Overview

Models

HP WA2612 Single Radio 802.11n Access Point	JD445A
HP WA2620 Dual Radio 802.11n Access Point	JD472A
HP WA2610E Single Radio 802.11n Access Point	JD452A
HP WA2620E Dual Radio 802.11n Plenum Access Point	JD453A

Key features

- High throughput
- Centralized access point management
- Automatic access point version upgrades
- IPv4/IPv6 dual stack
- EAD wireless client access

Product overview

In enterprise headquarters, branch offices, or campus networks, the HP 802.11n Access Point Series is an outstanding choice for secure, reliable radio-based connections. These WLAN access points extend mobile access to wired networks, broadening system capacity and providing seamless integration between wired and wireless networks. The single-radio dual-band HP WA2612 and WA2610E Access Points use the 2.4 or 5 GHz band; the dual-radio dual-band WA2620E and WA2620 access points operate simultaneously on both bands. All of the APs support IEEE 802.11a/b/g/n, and offer data rates up to 300 Mbps when using the 802.11n standard.

Features and benefits

Management

- Centralized access point management: if the WA2600 series access point is used with an AC, most of management and data frames are processed by the AC; the AC controls all Fit APs by using the AP-AC tunnel protocol so that the status of all devices can be clearly known; compared to a traditional Fat AP, a Fit AP and an AC greatly help system administrators manage the whole network
- Automatic access point version upgrades: The WA2600 access points can automatically communicate with the AC in a network, as well as download the latest software versions to the access point; such operations do not require manual intervention, and therefore reduce network maintenance; this feature is especially important to large-sized networks

Connectivity

- Auto Channel Select (ACS): helps reduce radio co-channel interference by automatically selecting an unoccupied radio channel
- IEEE 802.11h International Telecommunication Union (ITU) compliant: employs Dynamic Frequency Selection (DFS) to automatically select another channel and adjust transmit power to reduce interference with systems such as radar, if detected on that same channel

Performance

- High throughput: the WA2600 wireless APs are compatible with latest IEEE 802.11n standard; the single-radio APs support wireless access rates as much as 300 Mbps, which is six times more than that of the traditional IEEE 802.11a/b/g products
- Dual stack: IPv4 and IPv6 support future-proofs the wireless network against obsolescence



Overview

- Gigabit Ethernet interface: provides a connection to the network that eliminates the network as a bottleneck
- QoS and Multimedia: IEEE 802.11e Wi-Fi Multimedia (WMM) wireless QoS standard—when combined with wired QoS
- policies—provides end-to-end QoS, delivering different wireless channel competitiveness for different services
- Local forwarding: provides efficient data transmission and prevents the controller from being a performance bottleneck
- Intelligent load balancing: effectively balances users between APs, increasing the capacity of the radio network

Security

- Secure user isolation: virtual AP services enable the network administrator to provide specific services for different user groups, improving bandwidth and system resources, and simplifying network maintenance and management
- Secure access by location: location AP-based user access control helps ensure that wireless users can access and authenticate only to preselected APs, enabling system administrators to control the locations where a wireless user can access the network
- Endpoint Admission Defense: integrated wired and wireless Endpoint Admission Defense (EAD) helps ensure that only wireless clients who comply with mandated enterprise security policies can access the network, reducing threat levels by infected wireless clients and improving the overall security of the wireless network
- WPA2: the latest, toughest standards-based security—with Wi-Fi Protected Access 2 (WPA2), Advanced Encryption Standard (AES) encryption, Temporal Key Integrity Protocol (TKIP), and Wired Equivalency Protocol (WEP) for legacy clients—protects the network from unauthorized user access

Ease of use

- Ease of deployment: management via the wireless controller eliminates the need to manage each AP individually
- Aesthetics: WA2612 and WA2620 access points designed with embedded antennas expand installation options and improve aesthetics
- Optional antenna connectors: provide optional external antenna connections for installations that require further distances or more ideal antenna placement
- **Power over Ethernet**: power via standards-based PoE source eliminates the need to run costly power outlets at the access point; the exception is the WA2620E access point, which requires a PoE+ power supply

Technical features

- Radio technology: IEEE 802.11a/n and 802.11g/n standards enable high-speed access from IEEE 802.11a/b/g/n clients at data rates up to 300 Mbps and cover a wide coverage area
- Radio flexibility: single and dual radio access points allow customers to deploy what fits their needs
- Interoperability: Wi-Fi Alliance certification prevents multivendor interoperability problems
- Backwards compatibility: supports high speeds while protecting existing investments
- Multiple-Input Multiple-Output (MIMO): advanced Multiple Input Multiple Output (MIMO) technology provides enhanced wireless range and coverage area for improved roaming and performance
- Virtual Access Point (VAP): VAP services enable network administrators to provide specific services for different user groups, improving bandwidth and system resources

Warranty and support

- 1-year warranty: with advance replacement and 30-calendar-day delivery (available in most countries)
- Electronic and telephone support: limited electronic and telephone support is available from HP; refer to: www.hp.com/networking/warranty for details on the support provided and the period during which support is available
- Software releases: refer to: www.hp.com/networking/warranty for details on the software releases provided and the period during which software releases are available for your product(s)



