

# EAP102

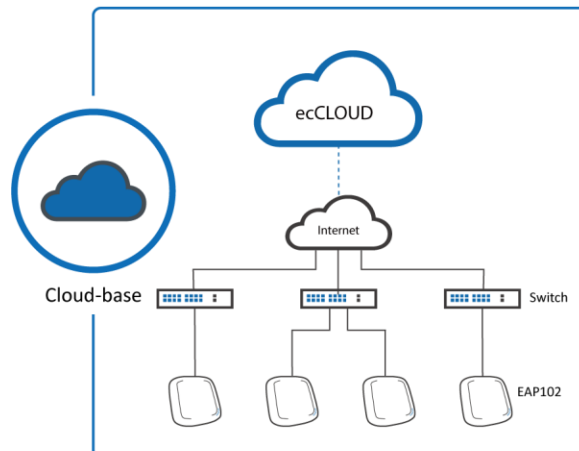
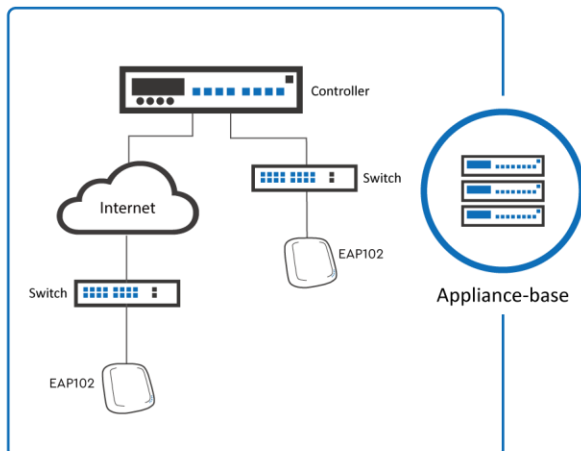
## INDOOR WI-FI 6 ACCESS POINT



### INTRODUCTION

EAP102 is an enterprise-grade, concurrent dual-band Wi-Fi 6 indoor access point. EAP102 supports 5G 4 x 4 : 4 uplink and downlink MU-MIMO between the AP and multiple clients, with up to 2.9 Gbps aggregated data rate. EAP102 is equipped with Bluetooth Low Energy (BLE) radio enabling value-added applications such as iBeacon.

EAP102 can be operated as standalone mode or managed by Edgecore ecCLOUD and EWS-Series controller.



### HIGHLIGHTS

- Concurrent Dual-Band 2.4GHz & 5GHz
- 802.11ax 4x4:4 UL MU-MIMO supporting up to 2.9 Gbps data rate
- Support up to 32 ESSIDs.
- Enterprise-Grade Wireless Security
- Bluetooth Low Energy (BLE) 5
- 802.3at Power over Ethernet (PoE)

## SPECIFICATIONS

PHYSICAL	
<b>Power</b>	<ul style="list-style-type: none"> <li>DC Input: 12V / 2.0A (Power adapter included)</li> <li>PoE: 802.3at compliant (PoE injector optional)</li> </ul>
<b>Dimensions (L x W x H)</b>	<ul style="list-style-type: none"> <li>19.5 cm x 20.1 cm x 3.98 cm (7.68 x 7.91 x 1.57 in)</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>0.7 kg (1.54 lbs)</li> </ul>
<b>Interface</b>	<ul style="list-style-type: none"> <li>Uplink: 1 x 10/100/1000/2.5GBase-T Ethernet, Auto MDIX, RJ-45 with 802.3at PoE</li> <li>LAN: 1 x 10/100/1000/2.5GBase-T Ethernet, Auto MDIX, RJ-45</li> <li>Console: 1 x RJ-45 Port</li> <li>USB: 2 x USB 2.0 Port*<sup>1</sup></li> </ul>
<b>LED Indicator</b>	<ul style="list-style-type: none"> <li>Uplink / 2.4G-WiFi / 5G-WiFi / Power</li> </ul>
<b>Buttons</b>	<ul style="list-style-type: none"> <li>Restart/ Reset</li> </ul>
<b>Environmental Conditions</b>	<ul style="list-style-type: none"> <li>Operating Temperature: 0°C (32°F) to 45°C (113°F)</li> <li>Operating Humidity: 5% to 95% non-condensing</li> </ul>
<b>Power Consumption</b>	<ul style="list-style-type: none"> <li>25W max*<sup>2</sup>.</li> </ul>
<b>Antenna</b>	<ul style="list-style-type: none"> <li>Type: 4 x Built-in antenna (2.4 GHz &amp; 5 GHz)</li> <li>Gain: 5.5dBi (2.4 GHz, BLE), 7.6 dBi (5 GHz)</li> </ul>
<b>Mounting</b>	<ul style="list-style-type: none"> <li>Wall/Ceiling/T-bar mount (Mounting kit included)</li> </ul>
WI-FI	
<b>Standards</b>	<ul style="list-style-type: none"> <li>802.11ax (Wi-Fi 6)</li> <li>Concurrent dual-band 2.4 &amp; 5 GHz</li> </ul>
<b>Supported Data Rates</b>	<ul style="list-style-type: none"> <li>802.11b: 1, 2, 5.5, 11 Mbps</li> <li>802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps</li> <li>802.11n: 6.5 –300 Mbps (20 / 40 MHz)</li> <li>802.11ac: 6.5 –1733 Mbps (20 / 40 / 80 MHz)</li> <li>802.11ax: 3.6 –574 Mbps (2.4 GHz, 20 / 40 MHz)</li> <li>802.11ax: 3.6 –2400 Mbps (5 GHz, 20 / 40 / 80 MHz)</li> </ul>
<b>Radio Chains</b>	<ul style="list-style-type: none"> <li>2.4 GHz: 2 x 2</li> <li>5 GHz: 4 x 4</li> </ul>
<b>Spatial Streams</b>	<ul style="list-style-type: none"> <li>2.4 GHz: 2; MU-MIMO support</li> <li>5 GHz: 4; MU-MIMO support</li> </ul>
<b>Aggregate Conducted Transmit Power*<sup>3</sup></b>	<ul style="list-style-type: none"> <li>2.4 GHz: Up to 23 dBm*<sup>4</sup></li> <li>5 GHz: Up to 26 dBm*<sup>4</sup></li> </ul>
<b>Channelization</b>	<ul style="list-style-type: none"> <li>2.4 GHz: 20 / 40 MHz</li> <li>5 GHz: 20 / 40 / 80Mhz</li> </ul>

