TP-Link EAP720

TP-Link Omada WiFi 7 Wireless Access Point EAP720 Instruction Manual

Model: EAP720

1. PRODUCT OVERVIEW

The TP-Link Omada EAP720 is a high-performance Wi-Fi 7 ceiling-mount access point designed for business environments. It offers a total speed of up to 5.0 Gbps across dual bands (4324 Mbps on 5GHz, 688 Mbps on 2.4GHz) utilizing advanced technologies such as 4K-QAM and 240MHz bandwidth. This access point supports over 250 concurrent devices, ensuring reliable connectivity in various settings. It features a 2.5G Ethernet port for enhanced wired backhaul and offers flexible deployment options including Power over Ethernet (802.3at) or DC power, with easy ceiling or wall mounting.

The EAP720 integrates seamlessly into Omada's Software Defined Networking (SDN) system, enabling mesh networking and centralized management via cloud, app, or local controllers. It also includes enhanced security features like WPA3 and guest network isolation.

Image 1.1: The Omada EAP720 BE5000 Wi-Fi 7 Access Point, highlighting its dual-band Wi-Fi 7, 5.0 Gbps speed, 2.5GbE port, seamless roaming, PoE power, remote management, free cloud management, app & web management, and easy installation.

Key Features:

- **Dual-Band Wi-Fi 7:** Up to 5.0 Gbps (4324 Mbps on 5 GHz + 688 Mbps on 2.4 GHz) with Multi-Link Operation

(MLO) and 4K-QAM.

- **2.5 Gigabit Ethernet Port:** Supports high-speed networking and future broadband upgrades.
- **Omada SDN Integration:** Centralized cloud management for network monitoring, remote configuration, and Zero Touch Provisioning (ZTP).
- **Flexible Deployment:** Supports 802.3at PoE and DC power supply (adapter included).
- **High Capacity:** Supports over 250 concurrent clients for business-level performance.
- **Enhanced Wi-Fi Experience:** Features like seamless roaming, mesh networking, and airtime fairness.
- **5-Year Warranty:** Industry-leading warranty with free technical support.

2. PACKAGE CONTENTS

Verify that all items are present in your package:

- Omada Wi-Fi 7 Ceiling Mount Access Point EAP720
- Installation Guide
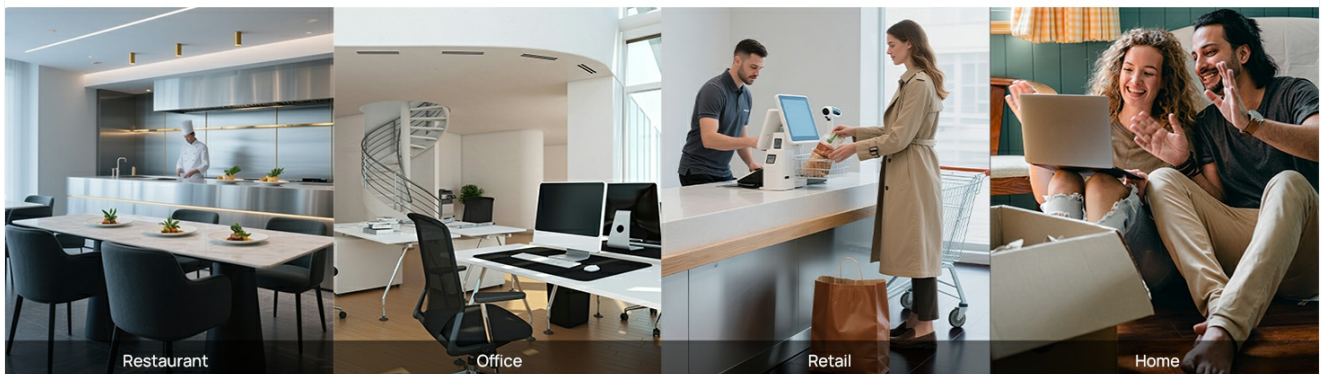- Ceiling/Wall/Junction Box Mounting Kit
- Power Adapter

Image 2.1: The EAP720 access point, its power adapter, and the complete mounting kit for installation.

