

# ExtremeWireless™ WiNG 7522E 802.11ac Access Point

Affordable Fifth-Generation Wi-Fi for Any Environment

## WiNG EXPRESS

For midsize businesses, the ExtremeWireless WiNG Express portfolio provides the ability to deploy an enterprise-grade network that is affordable and scalable with ease. Businesses with up to 64 access points get the power of centralized management — without the need to purchase and manage a controller. Deployment of WiNG Express Manager can help deploy a network with different WiNG Express Access Points and scale up to 1024 access points.

For features supported by the WiNG Express portfolio, please see the WiNG Express portfolio brochure.



## Product Overview

### 802.11ac WI-FI SPEED AND THROUGHPUT — ALL AT A LOW COST

Introducing the ExtremeWireless WiNG AP 7522E Access Point from Extreme Networks, delivering 802.11ac speeds at half the cost of many other solutions. Now, you can support all the mobile devices on your network running today's demanding applications, with an enterprise grade solution that fits budget. The 2.4 GHz radio ensures backward compatibility with every mobile device in use in your operation today — and 256 QAM modulation boosts the bandwidth of the 802.11n radio to 802.11ac levels. The 5 GHz 802.11ac radio unleashes the performance of all the new 11ac enabled mobile devices on your network, delivering high performance and capacity to all your users. Choose internal antennas for a sleek understated look that is ideal in customer-facing or carpeted office areas, or external antennas that allow you to choose the antennas you need to achieve maximum range and performance in demanding industrial areas.

### ENTERPRISE-GRADE WIRELESS FOR MIDSIZE BUSINESSES

ExtremeWireless WiNG Express brings the power of enterprise-grade award-winning WiNG 5 architecture to midsize businesses. With WiNG Express, smaller businesses now have access to the latest wireless technology and the always-on capability trusted by large enterprises. In addition, the portfolio contains purpose-built enterprise-grade products for midsize businesses that will allow customers to scale their network as their business grows.

### WiNG EXPRESS FAST PROVISIONING

WiNG Express was specifically designed to be simple to deploy, easy to manage and budget friendly for mid-size businesses. From deploying a single AP, to a single site, to multiple sites, WiNG Express's powerful management makes all WiNG Express solutions simple to deploy quickly.

## WiNG EXPRESS USER INTERFACE

WiNG Express is Extreme's powerful enterprise-class WLAN operating system wrapped in an easy-to-use and easy-to-understand graphical user interface that makes end-to-end deployment and management of WLAN networks easy for midsize businesses. The user interface provides a concise menu with time-tracked network and client information. As such, WiNG Express Management Interface empowers smaller businesses with valuable information available to enterprise customers in a meaningful way, allowing your company to leverage wireless applications to drive business.

## THE BANDWIDTH AND APPLICATION PERFORMANCE YOU NEED TO SUPPORT ALL OF YOUR USERS

All businesses depend on mobility today to increase productivity, customer response, employee communications, and operational efficiency. 802.11ac is the latest Wi-Fi standard and enables your employees to access critical information quickly, respond to customers faster, wherever they may be within the enterprise. No matter the mobile device, the application, if they are at their desk or on the move, WiNG Express will provide the reliable connections and performance they need to make the company successful.

## EASY MIGRATION TO FIFTH-GENERATION 802.11ac WI-FI

The dual-radio AP 7522E provides the simplest path to next-generation Wi-Fi. The 802.11ac radio readies you to support new 5 GHz mobile devices, while the 802.11n radio ensures support for all existing mobile 2.4 GHz devices. The radios work together to allow you to migrate to 802.11ac at your own pace — and without the high cost of “rip and replace.”