Technical Specifications

HP WA2612 Single Radie	o 802.11n Access Point (JD	445A)	
Ports	1 RJ-45 autosensing 10/100/1000 PoE port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3af PoE); Duplex: 10BASE-T/100BASE-TX: ha 1000BASE-T: full only		
	1 RJ-45 serial console (or	nly for debugging) port	
AP characteristics	Radios	Single (a/b/g/n)	
	Radio operation modes	Controlled	
	Wi-Fi Alliance Certification*	a/b/g/n Wi-Fi Certified	
	* HP access points and ac that these products have r Alliance Organization. Se	ccess devices are Wi-Fi Certified, providing our customers with the assurance net and passed the rigorous interoperability testing preformed by the Wi-Fi e the Specifications section of this series for more information.	
Physical characteristics	Dimensions	2.36(h) in. (6 cm)	
	Weight	1.1 lb. (0.5 kg)	
	Base diameter	7.48 in. (19 cm)	
	Enclosure	Indoor	
Memory and processor	128 MB SDRAM, 16 MB	flash	
Environment	Operating temperature	14°F to 131°F (-10°C to 55°C)	
	Operating relative humidity	5% to 95%, noncondensing	
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing	
Electrical characteristics	Maximum heat dissipatio	n 34 BTU/hr (35.87 kJ/hr)	
	Maximum power rating	10 W	
	Power Inputs	IEEE 802.3af PoE compliant for Gigabit Ethernet port	
	Antenna connector	none	
	Antenna	Three built-in dual-band antennas (3 x 3 MIMO). Gain 5.5 dBi, 2.4 GHz; Gain 5.1 dBi, 5.2 GHz; Gain 8.0 dBi, 5.8 GHz	
	Number of internal antennas	3	
	Number of external antennas	0	
	Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers.	
Frequency band and operating channels	FCC	2.412 - 2.472 GHz (1 - 11 channels) 5.180 - 5.240 GHz (36 - 48 channels) 5.260 - 5.320 GHz (52 - 64 channels) 5.500 - 5.700 GHz (100 - 116, 132, 136 140 channels) 5.745 - 5.825 GHz (149 - 165 channels)	



Technical Specific	cations					
	EN	2.412 - 2.472 GHz (1 - 13 channels) 5.180 - 5.240 GHz (36 - 48 channels) 5.260 - 5.320 GHz (52 - 64 channels) 5.500 - 5.700 GHz (100 - 140 channels)				
Radio	FCC Part 15.247 15.407	; EN 300 328; EN 301 893 (EU); RSS-210, Issue 7; RSS-Gen, Issue 2; FCC Part				
Safety	UL 60950-1; EN	60950-1; IEC 60950-1:2001 (with CB Report); CAN/CSA-C22.2 No. 60950-1				
Emissions	ANSI C63.4; FC0	C Part 15				
Immunity	EN	EN 301 489-1; EN 301 489-17				
, Medical	EN60601-1-2	,				
RF Exposure	FCC Bulletin OE1	Γ-65C; RSS-102; EN 50385				
Manaaement	The 11n FIT APs o	can be manaaed by A series access controllers.				
Notes	Maximum transm	Maximum transmit power varies by country				
Services	3-year, parts only 3-year, 4-hour or 3-year, 4-hour or 3-year, 4-hour or (UW938E) 3-year, 24x7 SW 1-year, post-warr 1-year, post-warr (HR717E) 4-year, 4-hour or 4-year, 4-hour or 4-year, 4-hour or 5-year, 4-hour or 5-year, 4-hour or 5-year, 4-hour or 5-year, 4-hour or 5-year, 4-hour or 5-year, 24x7 SW 3 Yr 6 hr Call-to- 5 Yr 6 hr Call-to- 1-year, 6 hour Ca 1-year, 24x7 soft Refer to the HP wa	 , global next-day advance exchange (UW931E) nsite, 13x5 coverage for hardware (UW932E) nsite, 24x7 coverage for hardware (UW935E) nsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates phone support, software updates (UW941E) anty, 4-hour onsite, 13x5 coverage for hardware (HR715E) anty, 4-hour onsite, 24x7 coverage for hardware (HR716E) anty, 4-hour onsite, 24x7 coverage for hardware (HR716E) anty, 4-hour onsite, 24x7 coverage for hardware (HR716E) anty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support nsite, 13x5 coverage for hardware (UW933E) nsite, 24x7 coverage for hardware (UW936E) nsite, 24x7 coverage for hardware, 24x7 software phone (UW939E) phone support, software updates (UW942E) nsite, 13x5 coverage for hardware (UW934E) nsite, 24x7 coverage for hardware (UW937E) nsite, 24x7 coverage for hardware (UW937E) nsite, 24x7 coverage for hardware (UW937E) nsite, 24x7 coverage for hardware, 24x7 software phone (UW940E) phone support, software updates (UW943E) Repair Onsite (UW945E) Repair Onsite (UW945E) Repair Onsite for hardware (HR719E) ware phone support, software updates (HR718E) 				

local HP sales office.