3. SETUP AND INSTALLATION

3.1 Powering the Device

The EAP720 can be powered in two ways:

- **Power over Ethernet (PoE):** Connect an Ethernet cable from an 802.3at compliant PoE switch or PoE injector to the 2.5GbE port on the EAP720. This method provides both power and data over a single cable.
- **DC Power:** Use the included power adapter to connect the EAP720 to a standard electrical outlet.

5-Year Warranty

5-Year Warranty & US-Based Call Center Support

✓ Localization Sales and Support Team
✓ Dedicated Omada Support Portal
✓ Official Omada Community
✓ Contact us via Call, Email, or Chat

Image 3.1: Illustration of power options: PoE connection via a switch and direct DC adapter connection.

3.2 Mounting the Access Point

The EAP720 is designed for ceiling or wall mounting. Use the provided mounting kit for secure installation.

1. Attach the mounting bracket to the desired location using the screws and anchors.
2. Connect the Ethernet cable (for data and/or PoE) to the 2.5GbE port on the EAP720.
3. Align the EAP720 with the mounting bracket and twist to lock it into place.

Up to 5.0 Gbps for Lag-Free 4K & Gaming*

4324 Mbps

688 Mbps

5 GHz   2.4GHz

*Actual speed, range, and device connections may vary due to ISP, network conditions, and environmental factors.
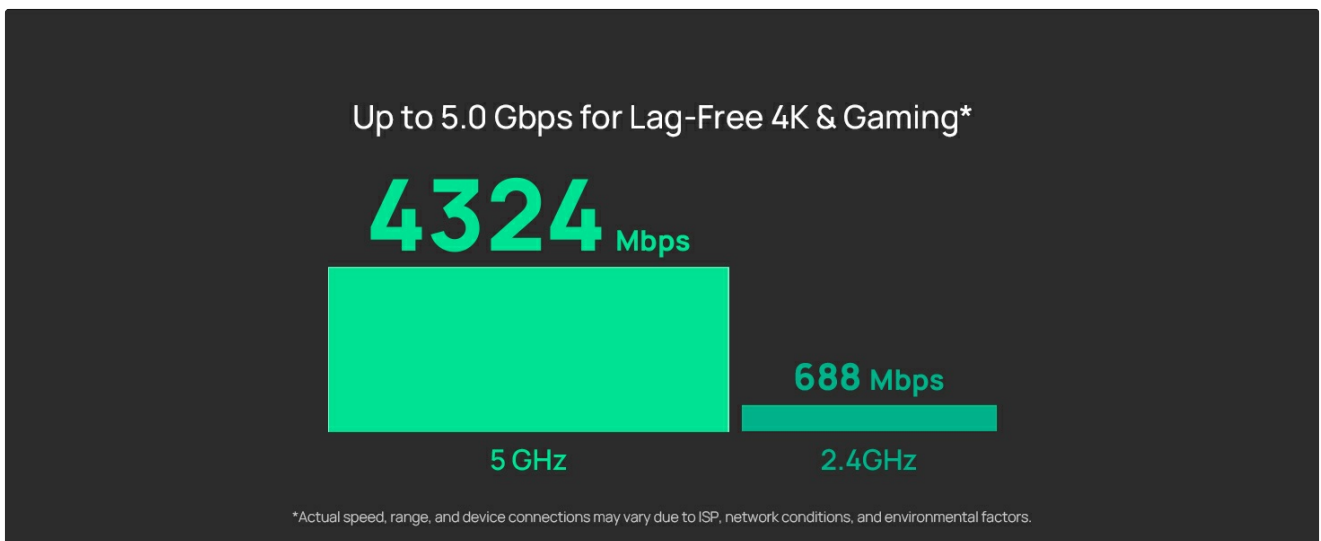
Image 3.2: Detailed view of the EAP720's T-Bar mounts and the 2.5GbE port, illustrating its design for quick installation.

3.3 Initial Configuration

The EAP720 is managed through the TP-Link Omada SDN platform. You can configure it using the Omada app or a web browser.

