





Omada 5 GHz 867 Mbps Long-Range Indoor/Outdoor Wireless Bridge

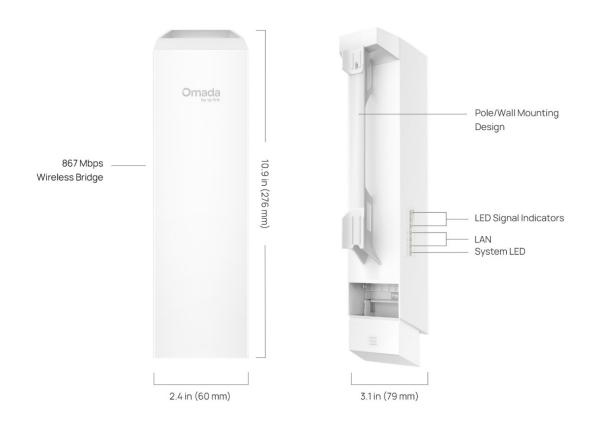
Model: EAP215-Bridge KIT

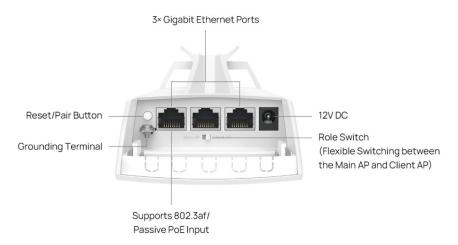
## **Product Overview**

Omada 5 GHz 867 Mbps Long-Range Indoor/Outdoor Wireless Bridge EAP215 Bridge KIT is an enterprise-grade Wi-Fi bridge kit engineered for transmission up to 3.1 miles (5 km). It delivers reliable PtP or PtMP connectivity in remote outdoor environments—ideal for farms, additional offices, parking lots, and other locations where extending network access and monitoring is critical.

- Up to 3.1 mi (5 km) Wireless Transmission: With 14 dBi high-gain directional antennas.
- Equipped with Omada SmartBridging: Our unique design for the most effortless and easy bridge setup ever, like instant auto-pairing with preconfigured kit and multi-bridge auto-pairing.
- App-Guided Alignment: Visualized app-guided alignment for long-distance setups and instant speed testing for installation verification.
- Simple PoE Deployment and Power Supply: 1× Gigabit PoE port supports both 802.3af PoE and Passive PoE for simplified wiring and lower deployment costs.
- Designed for Outdoor Durability & Reliability: IP65 weatherproof enclosure, 6 kV lightning protection and operating range of -40 °C to +70 °C (-40 °F to +158 °F).\*\*
- Remote Monitoring & Management: Standalone mode or Omada SDN mode for remote centralized management via Web UI or App.<sup>†</sup>

# **Product Appearance**





## **Feature Descriptions**

### Up to 3.1 mi (5 km) Wi-Fi Connectivity

It delivers reliable Wi-Fi with low latency and strong signal integrity, equipped with 14 dBi high-gain directional antennas for uninterrupted wireless transmission, and it is ideal for connecting remote sites in rural and hard-to-wire environments.

### Omada SmartBridging: The Most Effortless Bridge Setup

Preconfigured for instant PtP auto-pairing, the bridges deliver instant connectivity right out of the box. Simply power on and go, ideal for quick and easy deployments.

Effortlessly connect multiple bridges with PtMP Auto-Pairing<sup>‡</sup>. Simply dial the role switch and press the Pair/Reset button<sup>‡</sup>-no portal login needed. Supports up to 1-to-4 multi-bridge connections.

### **App-Guided Alignment for Optimal Performance**

Simply bridge alignment with real-time signal strength visualization on the Omada app. Perfect for installations where bridges are far apart, this feature ensures optimal alignment and connectivity. The Omada app also allows users to easily verify installations, test transmission speeds, and troubleshoot connections for optimal performance.

#### Simple Deployment with PoE Support

1× Gigabit PoE port delivers both power and data through a single cable, cutting deployment costs and outdoor wiring complexity. It supports both 802.3af PoE and Passive PoE power supply.

## **Outdoor-Ready Design for Extreme Conditions**

EAP215-Bridge KIT supports IP65 weatherproof and 6 kV lightning protection safeguard your network in harsh outdoor environments. Additionally, an extended temperature tolerance of -40  $^{\circ}$ C to 70  $^{\circ}$ C (-40  $^{\circ}$ F to +158  $^{\circ}$ F) makes it ideal for extremely hot and cold environments.

