Extreme™
Customer-Driven Networking

Benefits

Ideal Application

- Enterprise WLAN
- Retail WLAN for inventory, staff, guest access network
- K-12 classroom, higher education
- Hospitality conference rooms
- Transportation and Logistics warehouses
- Manufacturing plants

Key Value

- Integrated Application Visibility and Control
- Integrated Sensor
- Flexible mounting options
- Full performance with 802.3af
- Entended Temperature Range: -20°C - 60°C
- Cellular Coexistence Filter (ACF)

Services

- WiNG 5 distributed intelligence
- Integrated DPI engine
- NSiGHT™ Analytics
- AirDefense™ Security Sensor
- ExtremeLocation™
- BLE push notification
- ExtremeCloud™ Cloud-Managed Networking Platform (future)

ExtremeWireless™ WiNG 7632 Indoor Access Point

Product Overview

Every year more devices, services and applications go mobile. With Extreme Networks, you can demand more from your wireless network;

- Real-time network optimization for high density
- Application detection, analysis and control at the edge
- Service differentiation for inventory control, staff and guest access
- Digitize the shopper experience with guest access, social analytics, application QoS and Location aware services

ExtremeWireless WiNG AP 7632

With the new AP 7632 Wave 2 802.11ac access point, your network will get 802.11ac performance with overlay services to propel your enterprise. Fully compatible with every wireless device from legacy 802.11abgn devices up to the newest 802.11AC MU-MIMO smartphones.

The AP 7632 is packed with a comprehensive feature set based on the market proven WiNG 5 technology that delivers a self-optimizing, self-correcting Wi-Fi network to support devices from a student's tablet to a warehouse inventory control device. With the integrated Deep Packet Inspection engine, the AP 7632 provides on-board application visibility and control right on the AP itself. No matter how many users are on your WLAN or what applications they are using, they can count on dependable blazing desktop-style speed. Integrated sensor firmware extends the Extreme Networks AirDefense™ security suite across the network.

Available in two form factors to meet high aesthetics use case and flexible high temperature use cases. The AP 7632i (internal antenna) features a durable low profile polycarbonate enclosure and four distinct mounting options. The AP 7632e (external antenna) features an all metal enclosure and internal circuity to extend the operating temperature from -20°C to 60°C; ideal for maximum range and performance in demanding industrial applications.

ExtremeCloud Management

The AP 7632i/e is cloud-ready out of the box and supports future secure connectivity to ExtremeCloud™, a single pane of glass for cloud managing both the wired and wireless components of your network. Zero touch provisioning that significantly reduces deployment time. Select models enabled for use with ExtremeCloud in a future release.

See the ExtremeCloud datasheet for details and ordering part numbers.

Specifications

Product Features	AP 7632
802.11AC Capabilities	
802.11ac 2x2:2, MIMO, MU-MIMO 256-QAM, HT20/40/80 MHz	Packet Aggregation (AMSDU, AMPDU) RIFS, STBC, LDPC MIMO Power Save; 802.11ac Tx beamform; MRC
IoT Radio	Bluetooth Low Energy (BLE) v4.2, and IEEE 802.15.4 compliant
Physical Characteristics	
Dimensions	AP 7632i: 6.3 in x 1.7 in, 161 mm diameter x 48.5 mm AP 7632e: 6.9 in x 5.0in x 1.2 in, 175 mm x 128 mm x 26.9 mm
Weight	AP 7632i: .7 lbs, .3 kg AP 7632e: 1.4 lbs, .6 kg
Housing	Plenum-rated housing (UL2043)
Available Mounting	WiNG bracket compatible, Extreme Multi-Tbar, keyhole slots, Wall04
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	AP 7632-680B30: 4dBi - 2.4 GHz band; 6 dBi - 5GHz band, IoT 4.1 dBi
Antenna Connectors	AP 7632-680B40: Three RP SMAs: 2 dual band ports, 1 BTLE
Console Port	RJ45
USB Port	USB2.0 for purpose-built modules. Available on AP-7632-680B40 model
Warranty	Limited Lifetime Warranty
User Environment	
Operating Temperature	AP-7632-680B30: 32° F to 104° F/ 0° C to 40° C AP-7632-680B40: -4° F to 131° F/ -20° C to 55° C ambient temperature anywhere -4° F to 140° F/ -20° C to 60° C ambient temperature near sea level
Storage Temperature	-40°F to 158°F/-40°C to 70°C
Operating Humidity	0% - 95% (noncondensing)
Electrostatic Discharge	AP-7632-680B30: 15kV air, 8kV contact AP-7632-680B40: 12kV air, 6kV contact
Power Specifications	
Operating Voltage	PoE-PD: 48VDC; Wall brick: 12VDC
Operating Current	PoE-PD: 230mA at 48V; Wall brick: 1.5a
PoE-PD Class	802.3af, 802.3at
Power Consumption	AP 7632i Typical: 11 W, Idle (Radios ON): 4.8 W AP 7632e Typical: 10 W, Idle (Radios ON): 4.8 W w/o USB consumption
Networking Specification	
Layer 2 and Layer 3	Layer 3 routing, 802.1q, DynDNS, DHCP server/client, BOOTP client, PPPoE and LLDP
Security	Stateful Firewall, IP filtering, NAT, 802.1x, 802.11i, WPA2, WPA TripleMethodology Rogue Detection: 24x7 dual-band WIPS sensing, on-board IDS, and secure guest access (hotspot) with captive portal, IPSec, and RADIUS Server
Quality of Service	WMM, WMM-UAPSD, 802.1p, Diffserv, and TOS