\*1: One USB port work at a time

\*2: 22W when powered by DC

\*3: RF output power aggregates across MIMO chains and doesn't contain antenna gain

\*4: Maximum power is limited by local regulatory requirements

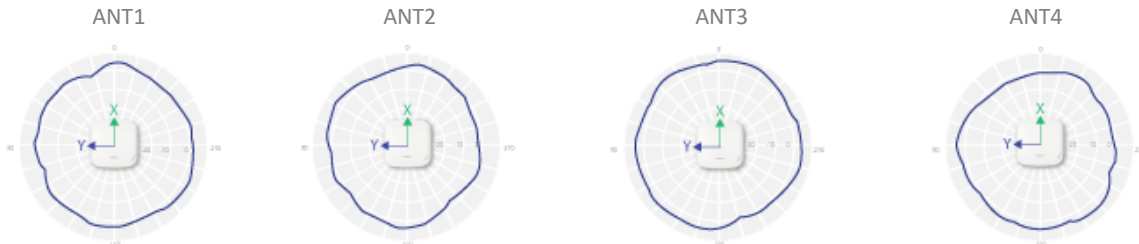
WI-FI	
<b>Frequency Range</b>	<ul style="list-style-type: none"> <li>• 2.400 – 2.483 GHz</li> <li>• 5.150 – 5.850 GHz</li> </ul>
<b>Operating Channels</b>	<ul style="list-style-type: none"> <li>• 2.4 GHz: 1 –11 (US), 1 –13 (Europe), 1 –13 (Japan)</li> <li>• 5 GHz*5: 36 –165 (US), 36 –140 (Europe), 36 –144 (Japan)</li> </ul>
<b>ESSIDs</b>	<ul style="list-style-type: none"> <li>• Up to 16 per radio (32 total)</li> </ul>
<b>Certifications</b>	<ul style="list-style-type: none"> <li>• FCC, CE, LVD, NCC, BSMI, VCCI, JATE, TELEC, IC, C-Tick, Philippines, Thailand</li> </ul>
PERFORMANCE	
<b>Physical Data Rate</b>	<ul style="list-style-type: none"> <li>• Up to 574 Mbps (2.4 GHz)</li> <li>• Up to 2400 Mbps (5 GHz)</li> </ul>
FEATURES	
<b>Wireless</b>	<ul style="list-style-type: none"> <li>• 802.11 k/r</li> <li>• Orthogonal Frequency Division Multiple Access (OFDMA)</li> <li>• Client Isolation</li> <li>• Open Mesh</li> </ul>
<b>Network</b>	<ul style="list-style-type: none"> <li>• Spanning Tree Protocol (STP)</li> <li>• Dynamic Host Configuration Protocol (DHCP)</li> <li>• 802.1q</li> <li>• Access Control List (ACL)</li> <li>• Network Address Translation (NAT)</li> <li>• Dynamic VLAN</li> <li>• Link Layer Discovery Protocol (LLDP)</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>• WPA-Personal (AES)</li> <li>• WPA-Enterprise (AES)</li> <li>• WPA2-Personal (AES)</li> <li>• WPA2-Enterprise (AES)</li> <li>• WPA3-Personal (AES)</li> <li>• WPA3-Personal Transition (AES)</li> <li>• WPA3-Enterprise (AES)</li> <li>• WPA3-Enterprise transition (AES)</li> <li>• MAC Address Authentication</li> </ul>
<b>Maintenance</b>	<ul style="list-style-type: none"> <li>• Network Time Protocol (NTP)</li> <li>• Standalone</li> <li>• Management by ecCLOUD</li> <li>• Management by EWS-Series Controller (Complete tunnel)</li> <li>• SSH</li> <li>• QR Code Onboarding</li> <li>• SNMP v2c</li> <li>• Remote Syslog</li> </ul>
<b>QoS</b>	<ul style="list-style-type: none"> <li>• RSSI Threshold (Optimal Client Filtering)</li> </ul>
<b>Others</b>	<ul style="list-style-type: none"> <li>• iBeacon</li> </ul>

