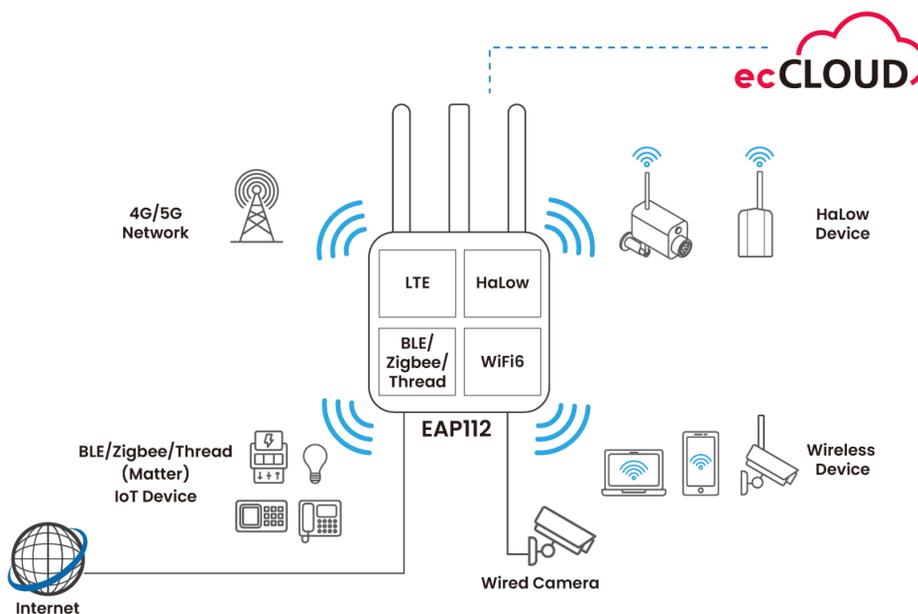


EAP112

WI-FI 6 IoT Gateway

EAP112 stands out as an enterprise-grade IoT Gateway, incorporating Wi-Fi 6, HaLow, BLE, Zigbee, Thread, and LTE technologies to drive advanced AI solutions. EAP112 supports Wi-Fi 6 2x2 uplink and downlink MU-MIMO, delivering an impressive up to 3Gbps data rate within its IP65-rated enclosure. With Bluetooth Low Energy (BLE) radio, ZigBee, Thread, and HaLow capabilities, EAP112 facilitates the implementation of value-added applications like iBeacon and Matter, fostering seamless communication among diverse IoT devices. The inclusion of Wi-Fi HaLow addresses the need for long-range, low-rate data transmission, while the additional LTE interface serves as an alternative uplink connection to the internet. EAP112 offers the flexibility to operate in standalone mode or under the management of Edgecore ecCLOUD or the ecCLOUD-VPC controller.



HIGHLIGHTS

- Wi-Fi 6 2x2 uplink and downlink MU-MIMO with up to 3 Gbps data rate
- Support OpenRoaming
- Wi-Fi HaLow for long-range application and large-scale IoT network
- Support 4G LTE Cat 6 as the alternative uplink interface to the internet
- Support Bluetooth Low Energy (BLE), ZigBee, Thread
- Support up to 32 ESSIDs
- Enterprise-Grade Wireless Security
- IP65 rating

SPECIFICATIONS**PHYSICAL**

Power	<ul style="list-style-type: none"> DC Input: 12V (Power adapter not included) PoE: 802.3at/af compliant (PoE injector not included)
Dimensions	<ul style="list-style-type: none"> 210 mm (L) x 195 mm (W) x 40 mm (H)
Weight	<ul style="list-style-type: none"> 1.14 Kg
Interface	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Power/Wifi, LTE, HaLow
Buttons	<ul style="list-style-type: none"> Restart / Reset
Environmental Conditions	<ul style="list-style-type: none"> Operating Temperature: -30°C to 50°C Operating Humidity: 5% to 95% non-condensing IP65 Rating
Power Consumption	<ul style="list-style-type: none"> 13.8 W max.
Antenna	<ul style="list-style-type: none"> Wi-Fi 6: Built-in, 4.9 dBi at 2.4GHz, 5.8 dBi at 5GHz BLE: Built-in, 5.2 dBi LTE: External SMA, 3 dBi HaLow: External SMA, 2 dBi
Mounting	<ul style="list-style-type: none"> Wall / Ceiling mount (Mounting kit included) Pole mount (Mount kit & hose clamp optional)
Anti-theft	<ul style="list-style-type: none"> 1 x Kensington lock slot

WI-FI

Standards	<ul style="list-style-type: none"> 802.11a/b/g/n/ac/ax (Wi-Fi 6) Concurrent dual-band 2.4 & 5 GHz
Data Rates	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 2.4GHz: 2 x 2 ; 5GHz: 3 x 3
Spatial Streams	<ul style="list-style-type: none"> 2; Uplink and downlink MU-MIMO support
Aggregate Conducted Transmit Power*1	<ul style="list-style-type: none"> 2.4 GHz: Up to 25.5 dBm*2 5 GHz: Up to 25 dBm*2
Channelization	<ul style="list-style-type: none"> 2.4 GHz: 20 / 40 MHz 5 GHz: 20 / 40 / 80 / 160 MHz
Frequency Range	<ul style="list-style-type: none"> 2.401 – 2.483 GHz 5.170 – 5.835 GHz
Operating Channels	<ul style="list-style-type: none"> 2.4 GHz: 1-11 (US), 1-13 (Europe, Japan) 5 GHz*3 : 36-165 (US), 36-140 (Europe), 36-144 (Japan)
Physical Data Rate	<ul style="list-style-type: none"> Up to 574 Mbps (2.4 GHz) Up to 2402 Mbps (5 GHz)
ESSIDs	<ul style="list-style-type: none"> Up to 16 per radio (32 total)
Certifications	<ul style="list-style-type: none"> FCC, CE, LVD, TELEC, VCCI, RCM, TEC

*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 and certifications.