Specifications (cont.)

Product Features	AP 7632
Radio Specifications	
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, L2TPv3, Client VPN, MESH (released in a future version of WiNG), Captive Portal server, Support SNMP v1, v2c, v3
Data Rates Supported	802.11b/g: 1,2,5.5,11,6,9,12,18,24,36,48 and 54 Mbps; 802.11a: 6,9,12,18,24,36,48, and 54 Mbps; 802.11n: MCS 0-15 up to 300 Mbps; 802.11ac on 2G VHT MCS0-9 up to 400Mbps, 802.11ac on 5G: VHT MCS 0-9 up to 867 Mbps
Operating Channels*	2.4 GHz band: channel 1 through channel 13 5 GHz band: channel 36 through channel 165
Antenna Configuration	2X2 MIMO (transmit/receive on both antennas). Transmit power adjustment 1dB increment
Operating Frequencies	2412 to 2472 MHz, 5180 to 5825 MHz
Performance and Capacity	
Concurrent Users	256 per radio
SSID	8 per radio, 16 per AP
Certifications	
Wi-Fi Alliance (WFA)	802.11a/b/g/n/ac
Bluetooth	Bluetooth SIG listed
Regulatory	
Product Safety Certifications	IEC 60950-1, EN 60950-1, UL 60950-1, CSA 22.2 No.60950-1-03 AS/NZS 60950.1, RoHS Directive 2011/65/EU
Radio Approvals	FCC CFR 47 Part 15, Class B, ICES-003 Class B, FCC Subpart C 15.247, FCC Subpart E 15.407, RSS-247, EN 301 893, EN 300 328, EN 301 489 1 & 17, EN 50385, EN 55032 (CISPR 32), EN 60601-1-2, AS/NZS4268 + CISPR32
Maximum Total Conducted Transmit Power One Antenna Tx	
Internal Antenna (AP-7632-680B30-xx)	2.4 GHz Band: 23 dBm, 5 GHz Band: 23 dBm, BLE: 3 dBm
External Antenna (AP-7632-680B40-xx)	2.4 GHz Band: 20 dBm, 5 GHz Band: 20 dBm, BLE: 3 dBm
Maximum Total Conducted Transmit Power Two Antennas Tx	
Internal Antenna (AP-7632-680B30-xx)	2.4 GHz Band: 26 dBm, 5 GHz Band: 26 dBm, BLE: 3 dBm
External Antenna (AP-7632-680B40-xx)	2.4 GHz Band: 23 dBm, 5 GHz Band: 23 dBm, BLE: 3 dBm

*Channel availability depends on local regulatory restriction

Note: Actual available power would vary based on local regulatory requirement and actual channels used for operation.