Technical Specifications

Radio characteristics: IEEE 802.11b/g/n, IEEE 802.11a/n (WA2612 access point)

Modulation: OFDM: BPSK @ 6/9 Mbps, QPSK @ 12/18 Mbps, 16-QAM @ 24 Mbps, 64-QAM @ 48/54 Mbps DSSS: DBPSK @ 1 Mbps, DQPSK @ 2 Mbps, and CCK @ 5.5/11 Mbps MIMO-OFDM: BPSK, QPSK, 16QAM, and 64QAM

Data rate	IEEE 802.11n 5 GHz @ 20 MHz-MCS0 Mbps	IEEE 802.11n 5 GHz @ 20 MHz-MCS7	IEEE 802.11n 5 GHz @ 20 MHz-MCS8 Mbps	IEEE 802. 5 GHz @ MHz-MC Mbps	11n 20 S15	EEE 802.11n 5 GHz @ 40 MHz-MCS0 Mbps	IEEE 802.11n 5 GHz @ 40 MHz-MCS7 Mbps
Receiver sensitivity	-94 dBm	-74 dBm	-94 dBm	-74 dBi	m	-88 dBm	-72 dBm
Transmit power	17 dBm	10 dBm	17 dBm	10 dBr	n	17 dBm	10 dBm
Data rate	IEEE 802.11n 5 GHz @ 40 MHz-MCS8 Mbps	IEEE 802.11n 5 GHz @ 40 MHz-MCS15 Mbps	IEEE 802.11n 2.4 GHz @ 20 MHz- MCS0 Mbps	IEEE 802. 2.4 GHz 20 MH: MCS7 M	11n 1 @ z- bps	EEE 802.11n 2.4 GHz @ 20 MHz- MCS8 Mbps	IEEE 802.11n 2.4 GHz @ 20 MHz- MCS15 Mbps
Receiver sensitivity	-88 dBm	-72 dBm	-94 dBm	-74 dBi	m	-94 dBm	-74 dBm
Transmit power	17 dBm	10 dBm	19 dBm	11 dBr	n	19 dBm	11 dBm
Data rate	IEEE 802.11n 2.4 GHz @ 40 MHz- MCS0 Mbps	IEEE 802.1 2.4 GHz (40 MHz- MCS7 Mb	1n IEEE 8 @ 2.4 . 40 ps MCS	802.11n GHz @ MHz- 58 Mbps	IEEE 8 2.4 (40 MCS1	802.11n GHz @ MHz- 5 Mbps	IEEE 802.11a- 6 Mbps
Receiver sensitivity	-88 dBm	-72 dBm	-88	8 dBm	-72	2 dBm	-92 dBm
Transmit power	19 dBm	11 dBm	19	9 dBm	11	dBm	17 dBm
Data rate	IEEE 802.11a- 54 Mbps	IEEE 802.1 1 Mbps	1b- IEEE 8 11	302.11b- Mbps	IEEE 8 6 N	02.11g- Mbps	IEEE 802.11g- 54 Mbps
Receiver sensitivity	-76 dBm	-94 dBm	-88	8 dBm	-92	2 dBm	-76 dBm
Transmit power	13 dBm	19 dBm	19	9 dBm	17	dBm	15 dBm

HP WA2620 Dual Radio 802.11n Access Point (JD472A)

Ports	1 RJ-45 autosensing 10/100/1000 PoE port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BAS TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3af PoE); Duplex: 10BASE-T/100BASE-TX: half or full 1000BASE-T: full only			
	1 RJ-45 serial console (on	ly for debugging) port		
AP characteristics	Radios	Dual (a/b/g/n)		
	Radio operation modes	Controlled		
	Wi-Fi Alliance Certification*	a/b/g/n Wi-Fi Certified		
	* HP access points and ac that these products have n Alliance Organization. See	cess devices are Wi-Fi Certified, providing our customers with the assurance net and passed the rigorous interoperability testing preformed by the Wi-Fi e the Specifications section of this series for more information.		
Physical characteristics	Dimensions	7.76(d) x 7.76(w) x 1.77(h) in. (19.7 x 19.7 x 4.5 cm)		
	Weight	2.2 lb. (1 kg)		
	Enclosure	Indoor		
Memory and processor	128 MB SDRAM, 16 MB f	lash		
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)		



