INTRODUCTION

EAP111 stands as an enterprise-grade, dual-band Wi-Fi 6 access point boasting a concurrent operation and an IP55-rated enclosure. With support for 2x2:2 uplink and downlink MU-MIMO between the access point and multiple clients, EAP111 delivers an impressive aggregated data rate of up to 3 Gbps. Notably, EAP111 comes equipped with a Bluetooth Low Energy (BLE) radio and ZigBee, enabling the integration of value-added applications such as iBeacon.

The TIP OpenWiFi AP EAP111 hardware is pre-installed with TIP’s OpenWiFi 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 OpenWiFi AP EAP111, with IP55 rating is a flexible hardware platform for various deployment environments.

HIGHLIGHTS

- Wi-Fi 6 2x2 uplink and downlink MU-MIMO with up to 3 Gbps data rate
- Support up to 32 ESSIDs.
- Enterprise-Grade Wireless Security
- Bluetooth Low Energy (BLE) and ZigBee support
- IP55 rating
# SPECIFICATIONS

## PHYSICAL

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<tr>
<td>CPU</td>
<td>MT7981A</td>
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<tr>
<td>Flash</td>
<td>256MB</td>
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<tr>
<td>Memory</td>
<td>512MB</td>
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| Power | DC Input: 12V / 2.0A (Power adapter not included)  
         PoE: 802.3at compliant (PoE injector not included) |
| Dimensions | 170 mm (L) x 185 mm (W) x 39.45 mm (H) |
| Weight | 0.63 kg |
| Interfaces | Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3at PoE  
             LAN: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 |
| LED Indicator | 1 tri-color LED: Power, Cloud Status, Uplink |
| Buttons | Restart / Reset |
| Environmental Conditions | Operating Temperature: 0°C (32°F) to 45°C (113°F)  
                             Operating Humidity: 5% to 95% non-condensing  
                             IP55 Rating |
| Power Consumption | 21.54W max. |
| Antenna | Type: Built-in antenna  
           Gain: 4.9 dBi (2.4 GHz), 5.8 dBi (5 GHz), 4 dBi (BLE) |
| Mounting | Wall/Ceiling/T-bar mount (Mounting kit included), Pole mount (Mount kit & hose clamp optional) |
| Anti-theft | 1 x Kensington lock slot |
| ESD | IEC-61000-4-2 +/-4KV for contact discharge, +/-8KV for Air discharge (criteria B) |

## WI-FI

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| Standards | 802.11a/b/g/n/ac/ax (Wi-Fi 6)  
           Concurrent dual-band 2.4 GHz & 5 GHz |
| Support 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 – 300 Mbps (20 / 40 MHz)  
                      802.11ac: 6.5 – 867 Mbps (20 / 40 / 80 MHz)  
                      802.11ax: 3.6 – 574 Mbps (2.4 GHz, 20 / 40 MHz)  
                      802.11ax: 3.6 – 2402 Mbps (5 GHz, 20 / 40 / 80 /160 MHz) |
| Radio Chains | 2.4 GHz: 2 x 2  
               5 GHz: 2 x 3 |
| Spatial Streams | 2.4 GHz: 2; MU-MIMO support  
                   5 GHz: 2; MU-MIMO support |
WI-FI

Aggregate Conducted Transmit power*1
- 2.4 GHz: 25.5dBm*2
- 5 GHz: 25dBm*2

Channelization
- 2.4 GHz: 20 / 40 MHz
- 5 GHz: 20 / 40 / 80 / 160 Mhz

Frequency Range
- 2.401 – 2.483 GHz
- 5.170 – 5.835 GHz

Operating Channels
- 2.4 GHz: 1 –11 (US), 1 –13 (Europe), 1 –13 (Japan)
- 5 GHz*3: 36 –165 (US), 36 –140 (Europe), 36 –144 (Japan)

ESSID
- Up to 16 per radio (32 total)

Certification
- FCC, IC, CE, LVD, TELEC, VCCI, NCC, BSMI

*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 574 Mbps (2.4 GHz)
- Up to 2,400 Mbps (5 GHz)

FIRMWARE

TIP OpenWiFi Ready

PART NUMBER

EAP111 (T) • TBD
131500000316A • Optional power adapter with changeable US / JP / EU / UK plugs
131500000206A • Optional POE29U-560 (30W PSE Injector)
123400001540A • Optional metal pole mount bracket
125900000249A • Optional hose clamp

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

EC OpenWiFi Page
https://wifi.edge-core.com/openwifi

EC OpenWiFi User Forum
https://community.wifi.edge-core.com/