootP, PPPoE, LLDP, GRE, and IPSec
Security	Stateful L2/L3 firewall, IP filtering, NAT, 802.1x, 802.11i, WPA2, Dedicated full-time WIPS sensor mode, secure guest access captive portal
Management	SSH, HTTPS, SNMPv3
Quality of Service (QoS)	WMM, 802.1P, DSCP. Applied per radio, WLAN, and user
<b>RADIO SPECIFICATIONS</b>	
Wireless medium	Direct Sequence Spread Spectrum (DSSS), Orthogonal Frequency Division Multiplexing (OFDM), Modulation and Coding Scheme, (MCS), High Throughput (HT)
Network standards	IEEE 802.11a/b/g/n/ac, 802.11d and 802.11i WPA2 and WMM
Data rates supported	802.11b: 1, 2, 5.5 and 11 802.11g/a: 6, 9, 12, 18, 24, 36, 48 and 54 Mbps; 802.11n: MCS 0-15 up to 300 Mbps; 802.11ac: MCS 0-8 up to 867 Mbps
Operating frequencies	2412 to 2472 MHz, 5180 to 5850 MHz (Actual channels depend on country limitations)
Antenna configuration	2.4Ghz: Two internal omni-directional, 1x2, 2x2, MIMO, 3dBi peak gain 5Ghz: Two internal omni-directional, 1x2, 2x2, MIMO, 5dBi peak gain Bluetooth: one internal omni-directional
Transmit power	6dBm to 15dBm per transmit chain 1dB increments (Actual transmit power dependent on national limits.)
Receiver sensitivity	2.4GHz band: -96dBm @ 1Mbps; - 74dBm @ MCS7 40MHz 5.2GHz band: -95dBm @ 6Mbps; - 73dBm @ MCS7 40MHz
Bluetooth LE	2400 - 2483.5KHz in 2MHz channels, user configurable UUID, beacon period, format

**PRODUCT FEATURES**

ORDERING INFORMATION	
AP-7502-67030-US AP-7502-67030-WR AP-7502-67030-EU AP-7502-67030-APME	802.11ac/802.11n Dual Radio Wall Plate AP; Universal mounting bracket and US-sized decorative trim included
AP-7502E-67030-US AP-7502E-67030-WR AP-7502E-67030-EU	802.11ac/802.11n Dual Radio Wall Plate AP; US- sized decorative trim included
MOUNTING	
Universal mounting bracket for worldwide structured cable boxes; includes US 70 mm x 115 mm decor trim plate	
ENVIRONMENTAL	
32° F to 104° F/0° C to 40° C, 5% to 90%non-condensing	
REGULATORY	
FCC 15.247, 15.407 / EN300 328, EN 301 893; UL EU EN 60950-1 2nd Ed., ANZ RCM, UL 2043; FCC Part 15 Subpart B, EN 55022: 2010 + A1: 2007, ICES -003 (Class B) EN 55024: 2010 + A1: 2001 + A2: 2003; EU RoHS Directive 2011/65/EU (EN50581: 2012 Standard); CE, IC, FCC	



The Wi-Fi CERTIFIED™ Logo is a certification mark of Wi-Fi Alliance®.



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