Ordering Information

Part Number	Product Name	Product Description
37111	AP-7632-680B30-US	WiNG 802.11ac Indoor Wave 2, Access Point, 2x2:2, Dual Radio 802.11ac/abgn, internal antenna Domain: United States, Puerto Rico
37112	AP-7632-680B30-WR	WiNG 802.11ac Indoor Wave 2, Access Point, 2x2:2, Dual Radio 802.11ac/abgn, internal antenna Domain: Canada, Colombia, EMEA, Rest of World
37113	AP-7632-680B40-US	WiNG 802.11ac Indoor Wave 2, Access Point, 2x2:2, Dual Radio 802.11ac/abgn, external antenna Domain: United States, Puerto Rico
37114	AP-7632-680B40-WR	WiNG 802.11ac Indoor Wave 2, Access Point, 2x2:2, Dual Radio 802.11ac/abgn,external antenna Domain: Canada, Colombia, EMEA, Rest of World
37115	AP-7632-680B30-EG	WiNG 802.11ac Indoor Wave 2, Access Point, 2x2:2, Dual Radio 802.11ac/abgn, Internal antenna Domain: Egypt
37116	AP-7632-680B40-EG	WiNG 802.11ac Indoor Wave 2, Access Point, 2x2:2, Dual Radio 802.11ac/abgn, External antenna Domain: Egypt
37117	AP-7632-680B30-IL	WiNG 802.11ac Indoor Wave 2 Access Point, 2x2:2, Dual Radio 802.11ac/abgn,internal antenna Domain: Israel

Accessories	Part Number	Product Description
WiNG Bracket	37201	Mounting Plate Indoor APs (included in AP Box) - only order for spares
Universal Mounting Kit	KT-135628-01	Universal Mounting Kit for EWLAN AP'S (compatibly with legacy installs)
Flat Metal WiNG Bracket	37210	Flat Metal Indoor Bracket (new bracket see QIG)
Beam Clip	BRKT-000147A-01	AP 7532, AP 7522 Beam Clip (compatibly with legacy installs)
Bracket Adapters	BRKT-000167A-01	AP-7532-7522 Bracket Adapter Wall Mount
Drop Ceiling Multi-Tbar	30518	WS-MBI-DCMTR01 Indoor tool-less drop Drop Ceiling Multi-T Rail Bracket. Accommodates 9/16 in, 15/16 in and 1.5 in wide T-bars (using this option need to remove mounting plate for indoor APs)
Indoor Wall Mounting bracket	30516	WS-MBI-WALL04 - indoor wall mounting bracket (using this option - remove mounting plate for indoor APs)
PoE Mid-Span Injector	PD-3501G-ENT	Single Port 802.3AF Midspan Device
PoE Mid-Span Injector	PD-9001GR-ENT	Single Port 802.3AT Compliant Midspan
Power Supply, Wall Brick	37215	PWR 12VDC, 2A, 2.5 mm x 5.5 mm Connector

*Refer to read QIG for mounting options and instructions.

Antennas for AP 7632e

Antenna Type	Part Number	Description	Connector
Dipole			
Dipole	ML-2452-APA2-01 ML-2452-APA2-02	3dBi/4.85dBi, dual band, black (up to 3 per AP) 3dBi/4.85dBi, dual band, white (up to 3 per AP)	RP SMA male
Dipole	ML-2452-HPA5-036	3dBi/5 dBi, dual band, outdoor, white	RP SMA male
Dipole	ML-2452-HPAG4A6-01	4dBi/7.3dBi, N-type male, dual band, outdoor, white	N Male
Panel			
Polarized Panel	ML-2452-PNL6M3-N36	ML-2452-PNL6M3-N36 , 11ABGN, 120° Sector, 3-Port, 6/6 dBi, LP, CBL 36, N-Type-M Type	N Male
Polarized Panel	ML-2452-PNL9M3-036	Outdoor, 3-Port,Dual-Band, 2V 1H, 11/10.7 dBi, 75/55 deg, CBL 36, RPSMA	RP SMA male
Panel	ML-2452-PNA5-01R	Antenna: 2.4/5 GHz, Outdoor, Panel, 5 dBi, Beam Width: E-Plane: 65 degrees, H-Plane: 120 degrees, Connector Type N-Ma	N Male
Panel	ML-2452-PNA7-01R	Antenna: 2.4/5 GHz, Outdoor, Panel, 8/12 dBi, Beam Width: E-Plane: 66 degrees, H-Plane: 68 degrees, Connector Type N-Male	N Male
Patch			
Patch	ML-2452-PTA2M2-036	4dBi/5 dBi, 2 port, dual band	(2) RP SMA male
Patch	ML-2452-PTA4M4-036	4dBi/5 dBi, 4 port, dual band	(4) RP SMA male

Note: No antennas included. Please refer to WLAN Antenna Guide for antenna details and other accessories.