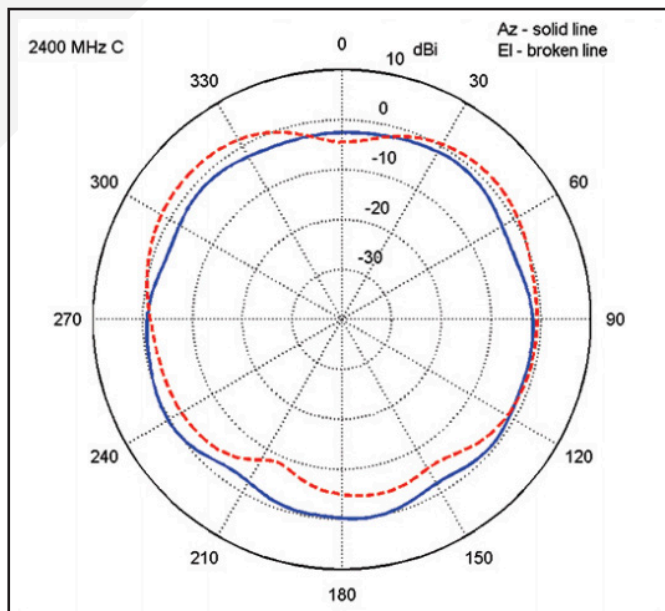
## MORE ROBUST WIRELESS CONNECTIONS

Your users will experience a wireless connection that is more robust than ever before, thanks to improved beamforming. Beamforming creates the most efficient path for data transmission between an access point and a mobile device. Until now, the transmitting beamformer worked alone to define this path. Now, the client receiver also assists, a process known as sounding. The result is a stronger connection that enables faster data transmission. Application throughput and performance is improved, along with mobile device battery power.

## THE AP 7522E — THE POWER OF 802.11ac WIRELESS SPEED, AT A NEW LOW COST

For more information, visit our global contact directory at <http://www.extremenetworks.com/contact>.

## AP 7522E Typical Antenna Patterns (Internal Model)



# Specifications

PRODUCT FEATURES	
<b>802.11AC CAPABILITIES</b>	
<ul style="list-style-type: none"> <li>Dual-band radios; supports 256-QAM</li> <li>2X2 MIMO with 2 Spatial Streams</li> <li>20, 40, and 80 MHz Channels</li> <li>1.267 Gbps data rates on dual concurrent radio operations</li> <li>Packet Aggregation (AMSDU, AMPDU)</li> </ul>	<ul style="list-style-type: none"> <li>Reduced Interface Spacing</li> <li>802.11 DFS</li> <li>MIMO Power Save (Static and Dynamic)</li> <li>Advanced forward error correction coding: STBC, LDPC</li> <li>802.11ac transmit beamforming</li> </ul>
<b>PHYSICAL CHARACTERISTICS</b>	
Dimensions	7.1 in. L x 6.5 in. W x 1.6 in. H, 180 mm L x 165 mm W x 41 mm H
Weight	1.8 lbs/0.82 kg
Housing	Plenum-rated housing (UL2043)
Plenum-Rated Housing (UL2043)	No additional hardware required to mount
Configurations	Above drop ceiling, under ceiling, or on wall
LEDs Activity Indication	2 top-mounted LEDs; activity indication
LAN Ethernet	1x IEEE 802.3 Gigabit Ethernet auto-sensing
Antenna	4dBi - 2.4 GHz band; 6 dBi - 5GHz band
Antenna Connectors	Two RP SMA's (External only – AP-7522-67040-xx)
Console Port	RJ45
<b>USER ENVIRONMENT</b>	
Operating Temperature	Internal antennas: 32° F to 104° F/ 0° C to 40° C External antennas: -4° F to 104° F/ -20° C to 40° C
Storage Temperature	-40°F to 158°F/-40°C to 70°C
Operating Humidity	85% RH non-condensing
Electrostatic Discharge	Internal AP-7522E-67030-xx: 15kV air, 8kV contact External AP-7522E-67040-xx: 12kV air, 6kV contact
<b>RADIO SPECIFICATIONS</b>	
Wireless Medium	Direct Sequence Spread Spectrum (DSSS), Orthogonal Frequency Division Multiplexing (OFDM), and Spatial Multiplexing (MIMO)
Network Standards	IEEE 802.11a/b/g/n/ac, 802.11d and 802.11i WPA2, WMM, and WMM-UAPSD
Data Rates Supported	802.11b/g: 1, 2, 5.5, 11, 6, 9, 12, 18, 24, 36, 48, and 54Mbps, 802.11a: 6, 9, 12, 18, 24, 36, 48, and 54Mbps, 802.11n: MCS 0-23 up to 300Mbps; Turbo mode (256QAM) on 2.4G band: up to 400Mbps, 802.11ac: MCS 0-9 up to 866.7Mbps
Operating Channels	2.4 GHz band: channel 1 through channel 13 5.2 GHz band: channel 36 through channel 165 *Channel availability depends on local regulatory restrictions
Antenna Configuration	2x2 MIMO (transmit/receive on both antennas)
Transmit Power Adjustment	1 dB increment
Operating Frequencies	2412 to 2472 MHz, 5180 to 5825 MHz
<b>REGULATORY</b>	
Product Safety Certifications	UL / cUL 60950-1, IEC / EN60950-1, UL2043, RoHS
Radio Approvals	FCC (USA), EU, TELEC
<b>MAXIMUM CONDUCTED TRANSMIT POWER – ONE ANTENNA TX POWER</b>	
Internal Antennas (AP-7522E-67030-xx)	2.4 GHz Band : 20 dBm 5 GHz Band : 20 dBm
External Antennas (AP-7522E-67040-xx)	2.4 GHz Band : 19 dBm 5 GHz Band : 18 dBm
<b>MAXIMUM CONDUCTED TRANSMIT POWER – TWO ANTENNAS TX POWER</b>	
Internal Antennas (AP-7522E-67030-xx)	2.4 GHz Band : 23 dBm 5 GHz Band : 23 dBm
External Antennas (AP-7522E-67040-xx)	2.4 GHz Band : 22 dBm 5 GHz Band : 21 dBm

