





# 60 GHz Gigabit+ Wireless Bridge Kit

Low-Interference 60 GHz Radio Band

5 GHz Radio for Backup

Pre-Paired Radios for Quick Setup Using UniFi App





### Overview

The UniFi Building-to-Building Bridge, model UBB, is the ideal solution for high-throughput connectivity with a range of up to 500 m. Integration with the UniFi Controller makes bridging two networks seamless.

Comprised of two pre-paired endpoint devices, the UBB delivers a Point-to-Point (PtP) link – up to 1+ Gbps – using 802.11ad technology on the low-interference 60 GHz radio band. For backup, a 5 GHz radio using 802.11ac technology is available.

# **60 GHz Operating Frequency**

The 60 GHz band attenuates quickly due to atmospheric absorption. When a 60 GHz radio – such as the UBB – uses a highly directional antenna, inteference from other directions is also attenuated. The 60 GHz band thus offers extremely high transmission capacity as a wireless wire.

# Wireless Link Redundancy

60 GHz is highly directional and any obstacle in the line of sight – even rain – can drop signal levels.

To maintain connectivity, the UBB can fail over to the 5 GHz radio. The 5 GHz radio band propagates better and uses radio wave reflections and refractions more effectively, although it offers lower maximum throughput.

# **Pre-Paired Configuration**

Setup is quick and easy: the UBB radios are pre-paired out of the box so you can use the UniFi app for simultaneous adoption.

The UniFi Controller software enables intuitive management of individual UniFi devices and site-wide deployments.

### Sleek Industrial Design

The UBB is designed with a compact form factor for discreet integration into any environment.

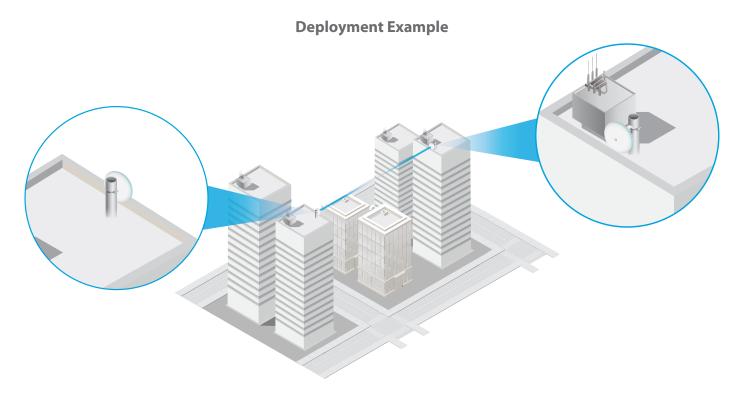
# **Convenient Alignment**

The UBB pivots on its ball joint 3-axis mount for easy aiming.

# **Mounting Versatility**

No fasteners are required for pole-mounting, and a single wall fastener (not included) is required for wall-mounting. A wall mount kit, model NBE-WMK, is available as an optional accessory to enhance stability.





The UBB creates a wireless link between two buildings.







# Scalable UniFi Network Controller

### **Management Capabilities**

The UniFi Network Controller can provision UniFi devices, map out networks, and quickly manage system traffic. Important network details are logically organized for a simplified, yet powerful, interface.

#### **Network Overview**

From a single pane of glass, view network topology and configuration, real-time statistics, and debugging metrics. Monitor your network's vitals and make on-the-fly adjustments as needed.

### **Deep Packet Inspection**

Ubiquiti's proprietary Deep Packet Inspection (DPI) engine includes the latest application identification signatures to track which applications (and IP addresses) are using the most bandwidth.

### **Detailed Analytics**

The UniFi Network Controller provides configurable reporting and analytics to manage large user populations and expedite troubleshooting. Advanced search and sorting capabilities make network management more efficient.

### **Multi-Site Management**

A single controller running in the cloud can manage multiple sites: multiple, distributed deployments and multi-tenancy for managed service providers. Each site is logically separated and has its own configuration, maps, statistics, guest portal, and administrator accounts.

#### **RF Environment**

Detect and troubleshoot nearby interference, analyze radio frequencies, and choose optimal AP placement. The auto-optimize feature configures the UBB with best practice settings, and the included radio Al capability optimizes channel selection using a genetic algorithm.

#### Advanced RF Performance

RF performance and configuration features include spectral analysis, airtime fairness, band steering, and cell-size tuning.

# LAN/WLAN Groups

Create multiple LAN and WLAN groups and assign them to the respective UniFi devices and VLAN tags.

# **Predictive Maps**

Upload a map or use Google Maps to represent the areas where your UniFi devices are located. Use the predictive map feature\* to get a preview of coverage, and to help you avoid dead spots.

### Wireless Uplink

Wireless Uplink functionality enables wireless connectivity between APs for extended range, wireless adoption of APs in their default state, and real-time changes to network topology.

### **Guest Portal/Hotspot**

Configure custom settings, including authentication, Hotspot setup, and the option to use your own external portal server.

version 5.6 or higher













	UBB Radio
Dimensions	140 x 140 x 90 mm (5.51 x 5.51 x 3.54")
Weight	376 g (13.3 oz)
Antenna Gain 2.4 GHz (BLE) 5 GHz 60 GHz	2 dBi 10 dBi 17.2 dBi
GPS	Yes
Max. TX Power (EIRP) 5 GHz 60 GHz	25 dBm 32 - 36.5dBm
60 GHz Elevation Beamwidth	30°
60 GHz Azimuthal Coverage	±60°
Interfaces Networking Management	(1) 10/100/1000 Ethernet Port Bluetooth
Enclosure	UV-Resistant Polycarbonate
Power Method	802.3af Supported Passive Power over Ethernet (48V)
Power Supply	UniFi PoE Switch 48V, 0.32A Gigabit PoE Adapter (Included)
Max Power Consumption	11W
Wind Loading	56 N @ 200 km/h (12.6 lbf @ 125 mph)
Wind Survivability	200 km/h (125 mph)
Mounting	Pole-Mount (Kit Included) Wall-Mount (Not Included)
ESD/EMP Protection	± 24kV Contact/Air
Operating Temperature	-40 to 60° C (-40 to 140° F)
Operating Humidity	5 to 95% Noncondensing
Certifications	CE, FCC, IC

Оре	erating Frequency (GHz)	
Worldwide		5.150 - 5.875 57 - 66
US/CA	U-NII-1: 5.150 - 5.250	U-NII-3: 5.725 - 5.850
		57 - 66







	Bluetooth (GHz)
Worldwide	2.400 - 2.4835

5 GHz Vertical Azimuth	5 GHz Vertical Elevation
90° 0dB 120° -5dB 60° 10dB 15dB 20dB 25dB 30° 25dB 30° 30° 40° 40° 40° 40° 40° 40° 40° 4	90° 0dB 120° -5dB -10dB -15dB -15dB -20dB -25dB 30dB -15dB -30dB -25dB -30dB -30°
5 GHz Horizontal Azimuth	5 GHz Horizontal Elevation

