

INDOOR WIRELESS ACCESS POINTS · CLOUD MANAGED

W618HAP

Wi-Fi 6 AX3000 Dual-Radio Ceiling Access Point with 2.5G Uplink

Wi-Fi 6 · 802.11ax

2.5 Gigabit Uplink

High Transmit Power

802.3af PoE Powered



The W618HAP is the high-power ceiling access point in the Foreedge Wi-Fi 6 range. It pairs a 2.5 Gigabit uplink with transmit power up to 27 dBm — several decibels above the standard W618AP — so a single unit covers a larger room, or reaches through one more wall, before a second access point is needed. Dual radios deliver a combined 3000 Mbps, and the unit runs from one 802.3af PoE cable.

AX3000

Combined peak rate

2.5 GbE

Uplink port

27 dBm

Peak transmit power

1.68x

Reach vs W618AP, 5 GHz 11n

< 15 W

802.3af PoE powered

-20...55 °C

Operating range

Key Capabilities

Higher Transmit Power, Fewer Units

Up to 27 dBm on 5 GHz 802.11n and 24 dBm on 2.4 GHz. On the published figures that is 1.68 times the cell-edge reach of a W618AP — roughly 2.8 times the covered area, and in a corridor or open floor often one access point fewer per zone.

Dual-Radio Wi-Fi 6, AX3000

Independent 2.4 GHz and 5 GHz radios run at the same time for a combined 3000 Mbps — 574 Mbps and 2402 Mbps — through five internal antennas: two for 2.4 GHz and three for 5 GHz.

Intelligent Local Forwarding

Latency-sensitive traffic is switched straight onto the wired network instead of tunnelling back through the controller — decided per SSID or per user VLAN, which removes the controller as a bottleneck.

2.5 Gigabit Uplink

The WAN port negotiates 10/100/1000/2500 Mbps, so the wired link does not cap a radio that can deliver 3000 Mbps. It connects straight to a 2.5G switch port or falls back to gigabit on existing cabling.

WPA3 and Guest Authentication

WPA3-Personal, WPA3-Enterprise and WPA3-OWE alongside WPA2, WPA and WEP, plus web portal, MAC address, local account, voucher code and SMS authentication for guest networks.

Apollo Cloud and AC Management

Managed from the Foreedge Apollo cloud platform or a Foreedge access controller: configuration and backup, device status, network topology, load balancing, intelligent roaming and one-click optimisation.

Typical Applications

Hotels & serviced apartments

Student housing & campuses

Clinics & healthcare

Offices & meeting rooms

Corridors & small compartments

Built for Crowded Rooms

The four mechanisms that separate a Wi-Fi 6 access point from a Wi-Fi 5 one in a real, busy space.

OFDMA

Splits one channel into sub-channels so many clients are served concurrently instead of queuing.

Multicast to Unicast

Converts multicast video to unicast, ending the freezing caused by packet loss on wireless.

QoS and WMM

Per-WLAN, per-AP and per-client bandwidth limits with WMM priorities for voice and video.

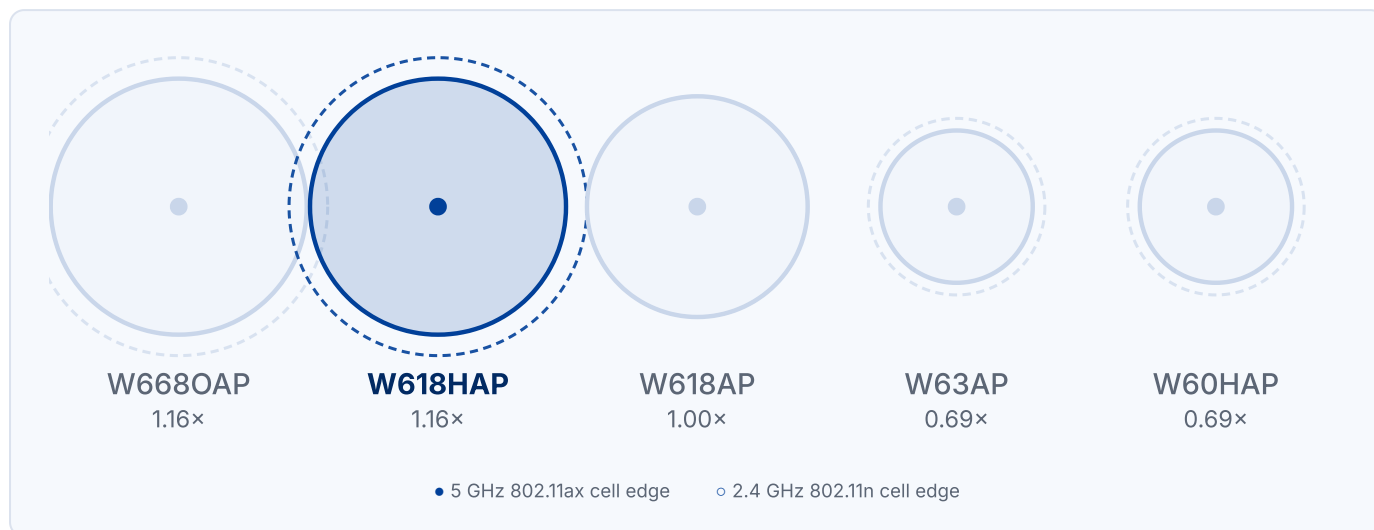
Roaming and Balancing

Intelligent roaming between APs and load balancing across them under a Foreedge AC.