## AP 7522E Receiver Sensitivity

802.11b (CCK)	802.11g (non HT20)	802.11a (non HT20)
-98 @ 1 Mbps	-97 @ 6 Mbps	-95 @ 6 Mbps
-95 @ 2 Mbps	-96 @ 9 Mbps	-95 @ 9 Mbps
-92 @ 5.5 Mbps	-95 @ 12 Mbps	-94 @ 12 Mbps
-91 @ 11 Mbps	-93 @ 18 Mbps	-92 @ 18 Mbps
	-89 @ 24 Mbps	-88 @ 24 Mbps
	-86 @ 36 Mbps	-85 @ 36 Mbps
	-82 @ 48 Mbps	-81 @ 48 Mbps
	-80 @ 54 Mbps	-79 @ 54 Mbps

802.11n	2.4 GHz (HT20)	5 GHz (HT20)	5 GHz (HT40)
MCS 0	-95	-95	-92
MCS 1	-92	-92	-89
MCS 2	-90	-90	-87
MCS 3	-88	-89	-85
MCS 4	-86	-86	-84
MCS 5	-79	-79	-76
MCS 6	-77	-77	-75
MCS 7	-76	-76	-74
MCS 8	-93	-93	-90
MCS 9	-90	-90	-87
MCS 10	-87	-87	-84
MCS 11	-84	-84	-81
MCS 12	-81	-81	-77
MCS 13	-76	-76	-73
MCS 14	-74	-74	-72
MCS 15	-73	-73	-65

2.4 GHz: 802.11ac				
MCS INDEX	SPATIAL STREAMS	VHT20	VHT40	
0	1	-95	-93	
8	1	-70	-68	
0	2	-93	-90	
8	2	-68	-66	

5 GHz: 802.11ac				
MCS INDEX	SPATIAL STREAMS	VHT20	VHT40	VHT80
0	1	-95	-93	-90
8	1	-70	-68	-64
0	2	-93	-90	-85
8	2	-68	-66	-61



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



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