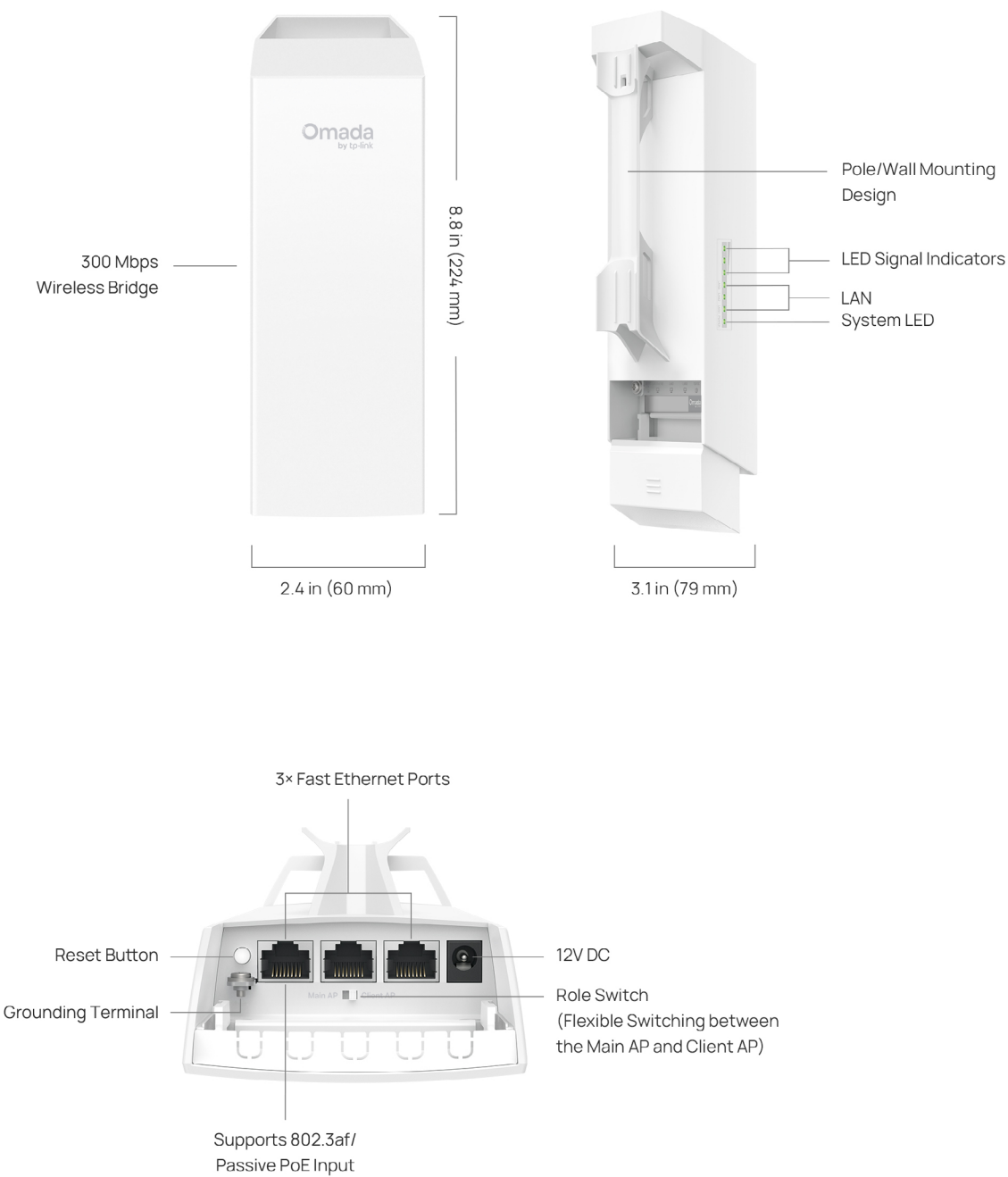# Omada EAP | Datasheet

## EAP100-Bridge KIT
2.4GHz 300Mbps Indoor/Outdoor Wireless Bridge

## Highlights

- Up to 1640 ft (500 m)  WiFi transmission

- Plug-and-Play Setup: Auto-pairing, LED signal indicators, and app-guide alignment

