

INDOOR WIRELESS ACCESS POINTS · CLOUD MANAGED

W668OAP

Wi-Fi 6 AX3000 Dual-Radio Outdoor Access Point

Wi-Fi 6 · 802.11ax

802.3at PoE Powered

External Antennas

-20...55 °C



The W668OAP is the outdoor member of the Foredge Wi-Fi 6 range. Two external dual-band antennas and transmit power up to 27 dBm cover a courtyard, a plaza, a car park or a work yard from a single pole, with a combined 3000 Mbps across two independent radios. One gigabit WAN/LAN port carries data and 802.3at power on the same cable, and the unit runs from -20 °C to 55 °C.

AX3000

Combined peak rate

27 dBm

Peak transmit power

2

External antennas

802.3at

PoE input

< 15 W

Power consumption

-20...55 °C

Operating range

Key Capabilities

Built for Outdoor Coverage

Two external dual-band antennas and transmit power up to 27 dBm on 5 GHz 802.11n — the same radio class as the high-power ceiling model, but with external antennas that shape the pattern across a yard, a plaza or a row of parking bays.

One Cable Does Everything

A single gigabit WAN/LAN port carries data and 802.3at power. Up a pole or under a canopy, that is one cable to pull, one gland to seal and one switch port to budget.

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.

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 — with HT160 channel support on 5 GHz.

OFDMA for High-Density Rooms

802.11ax OFDMA divides a channel into narrower sub-channels so several clients are served in one transmission. Contention and back-off fall away, cutting latency where dozens of devices share a lobby, classroom or conference room.

Apollo Cloud and AC Management

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

Typical Applications

Courtyards, plazas & parks

Car parks & work yards

Hotel pool & garden areas

Campus outdoor spaces

Wireless city and energy sites

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.

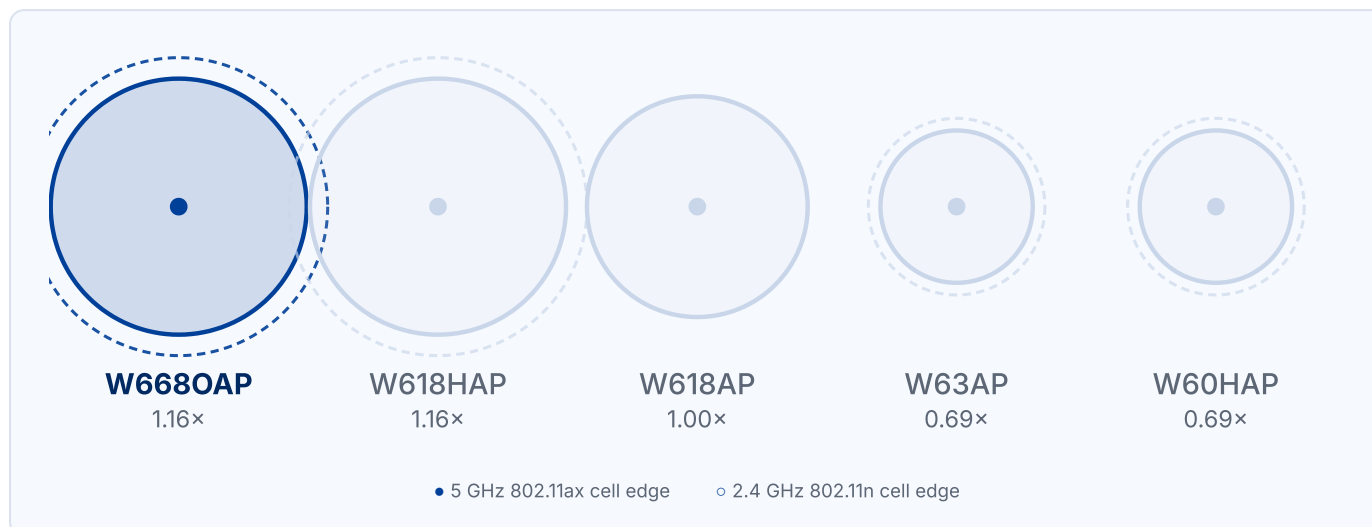
Roaming and Balancing

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

Technical Specifications — Hardware

Product model	W668OAP
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 × external 2.4 GHz / 5 GHz dual-band antennas
Channel widths	HT20 · HT40 · HT80 · HT160
Memory	256 MB DDR · 128 MB SPI NAND flash
Mounting	Pole or wall, outdoor
WAN port	1 × 10/100/1000 Mbps adaptive WAN/LAN port · 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 802.3at 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)	243 × 105.5 × 68.5 mm, including bracket
Weight	Approximately 1.6 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
W668OAP	Wi-Fi 6 AX3000 dual-radio outdoor access point · 1 × Gigabit WAN/LAN with 802.3at PoE · 2 external dual-band antennas · pole 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 matches the ceiling models; the outdoor advantage comes from transmit power and the external antennas.



W668OAP outdoor access point with external dual-band antennas — 243 × 105.5 × 68.5 mm

Panel Reference

WAN / LAN	Gigabit RJ45 — data and 802.3at PoE on one cable
Antennas	2 × external dual-band, removable
Reset	Hold 6 to 10 seconds to restore factory defaults
Status LED	SYS red · 2.4 GHz green · 5.8 GHz blue
Mounting	Pole or wall bracket, supplied
Power	802.3at PoE, or DC 12 V / 1.5 A

Related Foredge Access Points

MODEL	MOUNTING	WI-FI	UPLINK PORT	LAN PORT
W618HAP	Ceiling	Wi-Fi 6 AX3000	1 × 2.5G WAN	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 manufacturer's specification table for this model does not state an IP ingress rating. Confirm the rating with us in writing before an exposed installation.
- This model requires 802.3at PoE, not 802.3af. Check the switch budget and standard before ordering.
- The relative reach figures assume the published transmit power only. The two external antennas add gain that the manufacturer does not publish, so real outdoor reach is greater than the index shown.
- Specifications are taken from the manufacturer's published data and are subject to change without notice.
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