KuWFi KF-CPE130

KuWFi 2.4G 300Mbps Network Wireless Ethernet Bridge Instruction Manual

Model: KF-CPE130 | Brand: KuWFi

1. Introduction

The KuWFi 2.4G 300Mbps Network Wireless Ethernet Bridge (Model: KF-CPE130) is a cost-effective 11ac outdoor CPE with a data rate of 300Mbps. It offers a Wi-Fi range of up to 1KM and features an LED display for easy configuration of PT/PTMP connections. It supports both AP and bridge operation modes, making it versatile for various Wi-Fi transmission needs. Its robust design ensures stability and reliability in outdoor environments, providing a solution for extending network signals to remote locations like shops, other buildings, or for surveillance systems.

2. Package Contents

Please verify that all items are present in your package:

- Wireless Bridge Unit (x2)
- PoE Adapter (x2)
- Network Cable (x2)
- Quick Installation Guide

3. Specifications

Brand	KuWFi
Model Name	KF-CPE130
Connectivity Technology	Wi-Fi
Wireless Communication Standard	802.11b
Frequency Band Class	Single-Band (2.4 GHz)
Data Rate	300Mbps

Wi-Fi Range	Up to 1KM (Barrier-free)
Ports	100Mbps WAN Port, 100Mbps LAN Port
Power Supply	24V Passive PoE
Durability	IP65-rated waterproof, dustproof, UV-resistant shell
Protection	ESD protection, Surge protection
Operating Temperature	-40°C to 70°C
Antenna	12dBi antenna
Item Weight	2.03 pounds
Package Dimensions	9.72 x 7.95 x 3.86 inches

4. Setup Guide

The KuWFi Wireless Ethernet Bridge is designed for simplified setup, especially for point-to-point (PTP) and point-to-multipoint (PTMP) connections. The units come pre-programmed for ease of use.

4.1. Physical Installation

Mount the two wireless bridge units outdoors, ensuring a clear line of sight between them for optimal performance. The units are designed to withstand various weather conditions.

Figure 4.1: KuWFi Wireless Bridge units with indicated 1KM range capability.

Figure 4.2: Outdoor durability features of the KuWFi Wireless Bridge, including IP65 rating and wide temperature tolerance.

4.2. Powering On and Initial Connection

Connect each wireless bridge unit to its respective PoE adapter using the provided network cables. The PoE adapter supplies both power and data over a single Ethernet cable. The units feature an LED display and signal lights to help monitor connection status and signal strength.