Technical Specifications — Hardware

Product model	W618HAP
Wireless standards	IEEE 802.11 a/b/g/n/ac/ax — Wi-Fi 6
2.4 GHz radio	2.400 – 2.484 GHz · 802.11 b/g/n/ax
5 GHz radio	5.150 – 5.850 GHz · 802.11 a/n/ac/ax
Peak data rate	574 Mbps (2.4 GHz) + 2402 Mbps (5 GHz) — 3000 Mbps combined
Antennas	2 × internal 2.4 GHz · 3 × internal 5 GHz
Channel widths	HT20 · HT40 · HT80 · HT160
Memory	256 MB DDR · 128 MB SPI NAND flash
Mounting	Ceiling or wall
WAN port	1 × 10/100/1000/2500 Mbps adaptive · 48 V PoE input
LAN port	1 × 10/100/1000 Mbps adaptive
Button	Reset — hold 6 to 10 seconds to restore factory defaults
Status indicator	Tri-colour LED — SYS red · 2.4 GHz green · 5.8 GHz blue
Power supply	IEEE 802.3af PoE, or DC 12 V / 1.5 A
Maximum power consumption	< 15 W
Frequency deviation	± 20 ppm
EVM — 2.4 GHz	802.11b ≤ -10 dB · 802.11g ≤ -25 dB · 802.11n ≤ -28 dB · 802.11ax ≤ -35 dB
EVM — 5 GHz	802.11a ≤ -25 dB · 802.11n ≤ -28 dB · 802.11ac ≤ -32 dB · 802.11ax ≤ -35 dB
Dimensions (W×D×H)	194 × 194 × 44 mm, including bracket
Weight	Approximately 0.6 kg
Operating temperature	-20 °C to 55 °C
Storage temperature	-40 °C to 70 °C
Humidity	5 % – 95 % RH, non-condensing

Coverage & Deployment



MODEL	2.4 GHZ 11AX	5 GHZ 11AX	2.4 GHZ 11N	5 GHZ 11N
W668OAP	1.00×	1.16×	1.35×	1.68×
W618HAP	1.00×	1.16×	1.35×	1.68×
W618AP	1.00×	1.00×	1.00×	1.00×
W63AP	0.69×	0.69×	0.80×	0.74×
W60HAP	0.69×	0.69×	0.80×	0.74×

Relative reach, not absolute distance. Each figure is the ratio of cell-edge range to the W618AP, derived from the manufacturer's published transmit power at MCS0 using a distance-power loss coefficient of 31 (ITU-R P.1238, office). Doubling the reach index quadruples the covered area. Actual range depends on wall construction, ceiling height, interference and the client device — Foredge publishes no absolute coverage figure.

Deployment Guidance

SCENARIO	RECOMMENDED MODEL	DENSITY
Outdoor area, plaza, car park	W668OAP (outdoor)	One per zone — external antennas
Hotel or hospital room	W63AP / W60HAP (in-wall)	One per room
Student or staff room	W63AP / W60HAP (in-wall)	One per room
Corridor, lobby, small office	W618AP (ceiling)	One per zone
Open floor, large hall, atrium	W618HAP (ceiling)	One per zone — fewer units for the same area
Room with a wired TV or desk	Any model	LAN port on the unit feeds the wired device

Technical Specifications — Software & Management

SSID	Multi-SSID, with authentication and encryption configured per SSID
Authentication	Web portal · MAC address · local account · voucher code · SMS · PSK
Encryption	WEP 64/128-bit · WPA · WPA2 · WPA3-Personal · WPA3-Enterprise · WPA3-OWE
Access control	Standard Network Access Control (NAC) — user access, authorisation, host compliance check, network behaviour monitoring, attack detection and prevention
QoS	Per-WLAN, per-AP and per-client bandwidth limiting · Wi-Fi Multimedia (WMM) service priorities · multicast-to-unicast conversion
Forwarding	Intelligent local forwarding, pre-configured per SSID or per user VLAN through the access controller
Client recognition	Automatic identification of iOS, Android and PC clients
NAT	Network address translation between the branch LAN and the internet
Roaming & balancing	Intelligent roaming between access points and load balancing under a Foreedge AC
Management interfaces	Web interface on the AP and on the AC · Foreedge Apollo cloud platform · Foreedge access controller
Maintenance	Centralised firmware upgrade, configuration backup, device status query and topology diagrams through the AC or Apollo cloud