HP WA-802.11n Access Point Series

Technical Specifications

	Operating relative humidity	5% to 95%, noncondensing		
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)		
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing		
Electrical characteristics	Maximum heat dissipation	44 BTU/hr (46.42 kJ/hr)		
	Maximum power rating	13 W		
	Power Inputs	IEEE 802.3af PoE compliant for Gigabit Ethernet port		
	Antenna connector	3 RP-SMA (optional for JD455A)		
	Antenna	2 x 3 MIMO. Gain 4.0 dBi, 2.4 GHz; Gain 3.3dBi, 5.2 GHz; Gain 3.0 dBi, 5.8 GHz		
	Number of internal antennas	6		
	Number of external antennas	0		
	Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers.		
Frequency band and operating channels	FCC	2.412 - 2.472 GHz (1 - 11 channels) 5.180 - 5.240 GHz (36 - 48 channels) 5.260 - 5.320 GHz (52 - 64 channels) 5.500 - 5.700 GHz (100 - 116, 132, 136 140 channels) 5.745 - 5.825 GHz (149 - 165 channels)		
	EN	2.412 - 2.472 GHz (1 - 13 channels) 5.180 - 5.240 GHz (36 - 48 channels) 5.260 - 5.320 GHz (52 - 64 channels) 5.500 - 5.700 GHz (100 - 140 channels)		
Radio	FCC Part 15.247; EN 300 328; EN 301 893 (EU); RSS-210, Issue 7; RSS-Gen, Issue 2; FCC Part 15 407			
Safety	UL 60950-1; EN 60950-1	; IEC 60950-1:2001 (with CB Report); CAN/CSA-C22.2 No. 60950-1		
Emissions	ANSI C63.4; FCC Part 15			
Immunity	EN	EN 301 489-1; EN 301 489-17		
Medical	EN60601-1-2			
RF Exposure	FCC Bulletin OET-65C; RSS-102; EN 50385			
Management	The 11n FIT APs can be me	anaged by A series access controllers.		
Notes	Maximum transmit power v	raries by country.		
Services	3-year, parts only, global r 3-year, 4-hour onsite, 13x 3-year, 4-hour onsite, 24x 3-year, 4-hour onsite, 24x (UW938E) 3-year, 24x7 SW phone su 1-year, post-warranty, 4-ha 1-year, post-warranty, 4-ha 1-year, post-warranty, 4-ha (HR717E)	next-day advance exchange (UW931E) 5 coverage for hardware (UW932E) 7 coverage for hardware (UW935E) 7 coverage for hardware, 24x7 SW phone support and SW updates pport, software updates (UW941E) pur onsite, 13x5 coverage for hardware (HR715E) pur onsite, 24x7 coverage for hardware (HR716E) pur onsite, 24x7 coverage for hardware, 24x7 software phone support		



Technical Specifications

4-year, 4-hour onsite, 13x5 coverage for hardware (UW933E)
4-year, 4-hour onsite, 24x7 coverage for hardware (UW936E)
4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW939E)
4-year, 24x7 SW phone support, software updates (UW942E)
5-year, 4-hour onsite, 13x5 coverage for hardware (UW934E)
5-year, 4-hour onsite, 24x7 coverage for hardware (UW937E)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW940E)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW940E)
5-year, 24x7 SW phone support, software updates (UW943E)
3 Yr 6 hr Call-to-Repair Onsite (UW944E)
4 Yr 6 hr Call-to-Repair Onsite (UW945E)
5 Yr 6 hr Call-to-Repair Onsite (UW946E)
1-year, 6 hour Call-To-Repair Onsite for hardware (HR719E)
1-year, 24x7 software phone support, software updates (HR718E)

Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Radio characteristics: IEEE 802.11b/g/n, IEEE 802.11a/n (WA2620 access point)

Modulation: OFDM: BPSK @ 6/9 Mbps, QPSK @ 12/18 Mbps, 16-QAM @ 24 Mbps, 64-QAM @ 48/54 Mbps DSSS: DBPSK @ 1 Mbps, DQPSK @ 2 Mbps, and CCK @ 5.5/11 Mbps MIMO-OFDM: BPSK, QPSK, 16QAM, and 64QAM

Data rate	IEEE 802.11n 5 GHz @ 20 MHz-MCS0 Mbps	IEEE 802.11n 5 GHz @ 20 MHz-MCS7 Mbps	IEEE 802.11n 5 GHz @ 20 MHz-MCS8 Mbps	IEEE 802. 5 GHz @ MHz-MCS Mbps	11n IEEE 802.11r 20 5 GHz @ 40 515 MHz-MCS0 Mbps	IEEE 802.11n 5 GHz @ 40 MHz-MCS7 Mbps
Receiver sensitivity	-94 dBm	-74 dBm	-94 dBm	-74 dBr	n -88 dBm	-72 dBm
Transmit power	18 dBm	16 dBm	18 dBm	16 dBn	n 18 dBm	16 dBm
Data rate	IEEE 802.11n 5 GHz @ 40 MHz-MCS8 Mbps	IEEE 802.11n 5 GHz @ 40 MHz-MCS15 Mbps	IEEE 802.11n 2.4 GHz @ 20 MHz- MCS0 Mbps	IEEE 802. 2.4 GHz 20 MHz MCS7 MB	11n IEEE 802.11r @ 2.4 GHz @ - 20 MHz- pps MCS8 Mbps	IEEE 802.11n 2.4 GHz @ 20 MHz- MCS15 Mbps
Receiver sensitivity	-88 dBm	-72 dBm	-94 dBm	-74 dBr	n -94 dBm	-74 dBm
Transmit power	18 dBm	16 dBm	19 dBm	17 dBn	n 19 dBm	17 dBm
Data rate	IEEE 802.11n 2.4 GHz @ 40 MHz- MCS0 Mbps	IEEE 802.1 2.4 GHz (40 MHz- MCS7 Mb	1n IEEE 8 @ 2.4 0 . 40 ps MCS	302.11n GHz @ MHz- 8 Mbps	IEEE 802.11n 2.4 GHz @ 40 MHz- MCS15 Mbps	IEEE 802.11a- 6 Mbps
Receiver sensitivity	-88 dBm	-72 dBm	ı -88	3 dBm	-72 dBm	-92 dBm
Transmit power	19 dBm	17 dBm	19	dBm	17 dBm	21 dBm
Data rate	IEEE 802.11a- 54 Mbps	IEEE 802.1 1 Mbps	1b- IEEE 8 11	802.11b- Mbps	IEEE 802.11g- 6 Mbps	IEEE 802.11g- 54 Mbps
Receiver sensitivity	-76 dBm	-94 dBm	-86	6 dBm	-92 dBm	-76 dBm
Transmit power	19 dBm	22 dBm	22	dBm	22 dBm	20 dBm

