ECW100
INDOOR ACCESS POINT

INTRODUCTION

The ECW100 is a concurrent dual-band 802.11ac in-wall access point designed specifically for enhancing your traditional Ethernet/telephone outlets with Wi-Fi capabilities. It provides a Gigabit LAN port for your network devices and a pass-through telephone port for supporting telephone, modems and ADSL connections. Featuring two 2x2 MIMO radios, the ECW100 can simultaneously support up to 300 and 867 Mbps data rates in the 2.4 and 5 GHz bands respectively.

When the ECW100 is deployed and centrally managed by an Edgecore EWS Controller, additional value-added applications such as bandwidth control, user authentication, and captive portals can be used to provide an ideal solution for all types of businesses.

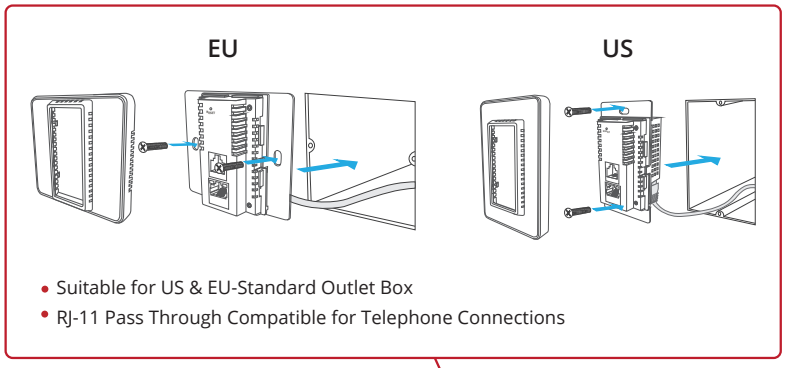
HIGHLIGHTS

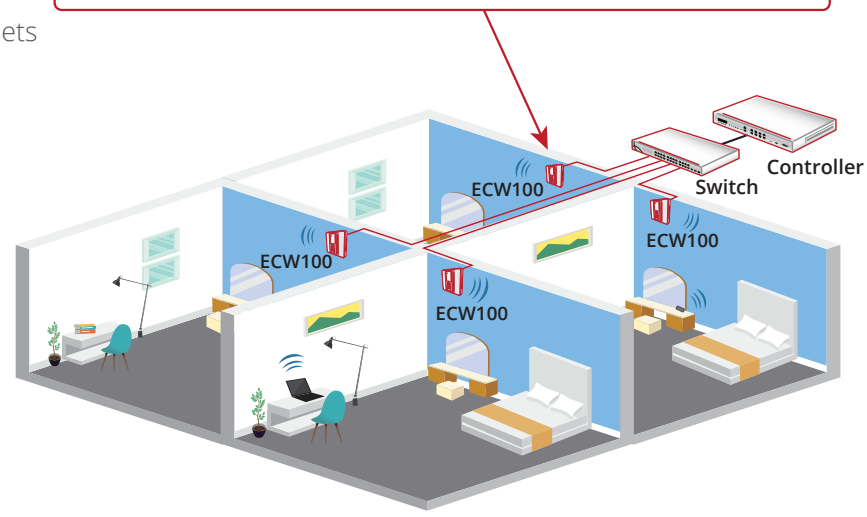
WI-FI

- Concurrent Dual-Band 2.4 & 5 GHz
- 2x2 MIMO supporting up to 1.2 Gbps data rate
- Support up to 16 ESSIDs.
- Enterprise-grade Wireless Security

PHYSICAL

- Simple Installation & Easy Per-room Deployment
- In-wall Design for US or EU standard outlets
- 802.3af PoE Uplink Port
- RJ-11 Pass-through Port





MANAGEMENT WITH EDGECORE WLAN CONTROLLER

- Captive Portal & Guest Provisioning
- Fast Layer 2 / Layer 3 roaming
- User-based Access Management
  - Bandwidth Control
  - Firewall Policies
  - Routing Policies
- Wi-Fi Monetization