Ordering Information

MODEL	DESCRIPTION
W618HAP	Wi-Fi 6 AX3000 dual-radio indoor ceiling access point · 1 × 2.5 Gigabit WAN with 802.3af PoE + 1 × Gigabit LAN · ceiling or wall mount

Warranty & Support

Warranty	Two years from date of purchase
Stock & replacement	Held in Riyadh · replacement within 48 hours
Firmware	Units are supplied with the 2026 firmware that includes the Saudi Arabia regulatory region
Technical support	Pre-sales design, configuration assistance and firmware from the distributor
Country of manufacture	China — Shenzhen Fengrunda Technology Co., Ltd.

Radio Performance — Transmit Power

MODE	2.4 GHZ (DBM)	5 GHZ (DBM)
802.11b	25 @ 11M · 27 @ 1M	—
802.11a	—	19 @ 54M · 21 @ 6M
802.11g	22 @ 54M · 24 @ 6M	—
802.11n HT20	22 @ MCS7 · 24 @ MCS0	25 @ MCS7 · 27 @ MCS0
802.11n HT40	22 @ MCS7 · 24 @ MCS0	22 @ MCS7 · 24 @ MCS0
802.11ac HT20	—	22 @ MCS7 · 22 @ MCS0
802.11ac HT40	—	21 @ MCS7 · 23 @ MCS0
802.11ac HT80	—	21 @ MCS9 · 23 @ MCS0
802.11ax HT20	18 @ MCS11 · 20 @ MCS0	19 @ MCS11 · 21 @ MCS0
802.11ax HT40	18 @ MCS11 · 20 @ MCS0	19 @ MCS11 · 21 @ MCS0
802.11ax HT80	—	19 @ MCS11 · 21 @ MCS0
802.11ax HT160	—	17 @ MCS11 · 19 @ MCS0

All transmit-power figures are typical, ± 2 dBm.

Radio Performance — Receive Sensitivity

MODE	2.4 GHZ (DBM)	5 GHZ (DBM)
802.11b	-87 @ 11M · -96 @ 1M	—
802.11a	—	-74 @ 54M · -92 @ 6M
802.11g	-75 @ 54M · -93 @ 6M	—
802.11n HT20	-73 @ MCS7 · -92 @ MCS0	-73 @ MCS7 · -90 @ MCS0
802.11n HT40	-70 @ MCS7 · -89 @ MCS0	-70 @ MCS7 · -87 @ MCS0
802.11ac HT20	—	-67 @ MCS7 · -91 @ MCS0
802.11ac HT40	—	-63 @ MCS7 · -88 @ MCS0
802.11ac HT80	—	-60 @ MCS9 · -84 @ MCS0
802.11ax HT20	-64 @ MCS11 · -92 @ MCS0	-62 @ MCS11 · -91 @ MCS0
802.11ax HT40	-61 @ MCS11 · -89 @ MCS0	-59 @ MCS11 · -89 @ MCS0
802.11ax HT80	—	-56 @ MCS11 · -86 @ MCS0
802.11ax HT160	—	-53 @ MCS11 · -83 @ MCS0

Lower is better. Receive sensitivity is identical to the W618AP; the difference between the two models is transmit power and uplink speed.



Top, side, rear and port views — 194 × 194 × 44 mm including bracket

Panel Reference

WAN	2.5 Gigabit RJ45 — uplink, accepts 802.3af PoE
LAN	Gigabit RJ45 — wired client at the same location
Reset	Hold 6 to 10 seconds to restore factory defaults
Status LED	SYS red · 2.4 GHz green · 5.8 GHz blue
Mounting	Rear bracket for ceiling or wall, with screw fixings
Power	802.3af PoE on the WAN port, or DC 12 V / 1.5 A

Related Foredge Access Points

MODEL	MOUNTING	WI-FI	UPLINK PORT	LAN PORT
W668OAP	Outdoor	Wi-Fi 6 AX3000	1 × GE WAN/LAN	1 × GE
W618AP	Ceiling	Wi-Fi 6 AX3000	1 × GE WAN	1 × GE
W63AP	In-wall	Wi-Fi 6 AX3000	1 × 2.5G WAN	1 × GE
W60HAP	In-wall	Wi-Fi 6 AX3000	1 × GE WAN	1 × GE

Also held in Riyadh stock. Ask us for the matching datasheet.

Notes

- The W618HAP and the W618AP share one enclosure and one product photograph. They are distinguished by the uplink port — 2.5 Gigabit against Gigabit — and by transmit power.
- Specifications are taken from the manufacturer's published data and are subject to change without notice.
- Foredge is a trademark of Shenzhen Fengrunda Technology Co., Ltd. All other marks are the property of their respective owners.