HP WA2610E Single Radio 802.11n Access Point (JD452A)



Technical Specification	ons		
Ports	1 RJ-45 autosensing 10/100/1000 PoE port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BAS TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3af PoE); Duplex: 10BASE-T/100BASE-TX: half or full 1000BASE-T: full only		
	1 RJ-45 serial console (on	ly for debugging) port	
AP characteristics	Radios	Single (a/b/g/n)	
	Radio operation modes	Controlled	
	Wi-Fi Alliance Certification*	a/b/g/n Wi-Fi Certified	
	* HP access points and ac that these products have n Alliance Organization. See	ccess devices are Wi-Fi Certified, providing our customers with the assurance net and passed the rigorous interoperability testing preformed by the Wi-Fi e the Specifications section of this series for more information.	
Physical characteristics	Dimensions	8.27(d) x 5.91(w) x 1.38(h) in. (21 x 15 x 3.5 cm)	
	Weight	2.65 lb. (1.2 kg)	
	Enclosure	Indoor, plenum	
Memory and processor	128 MB SDRAM, 16 MB f	lash	
Environment	Operating temperature	14°F to 149°F (-10°C to 65°C)	
	Operating relative humidity	5% to 95%, noncondensing	
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing	
Electrical characteristics	Maximum heat dissipation	n 44 BTU/hr (46.42 kJ/hr)	
	Maximum power rating	13 W	
	Power Inputs	IEEE 802.3af PoE compliant for Gigabit Ethernet port	
	Antenna connector	3 RP-SMA	
	Antenna	3 x 3 MIMO. Gain 2 dBi, 2.4 GHz; Gain 3 dBi, 5.2 GHz; Gain 3 dBi, 5.8 GHz omnidirectional	
	Number of external antennas	3	
	Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers.	
Frequency band and operating channels	FCC	2.412 - 2.472 GHz (1 - 11 channels) 5.180 - 5.240 GHz (36 - 48 channels) 5.260 - 5.320 GHz (52 - 64 channels) 5.500 - 5.700 GHz (100 - 116, 132, 136 140 channels) 5.745 - 5.825 GHz (149 - 165 channels)	
	EN	2.412 - 2.472 GHz (1 - 13 channels) 5.180 - 5.240 GHz (36 - 48 channels) 5.260 - 5.320 GHz (52 - 64 channels) 5.500 - 5.700 GHz (100 - 140 channels)	
Radio	FCC Part 15.247; EN 300 15.407	0 328; EN 301 893 (EU); RSS-210, Issue 7; RSS-Gen, Issue 2; FCC Part	
Safety	UL 2043; UL 60950-1; EN 60950-1; IEC 60950-1:2001 (with CB Report); CAN/CSA-C22.2 No.		