HaLow

Standards	<ul style="list-style-type: none"> • 802.11ah
Frequency Range	<ul style="list-style-type: none"> • 850-950 MHz (country dependent)
Channel Bandwidth	<ul style="list-style-type: none"> • 1 / 2 / 4 / 8 MHz
Data Rates	<ul style="list-style-type: none"> • Up to 32.5 Mbps @8MHz or 15 Mbps @4MHz (single-stream)
Output Power	<ul style="list-style-type: none"> • Up to 21 dBm

LTE

Standards	<ul style="list-style-type: none"> • 4G LTE Cat 6
Frequency Bands	<p>LTE</p> <ul style="list-style-type: none"> • LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71 • LTE-TDD: B34/B38/B39/B40/B41/B42/B43/B46 (LAA)/B48 (CBRS) • DL 2CA: Intra-band and Inter-band • DL 64QAM: Supported • UL 16QAM: Supported <p>UMTS</p> <ul style="list-style-type: none"> • WCDMA: B1/B2/B3/B4/B5/B6/B8/B19 <p>GNSS</p> <ul style="list-style-type: none"> • GPS/GLONASS/BeiDou (COMPASS)/Galileo
Data Rates (Max.)	<p>LTE</p> <ul style="list-style-type: none"> • 300 Mbps (DL); 50 Mbps (UL) <p>UMTS</p> <ul style="list-style-type: none"> • DC-HSDPA: 42 Mbps (DL) • DC-HSUPA: 11.2 Mbps (UL) • WCDMA: 384 kbps (DL); 384 kbps (UL)

*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 and certifications.

FEATURES	
Wireless	<ul style="list-style-type: none"> • 802.11 k/v/r • Orthogonal Frequency Division Multiple Access (OFDMA) • Client Isolation • BSS Coloring • Band Steering • Wi-Fi Enhanced Open (OWE) • Wireless Site Survey • Airtime Fairness • U-APSD • Interference Detection
Network	<ul style="list-style-type: none"> • Spanning Tree Protocol (STP) • Dynamic Host Configuration Protocol (DHCP) • 802.1q • Access Control List (ACL) • Network Address Translation (NAT) • Dynamic VLAN • Link Layer Discovery Protocol (LLDP) • Smart Isolation • IPv6 compatible • Proxy ARP
Security	<ul style="list-style-type: none"> • WPA-Personal (AES), WPA-Enterprise (AES) • WPA2-Personal (AES), WPA2-Enterprise (AES) • WPA3-Personal (AES), WPA3-Personal Transition (AES) • WPA3-Enterprise transition (AES), WPA3-Enterprise transition (AES) • Multi Pre-Shared Key (MPSK) • Dynamic Pre-Shared Key (DPSK) • MAC Address Authentication • L3 Firewall • OWE (Opportunistic Wireless Encryption)
Operation Mode	<ul style="list-style-type: none"> • Bridge mode • NAT mode
Maintenance	<ul style="list-style-type: none"> • Network Time Protocol (NTP) • Standalone • Management by ecCLOUD • Management by ecCLOUD-VPC • SSH • Remote Syslog • SNMP v1/v2c/v3 • Zero Touch Provisioning (ZTP)
QoS	<ul style="list-style-type: none"> • RSSI Threshold (Optimal Client Filtering) • Multicast-to-Unicast Conversion • WME
Mobility	<ul style="list-style-type: none"> • OpenRoaming (Hotspot 2.0 R1)
IoT	<ul style="list-style-type: none"> • iBeacon • Thread Border Gateway • Matter discovery and onboarding • OTA upgrade
Others	<ul style="list-style-type: none"> • Target Wake Time (TWT) • Hotspot Captive Portal • Dynamic Authorization (DAE)

ORDERING INFORMATION

Part Number	Description	Remark
FI2WLP112402A	EAP112 with Wi-Fi, Halow, and LTE for US	EAP112 (FCC)
FI2WLP112001E	EAP112 with Wi-Fi, Halow, and LTE for Japan	EAP112 (JP)
FI2WLP112007E	EAP112 with Wi-Fi, Halow, and LTE for Europe	EAP112 (CE)
FI2WLP112401A	EAP112 with Wi-Fi and Halow for US	EAP112-H (FCC)
FI2WLP112002E	EAP112 with Wi-Fi and Halow for Japan	EAP112-H (JP)
FI2WLP112008E	EAP112 with Wi-Fi and Halow for Europe	EAP112-H (CE)
FI2WLP112003E	EAP112 with Wi-Fi and LTE for global	EAP112-L (WW)
131500000316A	Optional power adapter with changeable US / JP / EU / UK plugs	
131500000258A	Optional US/JP power adapter	Quantities of 96 in a carton
131500000259A	Optional EU power adapter	Quantities of 72 in a carton
131500000262A	Optional UK power adapter	Quantities of 72 in a carton
FINAC7212001X	Optional metal pole mount bracket	ICC-BRACKET-WPM