OAP100

TIP OPEN OUTDOOR ACCESS POINT

INTRODUCTION

Edgecore OAP100 is an enterprise-grade, concurrent dual-band 802.11ac wave 2 outdoor access point, designed specifically to withstand harsh weather conditions by IP68 rated, rust-resistant plastic housing in outdoor and industrial environments. The OAP100 features 2x2:2 MU-MIMO radio that can each transmit data to multiple clients simultaneously, and together have a combined data rate of up to 1.3 Gbps. For built-in 2.4GHz and 5GHz antennas, there are two software-selectable options for different services.

OAP100's integration with Bluetooth Low Energy (BLE) enables new value-added applications such as location tracking, iBeacon, and other location-based services. Besides, with a built-in GPS receiver, IT administrators can easily keep track of the location of all deployed OAP100s, simplifying the maintenance task and adding a new potential of location-related services. Meanwhile, OAP100 also supports Long Term Evolution (LTE) to receive network service, decreasing the deployment difficulties.

The TIP open OAP100 AP hardware is pre-installed with TIP's Open AP software, saving time and hassle from software installation, but at the same time reserve the flexibility for further changes. From SMB to MDUs to larger venues, the TIP open OAP100 is a flexible hardware platform for the different network use cases and requirements.

Port Side

Antenna

HIGHLIGHTS

WI-FI

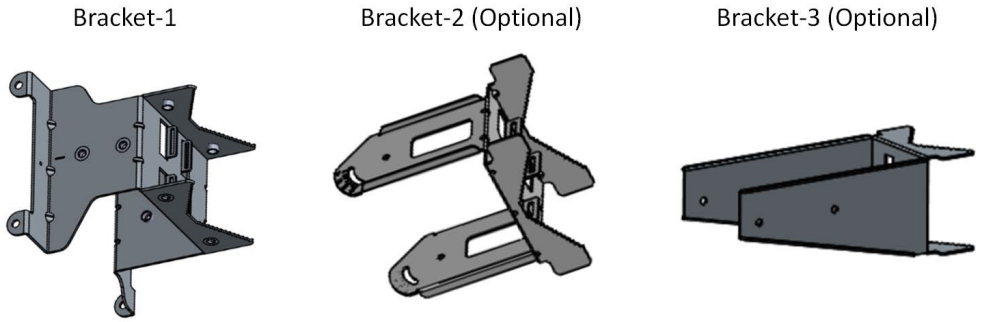
- 802.11ac 2x2 MU-MIMO
- Support up to 32 ESSIDs
- Enterprise-Grade Wireless Security

PHYSICAL

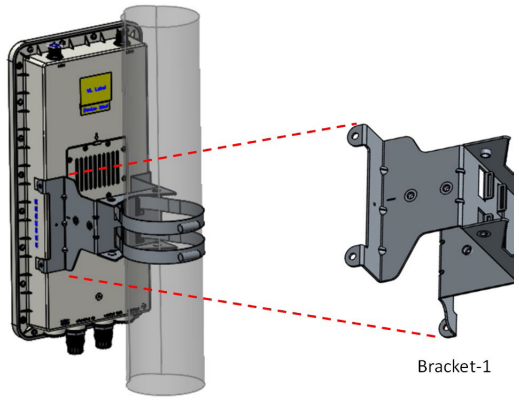
- Software Selectable Antenna for PtP/PtMP
- G-Sensor for Antenna Adjustment
- Wall, hose clamp, and uniaxial mountable
- IP68 weatherproof plastic housing
- Industrial Temperature Range
- 802.3at Power over Ethernet (PoE)
- Bluetooth Low Energy (BLE)
- Global Positioning System (GPS)
- Long Term Evolution (LTE)