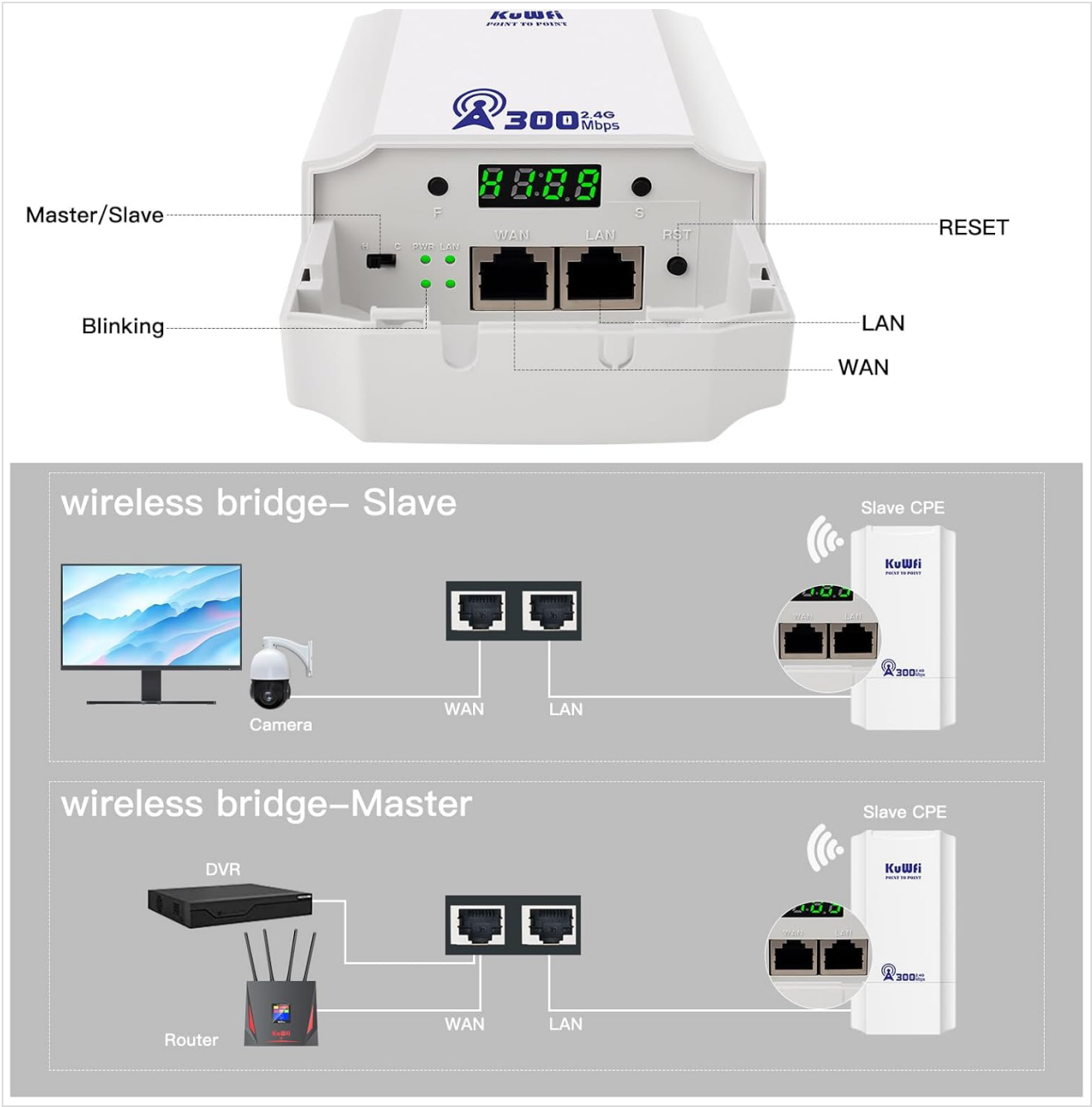

Figure 4.3: Detailed view of the KuWFi Wireless Bridge ports and indicators.

Figure 4.4: Master and Slave bridge configurations with digital display.

4.3. Simplified Point-to-Point Configuration

The device supports Wireless AP and Wireless Bridge operation modes for PTP/PTMP connections. With a simple operation switch (Master/Slave), you can easily set up the WiFi Bridge's mode without accessing the graphical user interface (GUI). LED signal lights assist in monitoring connection status and signal strength, simplifying the setup process.

Figure 4.5: Various network extension scenarios using KuWFi Wireless Bridges.

For detailed setup instructions, refer to the included Quick Installation Guide or the official product video below.

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Video 4.1: Official KuWFi video demonstrating the WiFi Point to Point Wireless Access Point CPE130 and its setup.

5. Operating Modes and Applications

The KuWFi Wireless Bridge offers versatile operating modes to suit different network environments.

5.1. Wireless AP and Bridge Modes

The device supports both Wireless Access Point (AP) and Wireless Bridge operation modes. In bridge mode, it acts like an invisible network cable, transmitting network signals wirelessly. This is ideal for extending network data using air as a medium.

Figure 5.1: Key features contributing to stable wireless coverage.

5.2. Extending Network Coverage

One common application is to extend your network to another building. One unit acts as the master, and the other as the slave. After successful pairing, they communicate wirelessly, extending your network reach.

Figure 5.2: PTP-Network Coverage setup for extending internet.