## **Remote Monitoring & Management**

Use the Omada app for easy on-site setup-no internet required. For additional flexibility, switch to Omada SDN, enabling cloud management via the Omada app or web portal for seamless control, and monitor from anywhere.

# **Specifications**

## **Hardware Specifications**

ltem	Description		
Wi-Fi Standards	5 GHz: IEEE 802.11a/n/ac		
Transmission Distance	5km		
	Spatial Streams	5 GHz: 2×2 Downlink MU-MIMO with 2 spatial streams	
	Frequency Bands	5.150 to 5.250 GHz U-NII-1 5.250 to 5.350 GHz U-NII-2A (DFS Channel) 5.470 to 5.725 GHz U-NII-2C (DFS Channel) 5.725 to 5.850 GHz U-NII-3/ISM *Note: Country-Specific Restriction Apply	
	Bandwidth	5 GHz: 20 MHz/40 MHz/80 MHz	
802.11ac	Wireless Data Rate	• 5 GHz: 8.6 Mbps to 866 Mbps (MCS0-MCS9, NSS=1 to 2, VHT20/40/80)	
	Radio Technology	OFDM (Orthogonal Frequency-Division Multiplexing)	
	Modulation Type	256-QAM. 64-QAM, 16-QAM, QPSK, BPSK	
	Frame Aggregation	<ul> <li>A-MPDU (Aggregate MAC Protocol Data Unit) for Tx/Rx</li> <li>A-MSDU (Aggregate MAC Service Data Unit) for Tx/Rx</li> </ul>	
	Spatial Streams	5 GHz: 2×2 MIMO with 2 spatial streams	
	Frequency Bands	5.150 to 5.250 GHz U-NII-1 5.250 to 5.350 GHz U-NII-2A (DFS Channel) 5.470 to 5.725 GHz U-NII-2C (DFS Channel) 5.725 to 5.850 GHz U-NII-3/ISM *Note: Country-Specific Restriction Apply	
	Bandwidth	20 MHz/40 MHz	
802.11n	Wireless Data Rate	• 5 GHz: 8.6 Mbps to 300 Mbps (MCS0-MCS7, NSS=1 to 2, HT20/40)	
	Radio Technology	OFDM (Orthogonal Frequency-Division Multiplexing)	
	Modulation Type	64-QAM, 16-QAM, QPSK, BPSK	
	Frame Aggregation	<ul> <li>A-MPDU (Aggregate MAC Protocol Data Unit) for Tx/Rx</li> <li>A-MSDU (Aggregate MAC Service Data Unit) for Tx/Rx</li> </ul>	

ltem	Description	
Antenna	Wi-Fi	Internal 2×2 dual-polarized directional MIMO antennas 5 GHz: 14.0 dBi Horizontal: 43°, Vertical: 18° *Note: The gains above are the single-antenna peak gains.
	IoT	None
Interfaces	• 3 x 10M/100M	1/1000Mbps Gigabit Ethernet Port (RJ45)
loT	None	
Memory	<ul><li>Flash: 128Mbi</li><li>DRAM: 1024M</li></ul>	
Button	1 × System Mode Selection Button: Slide the switch to switch the device roles (Main AP or Client AP) 1 × Pair/Reset button <sup>‡</sup> : Press the button for longer than 5 seconds to make the device restore to factory settings; Press this button on the Main AP and the Client AP to establish a network connection.	
Indicator	, e	
Reliability	MTBF (Mean Time between Failure) 360000- hours at the operating temperation (77°F)	
Power Supply	Input	12V/1A DC 802.3af PoE 24V or 48V Passive PoE
	Output	1