\*5: Some channels are restricted by local regulatory requirements and certifications

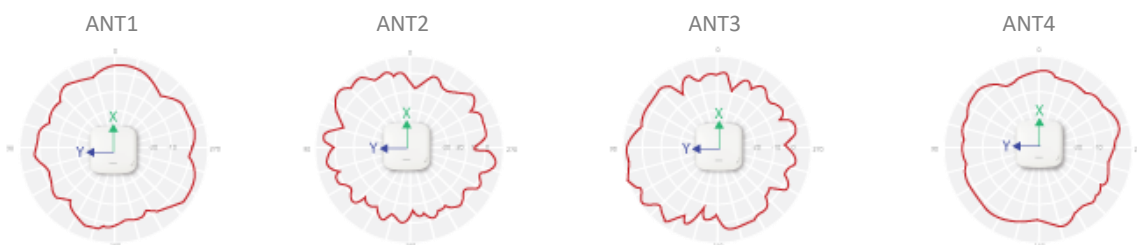
**SIGNAL COVERAGE PATTERN**

**Azimuth**

■ 2.4 GHz/ BLE

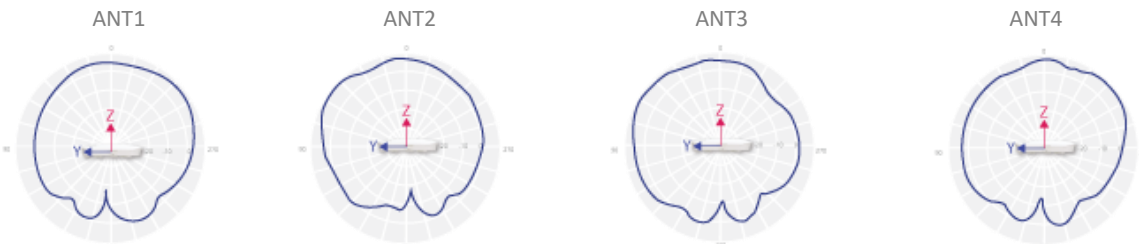


■ 5 GHz

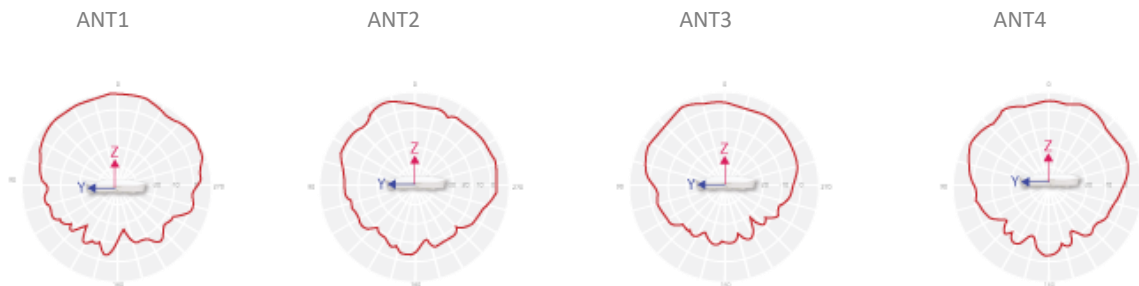


**Elevation**

■ 2.4 GHz/ BLE



■ 5 GHz



**RECEIVE SENSITIVITY**

Operating Mode	Data Rate	Receive Sensitivity (dBm)
802.11b	1 Mbps	-96
	11 Mbps	-88
802.11a	6 Mbps	-90
	54 Mbps	-72
802.11g	6 Mbps	-91
	54 Mbps	-75
802.11n (2.4 GHz/HT20)	MCS0	-90
	MCS7	-71
802.11n (2.4 GHz/HT40)	MCS0	-87
	MCS7	-68
802.11n (5 GHz/HT20)	MCS0	-89
	MCS7	-70
802.11n (5 GHz/HT40)	MCS0	-86
	MCS7	-67
802.11ac (VHT20)	MCS0	-90
	MCS8	-69
802.11ac (VHT40)	MCS0	-88
	MCS9	-64
802.11ac (VHT80)	MCS0	-85
	MCS9	-61
802.11ax (2.4 GHz/HE20)	MCS0	-92
	MCS11	-62
802.11ax (2.4 GHz/HE40)	MCS0	-89
	MCS11	-60
802.11ax (5 GHz/HE20)	MCS0	-90
	MCS11	-58
802.11ax (5 GHz/HE40)	MCS0	-87
	MCS11	-55
802.11ax (5 GHz/HE80)	MCS0	-85
	MCS11	-56