5.3. IP Surveillance Camera Extension

Connect an IP Surveillance Camera to the secondary port of the Wireless Network Bridge to extend surveillance coverage. This allows for setting up a series of IP cameras with the Outdoor AP CPE Kit, providing comprehensive monitoring capabilities in remote areas.

Figure 5.3: PTP-IP Camera setup for extending surveillance.

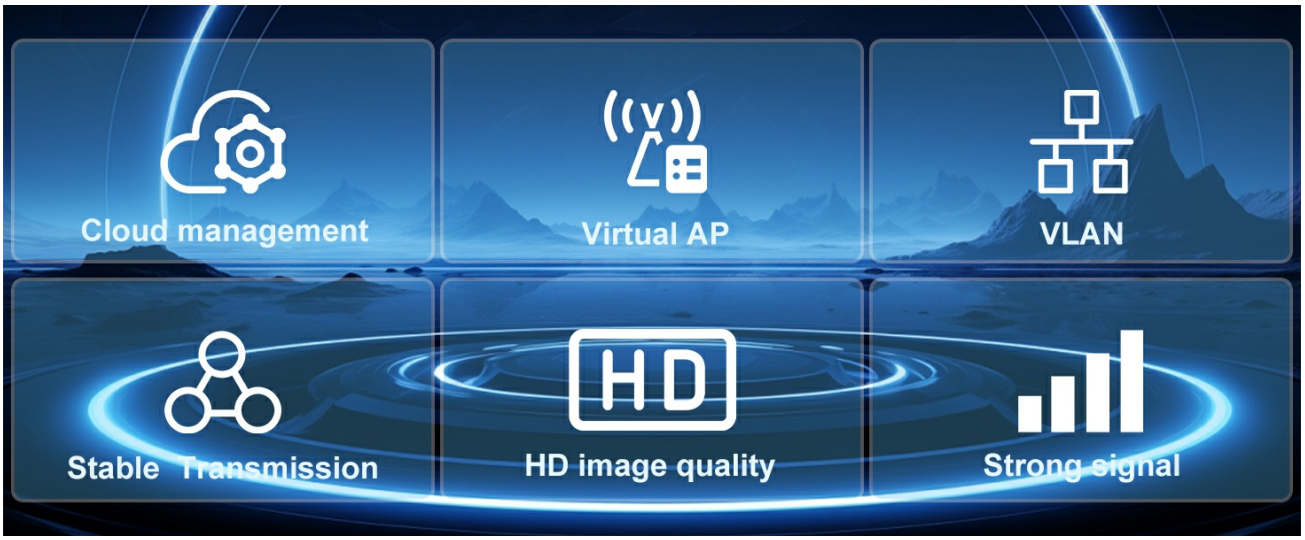

Figure 5.4: PTP-Multi-IP Camera setup for comprehensive monitoring.

5.4. Starlink Router Compatibility

The point-to-point wireless bridge is fully compatible with Starlink routers, enabling seamless integration with the Starlink satellite internet system. This ensures reliable network connections and an enhanced internet experience for Starlink users.

Figure 5.5: Diverse applications for the KuWFi Wireless Bridge.

6. Maintenance

The KuWFi Wireless Bridge is designed for minimal maintenance due to its robust construction.

- **Durable Design:** The IP65-rated waterproof, dustproof, and UV-resistant shell protects the device from harsh outdoor elements, including wind, sun, thunder, rain, snow, and frost.
- **Power Protection:** Supports 24V passive PoE, ESD protection, and surge protection, ensuring longevity and performance even in challenging conditions.
- **Cleaning:** Periodically inspect the exterior of the units for any accumulation of dirt or debris. Clean with a soft, damp cloth if necessary. Do not use harsh chemicals or abrasive materials.
- **Firmware Updates:** Check the official KuWFi website periodically for any available firmware updates to ensure optimal performance and security.