ltem	Description	
Power Consumption	<ul> <li>Max with DC:9.9W</li> <li>Max with PoE:11.5W</li> <li>Standby with DC:3.5W</li> <li>Standby with PoE:4.9W</li> </ul>	
Surge/Lightning Protection	Ethernet Ports: ±6 kV	
ESD/EMP Protection	<ul> <li>Air discharge: ±8 kV</li> <li>Contact discharge: ±4 kV</li> <li>*Note: ESD/EMP Protection means Electrostatic</li> <li>Discharge/Electromagnetic Pulse Protection independently.</li> </ul>	
	Maximum transmit power	<ul> <li>CE (ERIP)</li> <li>5 GHz: 23 dBm in U-NII-1, 23 dBm in U-NII-2A, 30 dBm in U-NII-2C,</li> <li>FCC (Conducted Power)</li> <li>5 GHz: 23.5 dBm in U-NII-1, 25 dBm in U-NII-3</li> <li>*Note: MIMO combined power, excluding antenna gains. The actual transmit power depends on local laws and regulations.</li> </ul>
Tx Power	Minimum transmit power	<ul> <li>CE (ERIP)</li> <li>5 GHz: 6 dBm in U-NII-1, 6 dBm in U-NII-2A, 6 dBm in U-NII-2C, 6 dBm in U-NII-3</li> <li>FCC (Conducted Power)</li> <li>5 GHz: 4 dBm in U-NII-1, 4dBm in U-NII-3</li> <li>*Note: MIMO combined power, excluding antenna gains. The actual transmit power depends on local laws and regulations.</li> </ul>
	Adjustable power increment	1 dBm
	Temperature	<ul> <li>Operating: -40°C to +70°C (-40°F to +158°F)</li> <li>Storage: -40°C to +70°C (-40°F to +158°F)</li> </ul>
	Humidity	<ul><li>Operating: 10% to 90% (non-condensing)</li><li>Storage: 5% to 90% (non-condensing)</li></ul>
Environment	Altitude	<ul><li>Storage: up to + 2000 m (6561 feet)</li><li>Operating: up to + 2000 m (6561 feet)</li></ul>
	Windproof	Class 16
	Weatherproof Enclosure	IP65 for Pole Mount
	Dimensions (W×D×H)	<ul> <li>Main Unit: 275.8×79×60.3 mm (10.8×3.1×2.3 in.)</li> <li>Shipping Unit: 318×250×105 mm (12.5×9.8×4.1 in.)</li> </ul>
Unit	Weight	<ul><li>Main Unit: 0.86 kg (1.89 lb)</li><li>Mounting Unit: 0.056 kg (0.12 lb)</li><li>Shipping Unit: 2 kg (4.4 lb)</li></ul>
	Mounting	Pole Mount (Kits included)

## **Software Specifications**

Item	Description		
	Maximum number of associated STAs	8	
	Guest Network	Yes	
	ACS (Automatic Channel Selection)	Yes	
	Airtime Fairness	No	
	TDMA	No	
	Speed Test	Yes	
	PtP	Yes	
	PtMP	4	
	Channel Optimization	Yes	
	Antenna Alignment	Yes	
	802.11 Rate Control	No	
	Rogue AP Detection	Yes	
	WLAN Optimization	No	
	Lock to AP	No	
	Rate Limit	<ul><li>SSID Rate Limit</li><li>Client Rate Limit</li></ul>	
	Load Balance	No	
	MLO	No	
	Multicast/Broadcast Management	Multicast/Broadcast Rate Limit	
	ACL  None  WPA/WPA2  WPA/WPA2		
	Radius Accounting		
Security and Authentication	EAP Types	<ul> <li>EAP-TLS</li> <li>EAP-TTLS</li> <li>EAP-PEAP</li> <li>EAP-CHAP</li> <li>EAP-SIM</li> <li>EAP-AKA</li> <li>EAP-GTC</li> <li>EAP-FAST</li> <li>EAP-PEAP</li> <li>EAP-MD5</li> <li>EAP-MSCHAPv2</li> <li>PEAPv0</li> </ul>	

Item	Description		
		• PEAPv1	
	Omada Controller	<ul> <li>Omada Controller V5.15.24 and above</li> <li>Omada Essential V5.15.24 and above</li> </ul>	
Management methods	Арр	Omada App V4.25 and above	
Management methods	Standalone Management	Yes	
	Standalone Mesh	No	
	SSH	Yes	
	SNMP	v1, v2c, v3	
	AP	Yes	
Operating Modes	Repeater	No	
	Mesh	No	
	System Log	Yes	
	Reboot Schedule	Yes	
	WLAN Schedule	Yes	
System Feature	NTP (Network Time Protocol)	Yes	
System Feature	Email Alerts	Yes	
	Firmware Upgrade	Yes	
	Restore & Backup	Yes	
	LED Control	Yes	
	VLAN	<ul><li>SSID VLAN</li><li>Management VLAN</li></ul>	
	Static IP / DHCP Client	Yes	
	IPv4	Yes	
Network Features	LLDP (Link Layer Discovery Protocol)	Yes	
	mDNS	Yes	
	Tools	<ul><li>Ping / Traceroute</li><li>Packet Capture</li><li>Terminal</li></ul>	