- **Omada App:** Download the Omada app from your device's app store. The app provides an easy and quick setup process. Scan the QR code or visit tp-link.com/common/app/omada/qrcode.php for direct access.
- **Web Browser:** For detailed configuration, access the Omada controller software via a web browser. Refer to the Omada SDN Controller documentation for specific instructions.
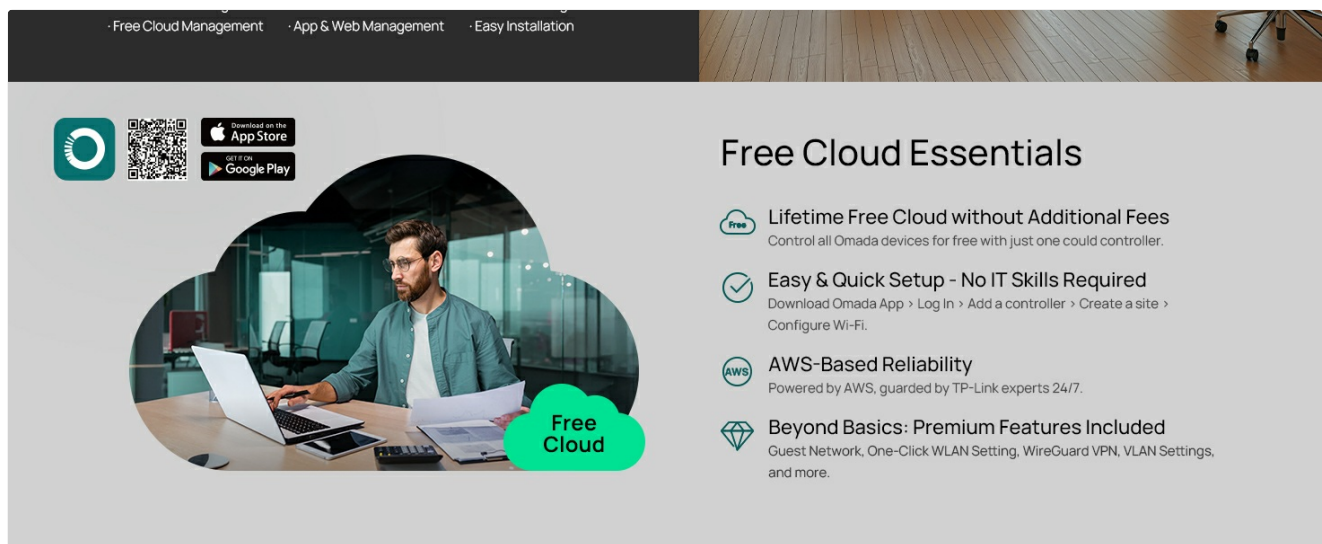
Image 3.3: Omada Free Cloud Essentials, detailing lifetime free cloud, AWS-based reliability, and easy setup via the Omada app.

4. OPERATING THE ACCESS POINT

4.1 Wi-Fi 7 Performance

The EAP720 leverages Wi-Fi 7 technology to deliver superior wireless performance. It operates on dual bands (2.4 GHz and 5 GHz) with combined speeds up to 5.0 Gbps.

- **Multi-Link Operation (MLO):** This feature allows devices to transmit and receive data simultaneously across different frequency bands and channels, significantly reducing latency and improving throughput.
- **4K-QAM:** 4096-QAM increases data density, allowing more data to be transmitted in the same amount of time, resulting in higher speeds.

Image 4.1: Breakdown of the EAP720's superior Wi-Fi experience, showing speeds of 4324 Mbps on 5 GHz and 688 Mbps on 2.4 GHz.

4.2 Network Management with Omada SDN

The Omada SDN platform provides comprehensive tools for managing your network:

- **Centralized Management:** Manage multiple EAPs from a single interface, whether via cloud, hardware controller, or software controller.
- **Seamless Roaming:** Ensures clients automatically switch to the access point with the strongest signal as they

move, providing uninterrupted connectivity.

- **Mesh Networking:** Extend your Wi-Fi coverage wirelessly by connecting EAPs to each other without needing Ethernet cables for every unit.
- **Guest Network:** Create isolated networks for guests, enhancing security and controlling access to your main network resources.
- **VLAN Segmenting:** Segment your network into virtual local area networks for improved security and traffic management.
- **Bandwidth Management:** Allocate bandwidth efficiently to different users or applications.

Image 4.2: Visual representation of how Omada access points provide seamless Wi-Fi coverage, preventing drop-offs as users move.

5. Maintenance

Regular maintenance helps ensure optimal performance and longevity of your EAP720 access point.

