



## ENTERPRISE CLASS WALL PLATE 802.11AC ACCESS POINT

# AP 7502 802.11ac ACCESS POINT

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

Whether you are responsible for a hotel, 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 multi-media 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 AP 7502, the 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 Motorola-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 provide the capacity and speeds 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 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 a Motorola Solutions wireless controller. With virtual controller mode, one AP 7502 can adopt up to 24 additional AP 7520 access points by simply logging into one AP 7520 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 standalone 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, Motorola Solutions 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 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.

## TECHNICAL SPECIFICATIONS

### PHYSICAL CHARACTERISTICS

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./7mm
Weight	0.5 lbs./0.23 kg
LED Activity Indicators	Two single color status LEDs

### AVAILABLE INTERFACES

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 Ethernet

### RADIO SPECIFICATIONS

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	<i>802.11b</i> : 1, 2, 5.5 and 11 <i>802.11g/a</i> : 6, 9, 12, 18, 24, 36, 48 and 54 Mbps <i>802.11n</i> : MCS 0-15 up to 300 Mbps <i>802.11ac</i> : MCS 0-8 up to 867 Mbps
Operating frequencies	2.4 GHz band: 2400 - 2483.5 MHz 5.2 GHz band: 5150 - 5250 MHz, 5725 - 5850 MHz
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
--------------	--

### NETWORKING SPECIFICATIONS

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 fulltime 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

### POWER

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

### ENVIRONMENTAL

32 ° F to 104° F/0 ° C to 40° C, 5% to 90% non-condensing

### MOUNTING

Universal mounting bracket for worldwide structured cable boxes; includes US 70 mm x 115 mm decor trimplate

### 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

### ORDERING INFORMATION

AP-7502-67030-US	802.11ac/802.11n Dual Radio Wallplate AP;
AP-7502-67030-WR	Universal mounting bracket and US sized decorative trim included
AP-7502-67030-EU	
AP-7502-67030-APME	
AP-7502E-67030-US	802.11ac/802.11n Dual Radio Wallplate AP; US-sized decorative trim included
AP-7502E-67030-WR	
AP-7502E-67030-EU	

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.motorolasolutions.com/wlan](http://www.motorolasolutions.com/wlan) or access our global contact directory at [www.motorolasolutions.com/contact us](http://www.motorolasolutions.com/contact-us)

**SPECIFICATION SHEET**

AP 7502



Part number: SS-AP7502-A4. Printed in USA 06/14. MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © Motorola Solutions, Inc. 2014. All rights reserved

**MOTOROLA WLAN  
UNLEASH OPTIMAL**

