

## UeeVii CPE452 Wireless Bridge Outdoor

# UeeVii CPE452 Wireless Bridge Outdoor User Manual

Model: CPE452 Wireless Bridge Outdoor

## 1. INTRODUCTION

The UeeVii CPE452 Wireless Bridge is a 5.8G point-to-point WiFi CPE system designed to extend your network wirelessly over long distances. This system is ideal for sharing internet connectivity with remote buildings such as garages, barns, or shops, and for extending surveillance ranges for IP cameras without the need for extensive wiring.

The two wireless bridges are pre-configured for plug-and-play operation, simplifying installation. They feature a 14dBi high-gain directional antenna and an IP65-rated weatherproof shell, ensuring reliable performance in various outdoor environments.

## 2. WHAT'S IN THE BOX

Upon opening the package, verify that all components are present:

- 2 x CPE452 Wifi Bridge Units
- 2 x 24V POE Injectors
- 2 x 3FT Test Network Cables
- 2 x J Installation bracket kits
- 1 x User Manual (this document)

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Figure 2.1: Package Contents - Two CPE452 units, two PoE adapters, two network cables, two metal ties, and a user manual.

The UeeVii CPE452 Wireless Bridge units are designed for robust outdoor performance. Each unit features essential ports and indicators for easy setup and monitoring.

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Figure 3.1: CPE452 Port and Indicator Layout. Includes Digital Tube (displaying A or B for Master/Slave mode), 100Mbps LAN/PoE ports, Reset button, A-B Button for mode selection, and DC Power port. The side features an Indicator Light bar for signal strength.

### Key Features:

- **Dual 10/100Mbps RJ45 Ports:** Each unit is equipped with two Ethernet ports, supporting speeds up to 100Mbps. The wireless transmission bandwidth between the two bridges can reach up to 300Mbps.
- **5.8G Frequency Band:** Utilizes the 5.8G frequency band for higher transmission speed, stronger anti-interference performance, and longer working distance compared to 2.4G.
- **14dBi High-Gain Directional Antenna:** Built-in antenna for focused signal transmission, requiring a clear line of sight between units.
- **IP65 Level Weatherproof Shell:** Ensures continued operation in harsh outdoor environments, resistant to rain, dust, and freezing temperatures.
- **Intelligent Power Adjustment:** Automatically adjusts power to adapt to environmental changes, ensuring smooth network and video transmission.



Figure 3.2: Wireless Security - The system incorporates features to ensure secure data transmission.

## 4. SETUP GUIDE

The UeeVii CPE452 Wireless Bridges come pre-configured for ease of use. Follow these steps for initial setup and deployment.

### 4.1 Initial Pairing (Pre-configured)

The two units are pre-paired from the factory. One unit is set as the **Master Bridge (A)** and the other as the **Slave Bridge (B)**. This is indicated by the digital tube display on each unit. If you accidentally reset or need to re-pair, simply use the A-B button to set one to 'A' and the other to 'B'.

# Pre-configured & Plug-and-Play

And when you've messed them up, pair them easily with the click of a button



Figure 4.1: Pre-configured A/B Pairing - One unit is set as Master (A) and the other as Slave (B).

## 4.2 Connecting the Devices

Each CPE unit requires power via the included 24V PoE Injector. The PoE injector has two ports: 'PoE' and 'LAN'.

1. Connect an Ethernet cable from the 'PoE' port of the PoE Injector to one of the LAN/PoE ports on the CPE unit. This cable provides both power and data.
2. Connect an Ethernet cable from the 'LAN' port of the PoE Injector to your network device (e.g., router, switch, computer, NVR).
3. Plug the PoE Injector into a power outlet.

## 4.3 Deployment Scenarios

The CPE452 system is versatile for various network extension needs:

### Scenario 1: Extending Home Network to an Outbuilding

This setup allows you to share your main house's internet connection with a remote building like a garage, barn, or another house.





300Mbps between wireless bridges transfer rate  
Max wired network speed of 100Mbps

Figure 4.2: Network Extension Setup. The Master CPE connects to your main router, and the Slave CPE connects to a router or device in the remote location.

- **Master CPE Side:** Connect the Master CPE (A) to your main router or network switch.
- **Slave CPE Side:** In the remote building, connect the Slave CPE (B) to a local router or directly to a device (e.g., computer, smart TV).

## Scenario 2: Wireless Surveillance System Extension

Connect IP cameras wirelessly to your NVR (Network Video Recorder) or monitoring system.