AP 7632 Radio Performance Summary

AP-7632-680B30-xx (Internal Antenna)

Mode	SS	Bandwidth	Max Conducted Power Per Antenna	Receiver Sensivitity
2G, DSSS,1Mbps	-	20	23	-101
2G, DSSS,11Mbps	-	20	23	-95
2G, OFDM,54Mbps	-	20	23	-82
2G, VHT MCS0	1	20	23	-94
	2	20	23	-93
2G, VHT MCS0	1	40	23	-91
	2	40	23	-90
2G, VHT MCS7	1	20	21	-79
	2	20	21	-76
2G, VHT MCS7	1	40	21	-76
	2	40	21	-73
2G, VHT MCS8	1	20	21	-74
	2	20	21	-71
2G, VHT MCS9	1	40	21	-69
	2	40	21	-68
5G, OFDM, 6Mbps	-	20	23	-94
5G, OFDM, 54Mbps	-	20	23	-82
5G, VHT MCS7	2	20	21	-75
		40	21	-73
		80	21	-70
5G, VHT MCS8	2	20	19	-72
		40	19	-69
		80	19	-66
5G, VHT MCS9	2	40	19	-66
		80	19	-63

AP 7632 Radio Performance Summary

AP-7632-680B40-xx (External Antenna)

Mode	SS	Bandwidth	Max Conducted Power Per Antenna	Receiver Sensivitity
2G, DSSS,1Mbps	-	20	20	-100
2G, DSSS,11Mbps	-	20	20	-94
2G, OFDM,54Mbps	-	20	20	-81
2G, VHT MCS0	1	20	20	-93
	2		20	-92
2G, VHT MCS0	1	40	20	-90
	2		20	-89
2G, VHT MCS7	1	20	20	-78
	2		20	-75
2G, VHT MCS7	1	40	20	-74
	2		20	-72
2G, VHT MCS8	1	20	20	-73
	2		20	-70
2G, VHT MCS9	1	40	20	-68
	2		20	-68
5G, OFDM, 6Mbps	-	20	21	-92
5G, OFDM, 54Mbps	-	20	19	-81
5G, VHT MCS7	2	20	19	-73
		40	19	-72
		80	19	-69
5G, VHT MCS8	2	20	17	-70
		40	17	-68
		80	17	-65
5G, VHT MCS9	2	40	17	-65
		80	17	-62

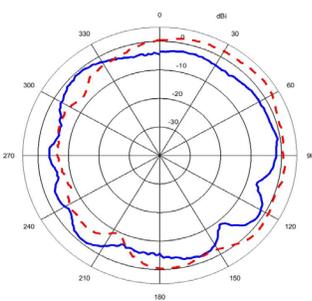# AP 7632i Antenna Patterns

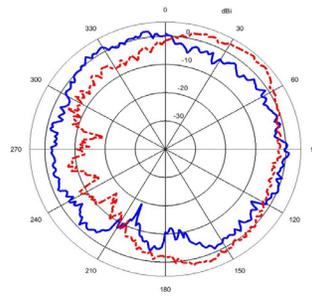*Figure 1:* AP-7632i–2.4 GHz

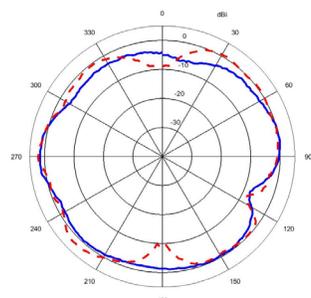*Figure 2:* AP-7632i - 5 GHz

Figure 3: AP-7632i - IoT Antenna

Legend
Solid line: Azimuth
Broken line: Elevation

Warranty

As a customer-centric company, Extreme Networks is committed to providing quality products and solutions. In the event that one of our products fails due to a defect, wehave developed a comprehensive warranty that protectsyou and provides a simple way to get your products repaired or media replaced as soon as possible. For full warranty terms and conditions please go to: support.extremenetworks.com

Service and Support

Extreme Networks provides comprehensive service offerings that range from Professional Services to design, deploy and optimization of customer networks, customized technical training, to service and support tailored to individual customer needs.

Please contact your Extreme Networks account executive for more information about Extreme Networks Service and Support.

Wi‑Fi

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