- Flexible Power Supply: 802.3af PoE, 12V/24V/48V Passive PoE, and 12V DC (compatible with TP-Link solar power supply system)

- 3× Fast Ethernet Ports: Provides high-speed connections to more cameras and devices without additional switch

- Ideal for Outdoor Scenarios:  IP65 weatherproof and 6 kV lightning protection, with a reliable operating range of -40 ℃ to +70 ℃.

- Efficient Management: Standalone Mode or Omada SDN Mode for remote centralized management via Web UI or Omada app.

# Product Pictures

300 Mbps
Wireless Bridge

8.8 in (224 mm)

2.4 in (60 mm)

Pole/Wall Mounting
Design

LED Signal Indicators

LAN

System LED

3.1 in (79 mm)

3× Fast Ethernet Ports

Reset Button

Grounding Terminal

Main AP | Client AP

12V DC

Role Switch
(Flexible Switching between
the Main AP and Client AP)

Supports 802.3af/
Passive PoE Input

\* Wall mounting accessories sold separately.

# Omada Solution

Omada's Software Defined Networking (SDN) platform integrates network devices, including access points, switches, and gateways, providing 100% centralized cloud management. Omada creates a highly scalable network—all controlled from a single interface.
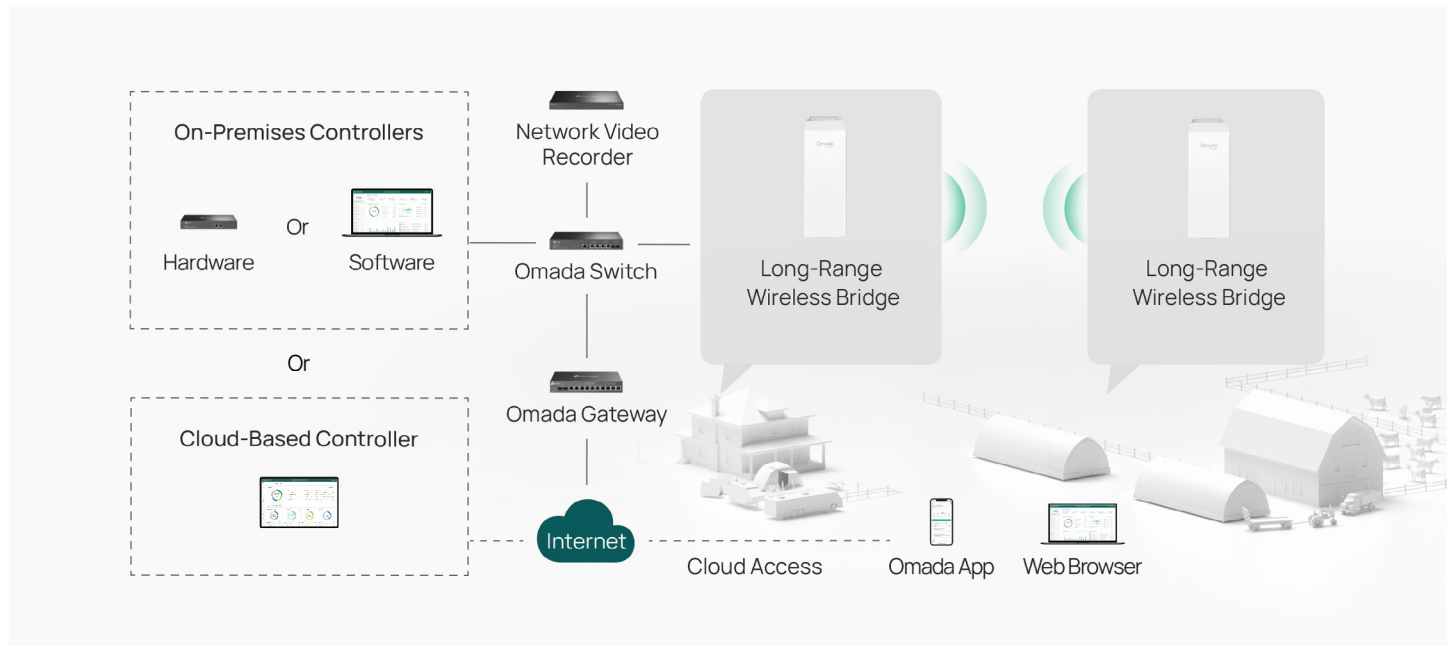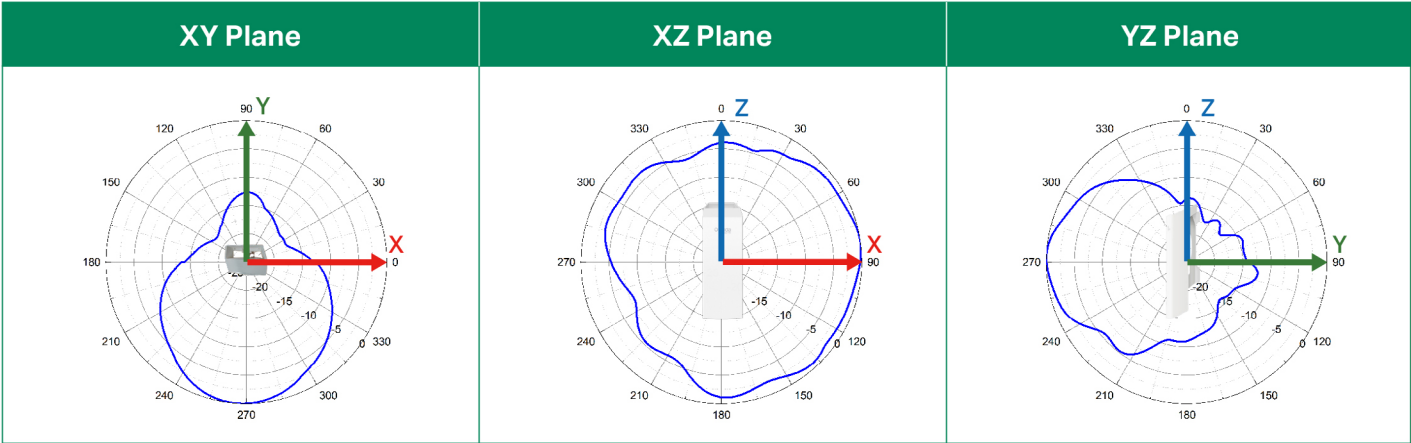
# Specifications

| Model | EAP100-Bridge |
|---|---|
| Name | 2.4GHz 300Mbps Indoor/Outdoor Wireless Bridge |

| Main Design | | |
|---|---|---|
| | LAN Interfaces | 3x 10/100 Mbps Ethernet Port |
| | DIP Switch | Role Switch |
| | Wi-Fi Standards | IEEE 802.11b/g/n |
| | Maximum Data Rate | 300 Mbps (2.4 GHz) |
| | Wireless Client Capacity | 8 |
| | Bluetooth | - |
| | Antennas | Internal 2×2 Dual-polarized directional MIMO antenna<br>2.4 GHz: 8 dBi<br>Horizontal Beamwidth: 70° |
| | Transmit Power | CE: <20dBm (2.4 GHz, EIRP)<br>FCC: <22dBm (2.4 GHz) |
| | Reception Sensitivity | 2.4 GHz:<br>11N 20MHz MCS0: -96<br>11N 20MHz MCS7: -76<br>11N 40MHz MCS0: -92.5<br>11N 40MHz MCS7: -73.5 |