60950-1

Technical Specifications

Emissions	ANSI C63.4; FCC Part 15	
Immunity	EN	EN 301 489-1; EN 301 489-17
Medical	EN60601-1-2	
RF Exposure	FCC Bulletin OET-65C; RS	SS-102
Management	The 11n FIT APs can be me	anaged by A series access controllers.
Notes	Maximum transmit power v	varies by country.
Services	3-year, parts only, global r 3-year, 4-hour onsite, 13x; 3-year, 4-hour onsite, 24x; 3-year, 4-hour onsite, 24x; (UW938E) 3-year, 24x7 SW phone su 1-year, post-warranty, 4-ha 1-year, post-warranty, 4-ha 1-year, post-warranty, 4-ha 1-year, post-warranty, 4-ha 1-year, post-warranty, 4-ha 1-year, post-warranty, 4-ha 1-year, 4-hour onsite, 13x; 4-year, 4-hour onsite, 24x; 4-year, 4-hour onsite, 24x; 4-year, 4-hour onsite, 13x; 5-year, 4-hour onsite, 13x; 5-year, 4-hour onsite, 24x; 5-year, 24x7 SW phone su 3 Yr 6 hr Call-to-Repair O 4 Yr 6 hr Call-to-Repair O 1-year, 6 hour Call-To-Rep 1-year, 24x7 software pho	next-day advance exchange (UW931E) 5 coverage for hardware (UW932E) 7 coverage for hardware (UW935E) 7 coverage for hardware, 24x7 SW phone support and SW updates repport, software updates (UW941E) bur onsite, 13x5 coverage for hardware (HR715E) bur onsite, 24x7 coverage for hardware (HR716E) bur onsite, 24x7 coverage for hardware, 24x7 software phone support 5 coverage for hardware (UW933E) 7 coverage for hardware (UW936E) 7 coverage for hardware, 24x7 software phone (UW939E) 19port, software updates (UW942E) 5 coverage for hardware (UW934E) 7 coverage for hardware (UW937E) 7 coverage for hardware, 24x7 software phone (UW940E) 19port, software updates (UW943E) 7 coverage for hardware, 24x7 software phone (UW940E) 19port, software updates (UW943E) 10 coverage for hardware (UW937E) 11 coverage for hardware (UW943E) 12 coverage for hardware (UW943E) 13 coverage for hardware (UW943E) 14 coverage for hardware (UW943E) 15 coverage for hardware (UW943E) 16 coverage for hardware (UW943E) 17 coverage for hardware (UW943E) 18 coverage for hardware (UW943E) 19 coverage for hardware (UW943E) 19 coverage for hardware (UW943E) 10 coverage for hardware (UW943E) 10 coverage for hardware (UW943E) 10 coverage for hardware (UW943E) 11 coverage for hardware (UW943E) 12 coverage for hardware (UW943E) 13 coverage for hardware (UW943E) 14 coverage for hardware (UW943E) 15 coverage for hardware (UW943E) 16 coverage for hardware (UW943E) 17 coverage for hardware (UW943E) 18 coverage for hardware (HR719E) 19 ne support, software updates (HR718E) 20 coverage for hardware (HR718E)

Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Radio characteristics: IEEE 802.11b/g/n, IEEE 802.11a/n (WA2610E access point)

Modulation: OFDM: BPSK @ 6/9 Mbps, QPSK @ 12/18 Mbps, 16-QAM @ 24 Mbps, 64-QAM @ 48/54 Mbps DSSS: DBPSK @ 1 Mbps, DQPSK @ 2 Mbps, and CCK @ 5.5/11 Mbps MIMO-OFDM: BPSK, QPSK, 16QAM, and 64QAM

Data rate	IEEE 802.11n 5 GHz @ 20 MHz-MCS0 Mbps	IEEE 802.11n 5 GHz @ 20 MHz-MCS7 Mbps	IEEE 802.11n 5 GHz @ 20 MHz-MCS8 Mbps	IEEE 802.11n 5 GHz @ 20 MHz-MCS15 Mbps	IEEE 802.11n 5 GHz @ 40 MHz-MCS0 Mbps	IEEE 802.11n 5 GHz @ 40 MHz-MCS7 Mbps
Receiver sensitivity	-94 dBm	-76 dBm	-92 dBm	-74 dBm	-90 dBm	-74 dBm
Transmit power	23 dBm	17 dBm	23 dBm	17 dBm	23 dBm	17 dBm
Data rate	IEEE 802.11n 5 GHz @ 40 MHz-MCS8 Mbps	IEEE 802.11n 5 GHz @ 40 MHz-MCS15 Mbps	IEEE 802.11n 2.4 GHz @ 20 MHz- MCS0 Mbps	IEEE 802.11n 2.4 GHz @ 20 MHz- MCS7 Mbps	IEEE 802.11n 2.4 GHz @ 20 MHz- MCS8 Mbps	IEEE 802.11n 2.4 GHz @ 20 MHz- MCS15 Mbps
Receiver sensitivity	-89 dBm	-70 dBm	-95 dBm	-78 dBm	-94 dBm	-76 dBm
Transmit power	23 dBm	17 dBm	23 dBm	16 dBm	23 dBm	16 dBm



