REDCELL TECHNOLOGIES

DATASHEET

Indoor Wi-Fi 6 access point

Edgecore EAP101

Wi-Fi 6. No subscription.

A dual-band Wi-Fi 6 access point with two extra LAN ports, built for guest rooms, offices and classrooms that need solid coverage at a sensible price. RedCell designs, pre-provisions and supports it from the US.



1.7 Gbps
Max aggregate data rate

2 bands
2.4 and 5 GHz, concurrent

2.5GbE
PoE+ uplink, plus 2 GbE LAN ports

BLE
Built-in radio for iBeacon and presence

OVERVIEW

Proven Wi-Fi 6 for rooms, offices and classrooms.

The EAP101 runs 2.4 and 5 GHz side by side with 2×2 MU-MIMO and OFDMA, so busy rooms stay connected. Two extra LAN ports wire a TV, phone or desktop at the same spot. It runs standalone or under ecCLOUD and EWS controllers, with no license that has to stay paid for it to keep working.

Dual-band Wi-Fi 6

2.4 and 5 GHz concurrently, 2×2 MU-MIMO on each band, 80 MHz channels on 5 GHz.

Up to 1.7 Gbps aggregate

574 Mbps on 2.4 GHz and 1,200 Mbps on 5 GHz.

2.5GbE PoE+ uplink, plus 2 LAN ports

802.3at PoE input on a 2.5GbE port, and two GbE ports for wired devices.

Guest-network ready

WPA3, MPSK, captive portal, OpenRoaming (Hotspot 2.0 R1) and client isolation.

BLE radio built in

Bluetooth Low Energy for iBeacon and presence-detection apps.

Manage it your way

Standalone, Edgecore ecCLOUD or EWS controllers, with QR-code onboarding.

SPECIFICATIONS

Full specifications.

HARDWARE & PHYSICAL	
Power	12 V / 2.0 A DC (adapter included) 802.3at PoE (injector not included)
Power consumption	22.4 W max
Uplink port	1 × 10/100/1000/2.5GBASE-T RJ-45, auto MDI-X, 802.3at PoE in
LAN ports	2 × 10/100/1000BASE-T RJ-45, auto MDI-X
Console & USB	1 x RJ-45 console; 1 x USB 2.0
Dimensions	195 × 195 × 39 mm (7.68 × 7.68 × 1.54 in)
Weight	0.65 kg (1.44 lb)
LED / buttons	2.4 GHz, 5 GHz and power LEDs; restart/reset button
Antenna	3 built-in; 4.8 dBi (2.4 GHz), 6 dBi (5 GHz), 4.6 dBi (BLE)
Mounting	Wall, ceiling or T-bar; mounting kit included
Anti-theft	Kensington lock slot
Operating environment	0 to 50 °C (32 to 122 °F); 5–95% RH non-condensing
Certifications	FCC, CE, LVD, NCC, BSMI, VCCI, JATE, TELEC, IC, C-Tick

WI-FI & RADIO	
Standards	802.11ax (Wi-Fi 6), concurrent 2.4 and 5 GHz
Radio chains	2×2
Spatial streams	2; MU-MIMO
Supported data rates	802.11b: 1–11 Mbps · 802.11a/g: 6–54 Mbps 802.11n: 6.5–300 Mbps · 802.11ac: 6.5–867 Mbps 802.11ax: 3.6–574 Mbps (2.4 GHz) · 3.6–1,200 Mbps (5 GHz)
Channel widths	2.4 GHz: 20/40 · 5 GHz: 20/40/80 MHz
Conducted TX power[1]	Up to 26 dBm (2.4 GHz), 26 dBm (5 GHz)[2]
Frequency range	2.400–2.483 · 5.150–5.850 GHz
Operating channels	2.4 GHz: 1–11 (US) · 5 GHz: 36–165 (US)[3]
SSIDs	Up to 16 per radio (32 total)

[1] Aggregated across MIMO chains, excluding antenna gain. [2] Maximum power limited by local regulations. [3] Some channels restricted by local regulations and certifications.

PERFORMANCE & FEATURES

Software and performance.

574 Mbps
Physical data rate, 2.4 GHz

1,200 Mbps
Physical data rate, 5 GHz

32 SSIDs
Up to 16 per radio

Wireless

- 802.11k/v/r
- OFDMA
- Client isolation
- Open Mesh
- BSS coloring
- Band steering
- Wi-Fi Enhanced Open (OWE)
- Wireless site survey

Network

- Spanning Tree Protocol (STP)
- DHCP and DHCP relay
- 802.1Q and dynamic VLAN
- Access control lists (ACL)
- NAT
- LLDP
- Smart isolation
- IPv6 compatible
- Proxy ARP

Security

- WPA/WPA2/WPA3 Personal and Enterprise (AES)
- WPA3 transition modes
- Multi pre-shared key (MPSK)
- Dynamic pre-shared key (DPSK)
- MAC address authentication
- DHCP snooping and ARP inspection
- Layer 3 firewall

Management

- Standalone
- Edgecore ecCLOUD and ecCLOUD-VPC
- EWS-Series controllers (complete or split tunnel)
- Zero-touch provisioning and QR-code onboarding
- SSH, SNMP v1/v2c/v3, remote syslog, NTP
- Discovery tool

QoS & mobility

- RSSI threshold (optimal client filtering)
- Multicast-to-unicast conversion
- WME
- OpenRoaming (Hotspot 2.0 R1)

Other

- Target Wake Time (TWT)
- iBeacon
- Hotspot captive portal
- Dynamic authorization (DAE)
- BLE and Zigbee radios

USE CASES

Where the EAP101 fits.

Hospitality: rooms that need wired ports

Two LAN ports serve the TV and phone at the same spot, and per-room keys with MPSK keep guest traffic separate.

Multi-site restaurants & retail

VLAN support and captive portal keep POS, staff and guest traffic apart at every location, managed from one view.

Education

OFDMA and MU-MIMO keep a classroom of laptops connected, with WPA3-Enterprise for staff and students.

Sports & venues

Suites, offices and meeting rooms. For concourses and open-air areas, RedCell specs the outdoor OAP101.

Warehousing: offices and break rooms

A good fit for conditioned indoor space (0–50 °C). For docks and yards, RedCell specs the outdoor OAP101.

Offices & multi-tenant buildings

Dependable Wi-Fi 6 for offices and shared buildings, managed from ecCLOUD or an on-site controller.

REDCELL SUPPORT

The hardware is half the story.

01

Design.

Network and RF design reviews so access points land where coverage and capacity need them.

02

Pre-provision.

Units configured before they ship, so your installers hang them and go.

03

Support.

Advanced support from US-based engineers, plus firmware and configuration help across your whole fleet.

30-DAY EDGECORE TRIAL

Test it on your network before you buy.

We ship you an Edgecore access point and a PoE switch, configured by RedCell for your network. Run them for 30 days with a US-based engineer on call, then decide.

Request your trial: **redcelltechnologies.com/contact · 813 885 2600**

Specifications from Edgecore Networks' published EAP101 datasheet and product page; subject to change. Edgecore is a trademark of Edgecore Networks Corporation.