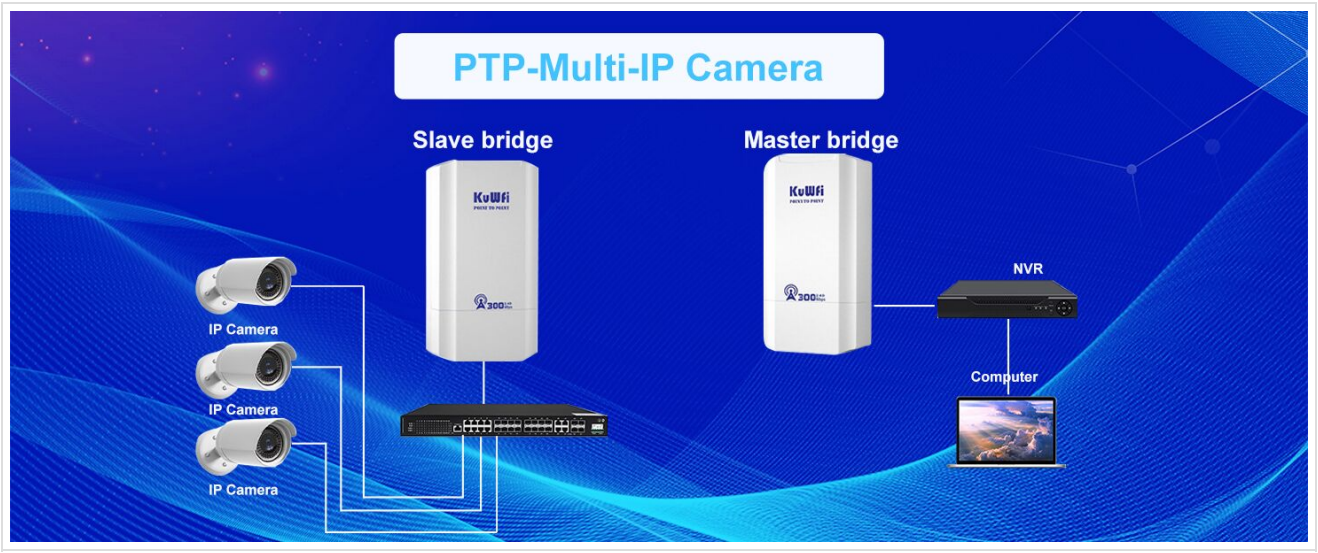

Figure 6.1: The KuWFi Wireless Bridge is built to withstand diverse weather conditions.

7. Troubleshooting

If you encounter issues with your KuWFi Wireless Ethernet Bridge, consider the following common troubleshooting steps:

- **No Power:** Ensure the PoE adapters are properly connected to a power source and the network cables are securely plugged into the units. Check the power LED indicator on the unit.
- **No Connection/Weak Signal:**
  - Verify clear line of sight between the two bridge units. Obstructions like buildings or dense foliage can significantly reduce range and signal strength.
  - Check the LED signal lights on the units. Adjust alignment until optimal signal strength is indicated.
  - Ensure the Master/Slave switch is correctly set on each unit.
  - Confirm that the WAN and LAN ports are correctly connected to your router/network and end device (e.g., camera, laptop).
- **Slow Speed:**
  - Ensure optimal alignment for the strongest signal.
  - Check for potential interference from other 2.4GHz devices in the area.
  - Verify that your internet service provider (ISP) speed is not the bottleneck.
- **Resetting the Device:** If issues persist, you may perform a factory reset using the RST button on the unit. Refer to the Quick Installation Guide for the exact procedure.

8. Warranty and Support

KuWFi is committed to providing competitive wireless network devices and solutions. The product comes with a 3-year quality service guarantee.

- **Warranty:** This product is covered by a 3-year quality service from KuWFi. Please retain your proof of purchase for warranty claims.
- **Technical Support:** For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact KuWFi customer support through their official website or the retailer where the product was purchased.
- **Online Resources:** Visit the KuWFi Store on Amazon for additional product information and resources.