HARDWARE INSTALLATION

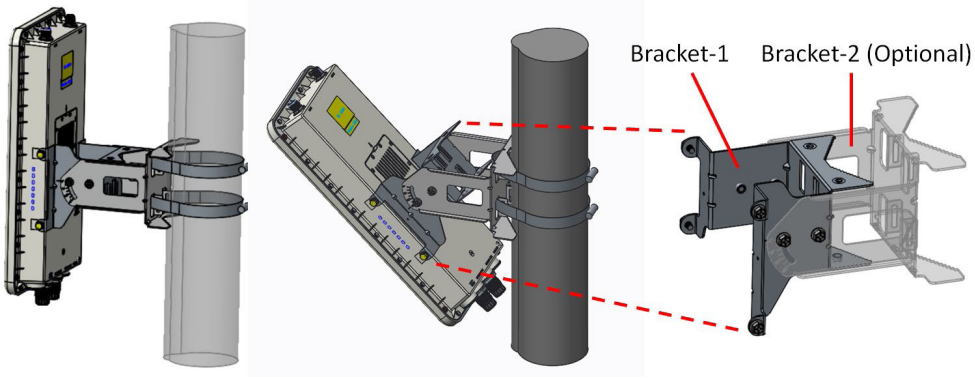
Bracket Options



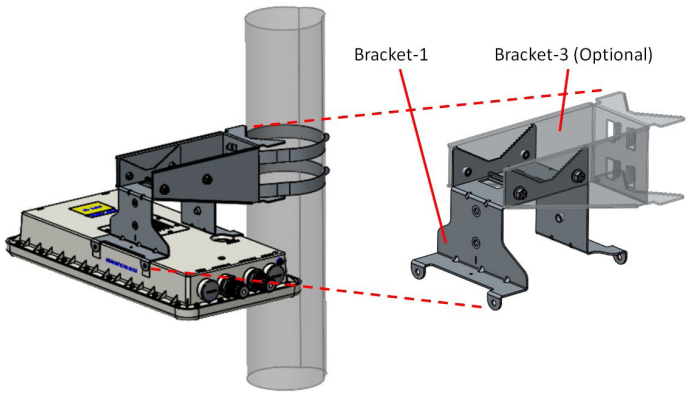
Pole Mount with Bracket-1



Pole Mount with Bracket-1 & Bracket-2



Pole Mount with Bracket-1 & Bracket-3



SPECIFICATIONS

PHYSICAL	
CPU	• IPQ4019
Flash	• NOR: 16MB • NAND: 256MB
Memory	• 512MB
Power	• DC input: 10-24V DC (DC terminal block) • PoE: 802.3at compliant
Dimensions	• 45.0 cm (L) x 23.0 cm (W) x 7 cm (H)
Weight	• 2.10 kg (4.63 lbs)
Interfaces	• Uplink (PoE In): 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3at PoE • LAN (PoE Out): 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3af PoE • Console: RJ-45
LED Indicator	• Power / System / Uplink / LAN / LTE / 2.4G / 5G
Environmental Conditions	• Operating Temperature: -40°C (-40°F) to 65°C (149°F) • Humidity: 5% to 95% non-condensing • IP68 Rating
Power Consumption	• 27.1W max.
Antenna	• Option 1: Built-in 2.4GHz Omni, 5GHz Directional with Azimuth 30° & Elevation 20° • Option 2: Built-in 2.4GHz Directional with Azimuth 130° & Elevation 30°, 5GHz Directional with Azimuth 90° & Elevation 30° • 1 x Built-in Omni (BLE) • 1 x Built-in GPS/GLONASS (GPS) • 2 x External N-type Female Connectors on OAP100 (LTE)
Antenna Gain	• Option 1: 5 dBi (2.4GHz), 15 dBi (5GHz) • Option 2: 10 dBi (2.4GHz), 10 dBi (5GHz) • 4 dBi (BLE), 2 dBi (GPS), 2 dBi (LTE)
Mounting	• Pole mount hose clamp
ESD	• IEC-61000-4-2 +/-8KV for contact discharge, +/-15KV for Air discharge (criteria B)
WI-FI	
Standards	• 802.11 ac Wave 2/a/b/g/n • Concurrent dual-band 2.4 & 5 GHz
Supported Data Rates	• 802.11b: 1, 2, 5.5, 11 Mbps • 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps • 802.11n: 6.5 – 144 Mbps (20 MHz) • 802.11n: 13.5 – 300 Mbps (40 MHz) • 802.11ac: 6.5 – 173.4 Mbps (20 MHz) • 802.11ac: 13.5 – 400 Mbps (40 MHz) • 802.11ac: 29.3 – 866.6 Mbps (80 MHz)
Radio Chains	• 2 x 2
Spatial Streams	• 2; MU-MIMO support
RF Output Power*1	• 2.4 GHz: Up to 25 dBm*2 • 5 GHz: Up to 21 dBm*2
Channelization	• 20 MHz • 40 MHz • 80 MHz
Frequency Band	• 2.412 – 2.472 GHz • 5.180 – 5.825 GHz
Operating Channels	• 2.4 GHz: 1 – 11 (US), 1 – 13 (Europe), 1 – 13 (Japan) • 5 GHz*3: 36 – 165 (US), 36 – 140 (Europe), 100 – 140 (Japan)
ESSIDs	• Up to 16 per radio (32 total)
Certifications	• FCC (United States), CE (Europe), NCC&BSMI (Taiwan)

*1: RF output power aggregates across MIMO chains and doesn't contain antenna gain
*2: Maximum power is limited by local regulatory requirements
*3: Some channels are restricted by local regulatory requirements

PERFORMANCE	
Physical Data Rate	• Up to 400 Mbps (2.4 GHz) • Up to 866 Mbps (5 GHz)
FIRMWARE	
TIP Open WiFi Ready	
PART NUMBER	
OAP100 (T)	• FI2EC0100003E-C

Contact Us

For more information, please contact us: openwifi@edge-core.com

EC Open Wi-Fi Page

https://wifi.edge-core.com/openwifi

EC Open Wi-Fi User Forum

https://openwifi.edge-core.com/

TEL: 886-3-5638888 FAX: 886-3-6686111
1, Creation Rd. III, Hsinchu Science Park, Taiwan 30077
sales@edge-core.com
www.edge-core.com