ORIGO

OAP1800G

AX1800 Wi-Fi 6 Dual-Band PoE Outdoor Access Point

Wi-Fi 6 (802.11ax), 2.4/5GHz, internal 8dBi antennas, 2x1000Base-T, 802.3af PoE, IP67, from -40 to 55 °C, wall/pole mounting

The OAP1800G is an outdoor dual-band AX1800 Wi-Fi 6 gigabit PoE access point.

The ORIGO OAP1800G access point is designed to build modern Wi-Fi 6 networks with high client density in government agencies, commercial organizations, educational institutions, exhibition centers, and hotel and station complexes.

The access point is adapted to operate in adverse weather conditions. The housing is protected against dust and water according to the IP67 standard. The operating temperature range is from -40 to 55ºC.

The OAP1800G supports simultaneous operation in two frequency bands and provides a maximum wireless connection speed of up to 1201Mbps in the 5GHz band and up to 574Mbps in the 2.4GHz band. OFDMA and MU-MIMO technologies ensure high speed and low latency in networks with multiple simultaneous connections. To protect data transmitted over Wi-Fi, the access point supports WPA3 encryption.

The access point is designed for wall or pole mounting. Pole mounts are included in the delivery package. Power is supplied via PoE technology from a switch or injector that supports the 802.3af standard, making it easier to install the equipment in places with power supply restrictions.

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Key Features

- AX1800 Wi-Fi 6: up to 1201Mbps in 5GHz and up to 574Mbps in 2.4GHz

- 1 gigabit WAN port, 1 gigabit LAN port

- 4 internal directional 8dBi antennas

- IP67-rated housing

- Operating temperature: from -40 to 55 °C

- Surge Protection is up to 4kV; Electrostatic Discharge Protection is up to 8kV

- 802.3af PoE power

- Wall/pole mounting

Specifications

Hardware

Processor	• MT7621AT (880MHz, dual core)
Ports	• 1 10/100/1000Base-T WAN port with PoE support • 1 10/100/1000Base-T LAN port

Antennas	• 2 internal directional 8dBi antennas for 2.4GHz
	  - Beam angle in horizontal plane: 100±10°
	  - Beam angle in vertical plane: 45±5°
	• 2 internal directional 8dBi antennas for 5GHz
	  - Beam angle in horizontal plane: 110±15°
	  - Beam angle in vertical plane: 60±15°

MIMO	• 2x2, MU-MIMO
Buttons	• Reset
Housing	• IP67 protection class
Mounting	• Wall • Pole

Wireless Module Parameters

Standards	• IEEE 802.11ax • IEEE 802.11ac Wave 2 • IEEE 802.11a/b/g/n
Frequency range	• 2.4~2.4835GHz • 5.15~5.35GHz • 5.65~5.85GHz

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Wireless connection rate	• 2.4GHz
	  - 11ax: up to 574Mbps
	  - 11n: up to 300Mbps
	  - 11g: up to 54Mbps
	  - 11b: up to 11Mbps
	• 5GHz
	  - 11ax: up to 1201Mbps
	  - 11ac: up to 867Mbps
	  - 11n: up to 300Mbps
	  - 11a: up to 54Mbps

Transmitter output power	• ≤18dBm

Receiver sensitivity	• 2.4GHz
	  - 11b (11Mbps): -82dBm
	  - 11g (54Mbps): -72dBm
	  - 11n (HT20_MCS0): -88dBm
	  - 11n (HT20_MCS7): -70dBm
	  - 11n (HT40_MCS0): -85dBm
	  - 11n (HT40_MCS7): -68dBm
	  - 11ax (HT20_MCS0): -88dBm
	  - 11ax (HT20_MCS11): -60dBm
	  - 11ax (HT40_MCS0): -85dBm
	  - 11ax (HT40_MCS11): -56dBm
	• 5GHz
	  - 11a (54Mbps): -72dBm
	  - 11n (HT20_MCS0): -89dBm
	  - 11n (HT20_MCS7): -71dBm
	  - 11n (HT40_MCS0): -86dBm
	  - 11n (HT40_MCS7): -68dBm
	  - 11ac (HT20_MCS0): -89dBm
	  - 11ac (HT20_MCS7): -66dBm
	  - 11ac (HT40_MCS0): -86dBm
	  - 11ac (HT40_MCS7): -60dBm
	  - 11ac (HT80_MCS0): -83dBm
	  - 11ac (HT80_MCS9): -57dBm
	  - 11ax (HT20_MCS0): -88dBm

	- 11ax (HT20_MCS11): -58dBm
	- 11ax (HT40_MCS0): -85dBm
	- 11ax (HT40_MCS11): -55dBm
	- 11ax (HT80_MCS0): -82dBm
	- 11ax (HT80_MCS11): -52dBm

Functionality

Operation modes	• Router • Access point
Wi-Fi functions	• MU-MIMO • OFDMA • Schedule for Wi-Fi
Wireless connection security	• Multi-SSID • MAC address filtering • SSID broadcast disable • Clients isolation • VLAN • WPA • WPA2 • WPA3
Management	• Web-based interface • Telnet

Physical Parameters

Device dimensions (L x W x H)	• 303 x 180 x 87 mm
Device weight	• 1.16 kg
Package dimensions	• 38 x 23 x 10.7 cm
Gross weight	• 1.59 kg

Operating Conditions

Power	• 802.3af PoE
Max Power Consumption	• 15W
Surge Protection	• Up to 4kV in common mode • Up to 2kV in differential mode

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Electrostatic Discharge Protection (ESD)	• Up to 4kV (contact discharge) • Up to 8kV (air discharge)
Temperature	• Operating: from -40 to 55 °C • Storage: from -40 to 70 °C
Humidity	• From 5% to 95% (non-condensing)

Package Contents

Package Contents	• Access point OAP1800G • Ethernet cable • Mounting kit • Cable gland (IP68) • Quick Installation Guide

Order Info

OAP1800G	AX1800 Wi-Fi 6 Outdoor Access Point, 2.4/5GHz, 1x1000Base-T WAN PoE, 1x1000Base-T LAN