| Centralized Management | | |
|---|---|---|
| | Omada Software Controller | √ |
| | Omada Hardware Controller | √ |
| | Omada APP | √ |

| Security | | |
|---|---|---|
| | Captive Portal Authentication | - |
| | Access Control | - |
| | Maximum number of MAC Filter | 4000 |
| | Wireless Isolation between Clients | - |
| | VLAN | √ |
| | Rogue AP Detection | √ |
| | Wireless Encryption | √ |
| | 802.1X Support | - |

| Wireless Function | | |
|---|---|---|
| | Multiple SSIDs | 8 |
| | Channel | US: 1-11<br>EU: 1-13 |
| | Enable/Disable Wireless Radio | √ |
| | Enable/Disable SSID Broadcast | √ |
| | Guest Network | √ |
| | Automatic Channel Assignment | - |
| | Transmit Power Control | Adjust transmit Power on dBm |
| | QoS (WMM) | - |
| | Seamless Roaming | - |
| | Mesh | √ |
| | Beamforming | √ |
| | MU-MIMO | - |
| | MIMO | 2×2 2.4 GHz MIMO |
| | OFDMA | - |
| | Rate Limit | √ |
| | Load Balance | - |
| | Airtime Fairness | - |
| | Band Steering | - |
| | RADIUS Accounting | √ |
| | MAC Authentication | - |
| | Reboot Schedule | √ |
| | Wireless Schedule | √ |
| | Wireless Statistics | √ |
| | Static IP/Dynamic IP | √ |

| Support Data Rates | 802.11n | 6.5 Mbps to 300 Mbps (MCS0-MCS15, HT20/40) |
|---|---|---|
| | 802.11g | 6, 9, 12, 18, 24, 36, 48 ,54 Mbps |
| | 802.11b | 1, 2, 5.5, 11 Mbps |
| Management | LED ON/OFF Control | √ |
| | Management MAC Access Control | - |
| | Web-based Management | √ |
| | SNMP | √ |
| | SSH | √ |
| | Restore & Backup | √ |
| | Firmware update via Web | √ |
| | NTP | √ |
| | System Log | √ |
| | Email Alerts | √ |
| Physical & Environment | Power Supply | 12V DC / 802.3af PoE / 12V Passive PoE /24V Passive PoE / 48V Passive PoE (Passive PoE Injector and DC Adapter included) |
| | Maximum Power Consumption | 4.8W |
| | Reset | √ |
| | Mounting | Pole mounting (Accessories included) Wall mounting (Accessories sold separately) |
| Others | Certifications | CE, FCC, RoHS |
| | Dimensions (W x D x H) | 3.1 × 2.4 × 8.8 in (79 × 60 × 224 mm) |
| | Net Weight | 255g |
| | Enclosure Material / Rack Material | Enclosure: ASA-HB Pole Mounting Straps: Nylon 66 |
| | Lightning Protection | Air discharge: ±15kV Contact discharge: ±8kV Common mode 10/700: ±6kV |
| | Environment | Operating Temperature: -40 °C–70 °C (-40 °F–158 °F); Storage Temperature: -40 °C–70 °C (-40 °F–158 °F); Operating Humidity: 10%–90% non-condensing; Storage Humidity: 5%–90% non-condensing |

# Antenna Radiation Patterns

## 2.4 GHz

| XY Plane | XZ Plane | YZ Plane |
|----------|----------|----------|
|  |  |  |

# Disclaimers

\* 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.

\* Non-Omada devices connected to the wired LAN ports will not be recognized by the Omada controllers, preventing users from viewing their connection status. To address this issue, connect those non-Omada devices to an Omada switch that links to the bridge's wired LAN ports.

\* PoE budget calculations are based on laboratory testing. Actual PoE power budget is not guaranteed and will vary as a result of client limitations and environmental factors.