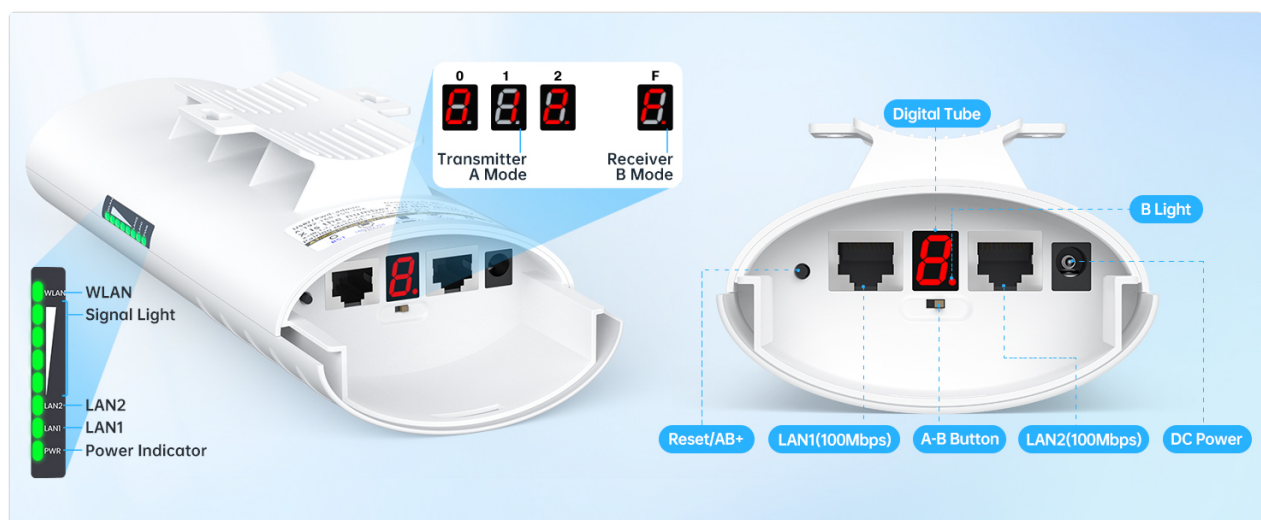


Figure 4.3: Wireless Lane Monitoring Setup. The Slave CPE connects to the IP camera, and the Master CPE connects to the NVR/monitoring system.

- **Slave CPE Side:** Connect the Slave CPE (B) to your IP camera(s) or a switch connected to multiple cameras.
- **Master CPE Side:** Connect the Master CPE (A) to your NVR or monitoring switch.



Figure 4.4: Multiple Camera Setup. Multiple Slave CPEs can connect to a single Master CPE, provided they are within the 60-degree directional range.

### Scenario 3: Starlink Network Extension

The CPE452 can extend your Starlink internet connection to other buildings.



Figure 4.5: Starlink Integration. The Master CPE connects to the Starlink Ethernet Adapter, extending the network to a remote



## 4.4 Installation Requirements

- **Line of Sight:** Ensure a clear, unobstructed line of sight between the two CPE units for optimal performance. Trees and other physical barriers can significantly impact signal strength and speed.
- **Mounting:** Use the provided J installation bracket kits to securely mount the units. They should be mounted facing each other.
- **Power:** The units support PoE power supply (100 FT cable length). Do not use 48V PoE injectors or switches.



Figure 4.6: Outdoor Durability. The IP65 rating ensures protection against sunlight, rain, snow, and wind.

## 5. OPERATING THE WIRELESS BRIDGE

Once properly installed and powered, the UeeVii CPE452 Wireless Bridge system operates automatically to extend your network.



## 5.1 Network Extension

The system acts as a transparent bridge, effectively creating a wireless Ethernet cable between the two points. Devices connected to the Slave CPE will receive network access from the Master CPE's network.



Figure 5.1: High-Speed Connectivity. The system supports up to 100 Mbps wired speeds and 300 Mbps wireless transmission between units on the 5.8G band.

## 5.2 Signal Indicators

The indicator lights on the side of each CPE unit provide visual feedback on signal strength. More illuminated lights indicate a stronger connection, which is crucial for optimal performance.

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Video 5.1: Ueevii CPE452 Wireless Bridge Unboxing. This video provides a visual overview of the product and its components, including a brief look at the indicator lights and ports.

## 6. MAINTENANCE

The UeeVii CPE452 Wireless Bridge is designed for minimal maintenance due to its durable outdoor construction.

- **Regular Inspection:** Periodically check the physical mounting and cable connections to ensure they remain secure and free from damage.
- **Clear Line of Sight:** Ensure that no new obstructions (e.g., tree growth) have appeared between the two units that could degrade signal quality. Trim foliage if necessary.
- **Cleaning:** If necessary, gently wipe the exterior of the units with a damp cloth to remove dirt or debris. Do not use harsh chemicals or abrasive cleaners.