- **Cleaning:** Keep the device clean and free from dust. Use a soft, dry cloth to wipe the exterior. Avoid using liquid cleaners or aerosols.
- **Ventilation:** Ensure the access point has adequate ventilation. Do not block the ventilation holes.
- **Firmware Updates:** Regularly check for and install firmware updates through the Omada SDN Controller. Firmware updates often include performance improvements, security patches, and new features.
- **Environmental Conditions:** Operate the device within its specified temperature and humidity ranges to prevent damage.

6. Troubleshooting

If you encounter issues with your EAP720, refer to the following common troubleshooting steps:

- **No Power:** Ensure the power adapter is securely connected or that the PoE source is active and providing power. Check the LED indicator on the EAP720.
- **No Wi-Fi Signal:** Verify that the EAP720 is powered on and configured correctly through the Omada Controller. Check the status of the Wi-Fi radio in the controller interface.
- **Poor Performance:**
  - Check for interference from other wireless devices or networks.
  - Ensure the EAP720 is optimally placed, avoiding obstructions.

- Update the firmware to the latest version.
- Review bandwidth management settings in the Omada Controller.

- **Cannot Access Omada Controller:** Ensure your device is on the same network as the Omada Controller. Verify the IP address and port settings.
- **Device Not Adopted:** If the EAP720 is not appearing in the Omada Controller for adoption, ensure it is factory reset and reachable on the network.

For more detailed troubleshooting or persistent issues, please contact TP-Link Technical Support.

7. SPECIFICATIONS

Feature	Specification
Model	EAP720
Wireless Type	802.11be (Wi-Fi 7), 802.11ax (Wi-Fi 6), 802.11ac, 802.11n, 802.11g
Frequency Band Class	Dual-Band (2.4 GHz & 5 GHz)
Max Wireless Speed	Up to 5.0 Gbps (4324 Mbps on 5 GHz, 688 Mbps on 2.4 GHz)
Ethernet Port	1x 2.5 Gigabit Ethernet Port
Power Supply	802.3at PoE or DC Power (Adapter Included)
Operating System	TP-Link OS (Managed by Omada SDN)
Item Weight	14.4 ounces
Dimensions	9.61 x 9.02 x 2.56 inches (Package)
Special Features	Access Point Mode, Beamforming, Internet Security, QoS, Seamless Roaming, Mesh
Recommended Uses	Business, Home
Compatible Devices	Personal Computer, Security Camera, Smart Television, Smartphone, Tablet

8. WARRANTY AND SUPPORT

8.1 Warranty Information

The TP-Link Omada EAP720 comes with an industry-leading **5-year warranty**, ensuring long-term reliability and peace of mind.

8.2 Technical Support

TP-Link offers free technical support for the EAP720. Support is available from 6 AM to 6 PM PST, Monday to Friday.

- **Omada Support Portal:** Access dedicated resources, FAQs, and documentation online.
- **Official Omada Community:** Engage with other users and experts for tips and solutions.
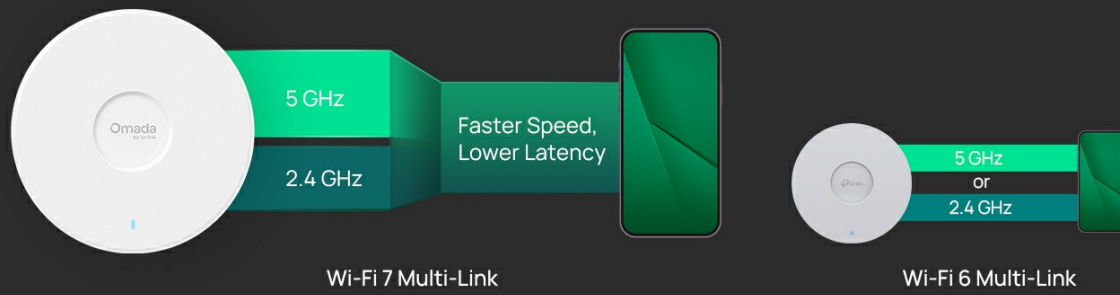- **Contact Support:** Reach out via call, email, or chat for direct assistance.

Image 8.1: TP-Link's commitment to customer satisfaction, highlighting the 5-year warranty and US-based call center support.