Technical Specifications

Data rate	IEEE 802.11n 2.4 GHz @ 40 MHz- MCS0 Mbps	IEEE 802.11n 2.4 GHz @ 40 MHz- MCS7 Mbps	IEEE 802.11n 2.4 GHz @ 40 MHz- MCS8 Mbps	IEEE 802.11n 2.4 GHz @ 40 MHz- MCS15 Mbps	IEEE 802.11a- 6 Mbps		
Receiver sensitivity	-89 dBm	-74 dBm	-89 dBm	-72 dBm	-94 dBm		
Transmit power	23 dBm	16 dBm	23 dBm	16 dBm	22 dBm		
Data rate	IEEE 802.11a- 54 Mbps	IEEE 802.11b- 1 Mbps	IEEE 802.11b- 11 Mbps	IEEE 802.11g- 6 Mbps	IEEE 802.11g- 54 Mbps		
Receiver sensitivity	-81 dBm	-95 dBm	-90 dBm	-95 dBm	-82 dBm		
Transmit power	19 dBm	23 dBm	23 dBm	23 dBm	20 dBm		
HP WA2620E Dual Radio	o 802.11n Plenum Acces	s Point (JD453A)					
Ports	1 RJ-45 auto-negotiatir TX, IEEE 802.3ab Type only	ng 10/100/1000 1000BASE-T); Du	port (IEEE 802.3 Typ plex: 10BASE-T/100	e 10BASE-T, IEEE 80 BASE-TX: half or full;	2.3u Type 100BASE- 1000BASE-T: full		
	1 RJ-45 serial console	(only for debuggin	g) port				
AP characteristics	Radios	Dual (a/b/g/ı	n)				
	Radio operation mode	s Controlled	Controlled				
	Wi-Fi Alliance Certification*	a/b/g/n Wi-F	i Certified				
	* HP access points and that these products hav Alliance Organization.	access devices ar e met and passed See the Specificati	e Wi-Fi Certified, pro the rigorous interope ions section of this se	viding our customers erability testing prefor ries for more informa	with the assurance med by the Wi-Fi tion.		
Physical characteristics	Dimensions	8.27(d) x 5.9	1(w) x 1.38(h) in. (21	x 15 x 3.5 cm)			
	Weight	2.87 lb. (1.3	kg)				
	Enclosure	Indoor, plenu	im				
Memory and processor	128 MB SDRAM, 16 M	DRAM, 16 MB flash					
Environment	Operating temperature	14°F to 149°F (-10°C to 65°C)					
	Operating relative humidity	5% to 95%, r	noncondensing				
	Nonoperating/Storage temperature	-40°F to 158	°F (-40°C to 70°C)				
	Nonoperating/Storage relative humidity	5% to 95%, r	noncondensing				
Electrical characteristics	Maximum heat dissipa	tion 55 BTU/hr (5	8.03 kJ/hr)				
	Maximum power rating	j 16 W					
	Power Inputs	IEEE 802.3at	(draft 2) PoE+ comp	liant for Gigabit Ethe	rnet port		
	Antenna connector	6 RP-SMA					
	Antenna	3 x 3 MIMO. GHz omnidire	Gain 2 dBi, 2.4 GH ectional	z; Gain 3 dBi, 5.2 Gl	Hz; Gain 3 dBi, 5.8		
	Number of external antennas	6					



Technical Specifications

	Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers.				
Frequency band and operating channels	FCC	2.412 - 2.472 GHz (1 - 11 channels) 5.180 - 5.240 GHz (36 - 48 channels) 5.260 - 5.320 GHz (52 - 64 channels) 5.500 - 5.700 GHz (100 - 116, 132, 136 140 channels) 5.745 - 5.825 GHz (149 - 165 channels)				
	EN	2.412 - 2.472 GHz (1 - 13 channels) 5.180 - 5.240 GHz (36 - 48 channels) 5.260 - 5.320 GHz (52 - 64 channels) 5.500 - 5.700 GHz (100 - 140 channels)				
Radio	FCC Part 15.247; EN 15.407	300 328; EN 301 893 (EU); RSS-210, Issue 7; RSS-Gen, Issue 2; FCC Part				
Safety	UL 2043; UL 60950-1 60950-1	; EN 60950-1; IEC 60950-1:2001 (with CB Report); CAN/CSA-C22.2 No.				
Emissions	ANSI C63.4; FCC Par	15				
Immunity	EN	EN 301 489-1; EN 301 489-17				
Medical	EN60601-1-2					
RF Exposure	FCC Bulletin OET-650	C; RSS-102				
Manaaement	The 11n FIT APs can b	The 11n FIT APs can be managed by A series access controllers				
Notes	Maximum transmit pov	ver varies by country				
Services	3-year, parts only, glot 3-year, 4-hour onsite, 3-year, 4-hour onsite, 3-year, 4-hour onsite, (UW938E) 3-year, 24x7 SW phon 1-year, post-warranty, 1-year, post-warranty, 1-year, post-warranty, (HR717E) 4-year, 4-hour onsite, 4-year, 4-hour onsite, 4-year, 4-hour onsite, 5-year, 4-hour onsite, 5-year, 4-hour onsite, 5-year, 4-hour onsite, 5-year, 4-hour onsite, 5-year, 24x7 SW phon 3 Yr 6 hr Call-to-Repai 4 Yr 6 hr Call-to-Repai 1-year, 6 hour Call-To 1-year, 24x7 software	al next-day advance exchange (UW931E) 13x5 coverage for hardware (UW932E) 24x7 coverage for hardware (UW935E) 24x7 coverage for hardware, 24x7 SW phone support and SW updates e support, software updates (UW941E) 4-hour onsite, 13x5 coverage for hardware (HR715E) 4-hour onsite, 24x7 coverage for hardware (HR716E) 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support 13x5 coverage for hardware (UW933E) 24x7 coverage for hardware (UW936E) 24x7 coverage for hardware, 24x7 software phone (UW939E) e support, software updates (UW942E) 13x5 coverage for hardware (UW934E) 24x7 coverage for hardware (UW937E) 24x7 coverage for hardware (UW943E) ir Onsite (UW944E) ir Onsite (UW944E) ir Onsite (UW945E) ir Onsite (UW946E) -Repair Onsite for hardware (HR719E) phone support, software updates (HR718E)				
	Refer to the HP website	at: www.hp.com/networking/services for details on the service-level description				

Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.