# **Standards Compliance and Certifications**

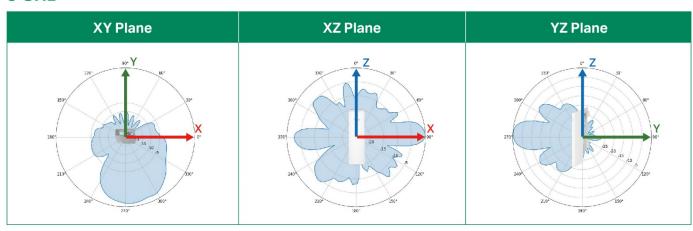
Item	Category	Description
	IEEE Standards	<ul> <li>IEEE 802.11a/n/ac</li> <li>IEEE 802.1q</li> <li>IEEE 802.3af</li> <li>IEEE 802.3ab</li> <li>IEEE 802.3x</li> </ul>
	Radio Standards	<ul> <li>RSS-247, RSS-Gen</li> <li>ETSI EN 301 893, EN 62311&amp; EN 50665</li> <li>FCC Part 15E</li> </ul>
Standards compliance	EMC standards	<ul> <li>EN 55032</li> <li>EN 55035</li> <li>ICES-003</li> <li>EN 301489-1</li> <li>EN 301489-17</li> <li>FCC Part 15B</li> <li>VCCI-CISPR 32</li> </ul>
	Safety Standards	<ul> <li>EN 62368-1</li> <li>IEC 62368-1</li> <li>IEC 60950-22</li> </ul>
	Security Standards	<ul><li>WPA-Personal/Enterprise</li><li>WPA2-Personal/Enterprise</li></ul>
	RoHS	<ul><li>Directive 2011/65/EU, Directive (EU) 2015/863</li><li>EN IEC 63000: 2018</li></ul>
	Others	
Certifications	FCC/CE/ISED/V	CCI/MIC

## **RF Performance**

Frequency Band	Wi-Fi Protocol & Bandwidth	MCS Index / Data Rate	EU/US Maximum Transmit Power (dBm) per transmit chain	Receiver Sensitivity (dBm) per receive chain
	802.11a	6M	16/22	-94
		54M	16/19	-78
	802.11ac, VHT20	MCS0	16/22	-94
5.011	802.11ac, VHT40	MCS8	16/17.5	-71
5 GHz		MCS0	16/22	-90.5
	MCS9	16/16.5	-66.5	
	802.11ac, VHT80	MCS0	16/20	-87.5
		MCS9	16/16.5	-63

# **Antenna Radiation Patterns**

### 5 GHz



# **Package Contents**

Item	Quantity
EAP215-Bridge	2
Passive PoE Adapter	2
Power Cord	2
Mounting Kit	2
Installation Guide	1



# **Support Services**

We are committed to providing you with comprehensive and reliable support services to ensure seamless experience with Omada products.

- Contact Support: <a href="https://support.omadanetworks.com/#contact-us">https://support.omadanetworks.com/#contact-us</a>
- Warranty Services: <a href="https://www.omadanetworks.com/support/replacement-warranty/">https://www.omadanetworks.com/support/replacement-warranty/</a>

# **Revision History**

Version	Date	Description
V1.0	2025-11-10	Initial release.

Note: Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput and wireless coverage are not guaranteed and will vary as a result of 1) environmental factors, including building materials, physical objects, and obstacles, 2) network conditions, including local interference, volume and density of traffic, product location, network complexity, and network overhead, and 3) client limitations, including rated performance, location, connection, quality, and client condition.

\*The advertised coverage is calculated based on laboratory testing. Actual coverage is not guaranteed and will vary as a result of the performance of the equipped antennas, client limitations, and environmental factors.

\*\*Protection against lightning and electro-static discharge may be achieved through proper product setup, grounding, and cable shielding. Refer to the instruction manual and consult an IT professional to assist with setting up this product.

<sup>†</sup>These functions require the use of an Omada controller.

<sup>‡</sup>Pairing with the Pair/Reset button requires firmware upgrade if the button is labeled as "Reset" only.

Some models featured in this guide may be unavailable in your country or region. Visit TP-Link website for local sales information: https://www.omadanetworks.com. Specifications are subject to change without notice.

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