## 7. TROUBLESHOOTING

If you encounter issues with your UeeVii CPE452 Wireless Bridge, refer to the following common problems and solutions:

### 7.1 No Network Connectivity / Slow Speed

- **Check Power:** Ensure both CPE units and their respective PoE injectors are properly powered and indicator lights are on.
- **Verify Connections:** Confirm all Ethernet cables are securely connected to the correct ports on the CPEs, PoE injectors, and network devices.
- **Line of Sight:** The most common issue for outdoor wireless bridges is an obstructed line of sight. Ensure there are no physical barriers (trees, buildings, etc.) directly between the two units. Even partial obstructions can severely degrade performance.
- **Signal Strength:** Check the indicator lights on the side of each CPE. If fewer lights are illuminated, the signal is weak. Adjust alignment or clear obstructions.
- **Re-pair Units:** If the units are not communicating, they might have lost their pairing. Use the A-B button on each unit to re-establish the Master (A) and Slave (B) configuration.
- **Network Device Check:** Ensure your main router/network is functioning correctly and providing internet access. Test by connecting a device directly to your main router.

### 7.2 Units Not Pairing / Digital Tube Display Issues

- **A-B Button:** Press the A-B button on each unit to cycle through modes (A, B, C, etc.). Ensure one is set to 'A' and the other to 'B'.
- **Reset:** If issues persist, use a paperclip to press and hold the 'Reset' button for 5-10 seconds until the unit reboots. This will revert to factory settings, and you will need to re-pair them using the A-B button.

## 8. SPECIFICATIONS

Feature	Detail
Model Number	CPE452 Wireless Bridge Outdoor

Brand	UeeVii
Product Dimensions	9.84 x 3.74 x 2.36 inches (25 x 9.5 x 6 cm)
Item Weight	0.205 ounces (5.8 Grams)
Hardware Interface	Ethernet
Data Link Protocol	IEEE 802.11a, IEEE 802.11n
Data Transfer Rate	100 Megabits Per Second (wired)
Wireless Transmission Speed	Up to 300Mbps (between bridges)
Antenna Gain	14dBi Directional
Frequency Band	5.8G
Power Supply	24V PoE (Passive PoE)
Weatherproof Rating	IP65
Compatible Devices	Computer, Router, Camera, Access Point, Switch


## 9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your purchase or visit the official UeeVii brand store. The manufacturer provides support for product inquiries and troubleshooting assistance.

**UeeVii Official Store:** [Visit Store](#)

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### Related Documents - CPE452 Wireless Bridge Outdoor

	<p><a href="#">UeeVii CPE688 Wireless Bridge User Manual - 5.8GHz Long-Range Network Extender</a></p> <p>Comprehensive user manual for the UeeVii CPE688 Wireless Bridge, detailing installation, configuration, troubleshooting, and specifications for 5.8GHz long-range point-to-point and point-to-multipoint network extension.</p>
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 <p>Outdoor CPE -Quick Installation Guide-</p> <p>Note: 1. Thank you for order and using our product, please read the manual carefully before use. If there are any problems during the use, please contact us in time. 2. Please read the manual carefully before use. If there are any problems during the use, please contact us in time. 3. Please read the manual carefully before use. If there are any problems during the use, please contact us in time.</p>	<p><a href="#">VSVABEFV Outdoor CPE Quick Installation Guide</a></p> <p>This guide provides essential information for installing and configuring the VSVABEFV Outdoor CPE, a 5.8G 300Mbps wireless bridge designed for long-range network extension and video surveillance applications. It covers device features, specifications, setup procedures, advanced settings, and field applications.</p>
 <p>UeeVii WIRELESS BRIDGE - User Manual -</p> <p>Model: CPE58G</p> <p>Note: Thank you for order and using our product, please read the manual carefully before use. If there are any problems during the use, please contact us in time. Customer Service Email: support@ueevii.com</p>	<p><a href="#">UeeVii CPE58G Wireless Bridge User Manual - Setup, Specs, and Troubleshooting</a></p> <p>Official user manual for the UeeVii CPE58G 5G high-performance outdoor wireless bridge. Covers product introduction, features, specifications, interface details, button operations, quick start guide, installation, application cases, advanced settings, and troubleshooting for optimal network connectivity.</p>
	<p><a href="#">BrosTrend WiFi Bridge Quick Installation Guide</a></p> <p>Comprehensive quick installation guide for the BrosTrend Outdoor CPE WiFi Bridge. Learn how to set up point-to-point wireless connections, configure network settings, and ensure optimal performance for long-range connectivity.</p>
 <p>Outdoor CPE - Quick Installation Guide -</p> <p>5.8G</p> <p>Note: Thank you for order and using our product, please read the manual carefully before use. If there are any problems during the use, please contact us in time.</p>	<p><a href="#">KuWfi Outdoor CPE Quick Installation Guide</a></p> <p>A comprehensive guide for installing and configuring KuWfi Outdoor CPE wireless bridges, detailing setup, specifications, modes, IP configuration, and field applications for long-range wireless transmission up to 5KM.</p>
	<p><a href="#">KuWFi WB2F01 300M Outdoor PTP/PTMP WiFi Bridge User Guide</a></p> <p>This guide provides instructions for setting up and managing the KuWFi WB2F01 300M Outdoor WiFi Bridge, covering login, operation interface, working modes, WiFi settings, and device status.</p>