Technical Specifications

Radio characteristics: IEEE 802.11b/g/n, IEEE 802.11a/n (WA2620E access point)

Modulation: OFDM: BPSK @ 6/9 Mbps, QPSK @ 12/18 Mbps, 16-QAM @ 24 Mbps, 64-QAM @ 48/54 Mbps DSSS: DBPSK @ 1 Mbps, DQPSK @ 2 Mbps, and CCK @ 5.5/11 Mbps MIMO-OFDM: BPSK, QPSK, 16QAM, and 64QAM

Data rate	IEEE 802.11n 5 GHz @ 20 MHz-MCS0 Mbps	IEEE 802.11n 5 GHz @ 20 MHz-MCS7 Mbps	IEEE 802.11 5 GHz @ 2 MHz-MCS8 Mbps	n IEEE 802 0 5 GHz @ 3 MHz-MC Mbp:	.11n IEE 9 20 5 (CS15 M s	E 802.11n GHz @ 40 Hz-MCS0 Mbps	IEEE 802.11n 5 GHz @ 40 MHz-MCS7 Mbps
Receiver sensitivity	-94 dBm	-76 dBm	-92 dBm	-74 dE	Sm .	.90 dBm	-74 dBm
Transmit power	23 dBm	17 dBm	23 dBm	17 dB	m	23 dBm	17 dBm
Data rate	IEEE 802.11n 5 GHz @ 40 MHz-MCS8 Mbps	IEEE 802.11n 5 GHz @ 40 MHz-MCS15 Mbps	IEEE 802.11 2.4 GHz @ 20 MHz- MCS0 Mbp	n IEEE 802 2.4 GH 20 MH s MCS7 M	.11n IEE z@2. Iz- 2 1bps M	E 802.11n 4 GHz @ 20 MHz- CS8 Mbps	IEEE 802.11n 2.4 GHz @ 20 MHz- MCS15 Mbps
Receiver sensitivity	-89 dBm	-70 dBm	-95 dBm	-78 dE	Sm .	-94 dBm	-76 dBm
Transmit power	23 dBm	17 dBm	23 dBm	16 dB	m	23 dBm	16 dBm
Data rate	IEEE 802.11n 2.4 GHz @ 40 MHz- MCS0 Mbps	IEEE 802.1 2.4 GHz 40 MHz MCS7 Mb	1n IEE @ 2. - 2 ops Mo	E 802.11n 4 GHz @ 40 MHz- CS8 Mbps	IEEE 80: 2.4 GH 40 M MCS Mbs	2.11n 1z @ Hz- 15 os	IEEE 802.11a- 6 Mbps
Receiver sensitivity	-89 dBm	-74 dBn	ו -	89 dBm	-72 d	Bm	-94 dBm
Transmit power	23 dBm	16 dBm		23 dBm	16 dl	3m	22 dBm
Data rate	IEEE 802.11a- 54 Mbps	IEEE 802.1 1 Mbps	1b- IEEE 1	802.11b- 1 Mbps	IEEE 802 6 Mb	2.11g- ops	IEEE 802.11g- 54 Mbps
Receiver sensitivity	-81 dBm	-95 dBn	า -	90 dBm	-95 d	Bm	-82 dBm
Transmit power	19 dBm	23 dBm		23 dBm	23 dl	3m	20 dBm
Standards and protocols (applies to all products in series)	Mobility IEEE 802.11a Hig IEEE 802.11b Hig IEEE 802.11d Gla IEEE 802.11g Fur	h Speed Physical her-Speed Physic bal Harmonizatic ther Higher Data	Layer in the 5 al Layer Exten on Rate Extensio	GHz Band sion in the 2.4 n in the 2.4 GI	GHz Band Hz Band		

IEEE 802.11i Medium Access Control (MAC) Security Enhancements

IEEE 802.11n WLAN Enhancements for Higher Throughput



Accessories

HP WA-802.11n Access Point Series accessories	HP WA2620 Dual Radio 802.11n Access Point (JD472A)				
	HP 2/5GHz Ceiling MIMO 3 Antenna	JD455A			
	HP WA2610E Single Radio 802.11n Access Point (JD452A)				
	HP 2/5GHz Ceiling MIMO 3 Antenna	JD455A			
	HP WA2620E Dual Radio 802.11n Plenum Access Point (JD453A)				
	HP 2/5GHz Ceiling MIMO 6 Antenna	JD454A			

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