SPECIFICATIONS

PHYSICAL	
Power	• PoE: 802.3af compliant (PoE injector optional)
Dimensions	• US: 4.0 cm (L) x 7.0 cm (W) x 11.5 cm (H) • EU: 4.0 cm (L) x 8.5 cm (W) x 8.5 cm (H)
Weight	• 125 g (0.275 lbs)
Interfaces	• Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3af PoE • LAN: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 • Bypass: 1 x RJ-11 (front) and 1 x RJ-11 (back)
LED Indicators	• Power • 1 x LAN Status (100 Mbps) • 1 x LAN Status (1 Gbps)
Buttons	• Restart / Reset
Environmental Conditions	• Operating Temperature: 0°C (32°F) to 40°C (104°F) • Operating Humidity: 0% to 90% non-condensing
Power Consumption	• 8W max.
Antenna	• Type: 2 x Built-in (2 x 2.4 GHz, 2 x 5 GHz) • Gain: 2 dBi (2.4 GHz), 3.5 dBi (5 GHz)
Mounting	• In-Wall (Mounting plate included)
Tamperproof Mounting Kit Lock	
WI-FI	
Standards	• 802.11 a/b/g/n/ac • 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
RF Output Power*[1]	• 2.4 GHz: Up to 10 dBm*[2] • 5 GHz: Up to 10 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), 36 – 140 (Japan)
ESSIDs	• Up to 8 per radio (16 total)
PERFORMANCE	
Physical Data Rate	• Up to 300 Mbps (2.4 GHz) • Up to 867 Mbps (5 GHz)
Concurrent Users	• Up to 200 (100 on 2.4 GHz, 100 on 5 GHz)

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

QUALITY OF SERVICE

Wireless QoS (802.11e/WMM)	
DSCP (802.1p)	
Multicast to Unicast Conversion	
Optimal Client Filtering	

MANAGEMENT

Deployment	• Standalone • Tunneled management by Edgecore EWS Controller • IPv4 compatible • LLDP
Configuration	• Web User Interface (HTTP/HTTPS) • SNMP v1, v2c, v3

SECURITY

Wireless Security	• WEP • WPA/WPA2 Mixed (TKIP/AES Mixed) • WPA2-Personal (AES) • WPA2-Enterprise (AES)
VLAN Tagging (802.1Q)	
Station Isolation	
DHCP Snooping	
Layer-2 Firewall	

MOBILITY/ROAMING

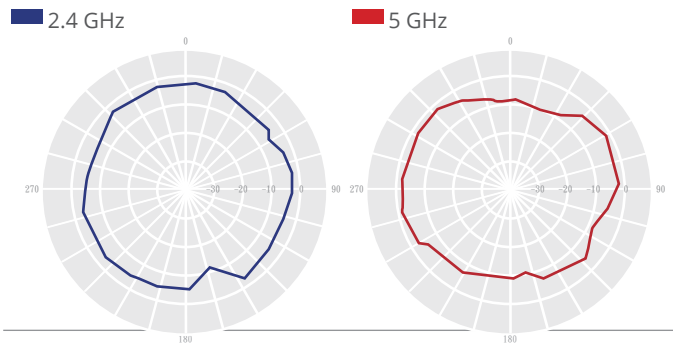
802.1X Preauthentication	
Layer 2/Layer 3 Fast Roaming	

RECEIVE SENSITIVITY

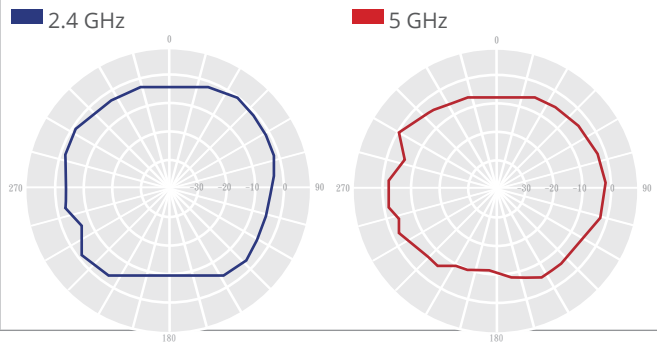
Operating Mode	Data Rate	Receive Sensitivity (dBm)
802.11b	1 Mbps	-91
	11 Mbps	-84
802.11a	6 Mbps	-86
	54 Mbps	-69
802.11g	6 Mbps	-86
	54 Mbps	-69
802.11n (HT20)	MCS0	-85
	MCS7	-68
	MCS8	-85
	MCS15	-66
802.11n (HT40)	MCS0	-84
	MCS7	-65
	MCS8	-84
	MSC15	-63
802.11ac (VHT20)	MCS0	-85
	MCS8	-65
802.11ac (VHT40)	MCS0	-84
	MCS9	-60
802.11ac (VHT80)	MCS0	-80
	MCS9	-54

SIGNAL COVERAGE PATTERN

H-plane (Horizontal)



E-plane (Vertical)



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