UniFi® Building Bridge

DATASHEET



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 1.7+ Gbps bi-directional – 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

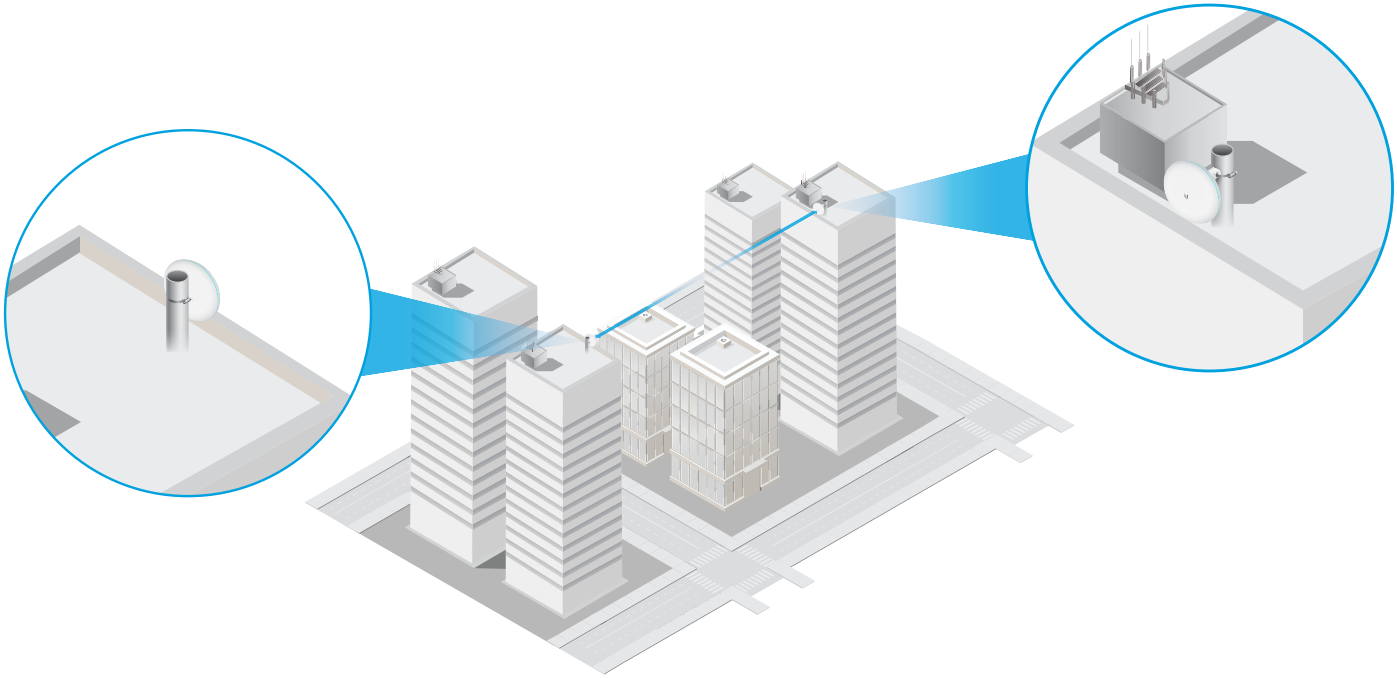
The UBB pivots on its ball joint 3-axis mount for easy aiming.

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.



Deployment Example



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 AI 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*

Download on the App Store

GET IT ON Google Play

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

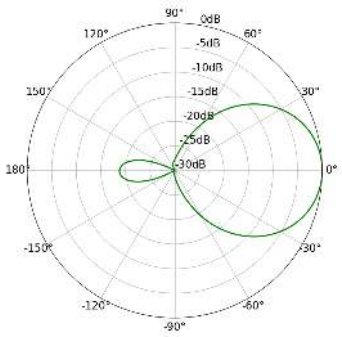
Operating Frequency (GHz)		
Worldwide		5.150 - 5.875 57 - 66
US/CA	U-NII-1: 5.150 - 5.250	U-NII-3: 5.725 - 5.850
		57 - 66



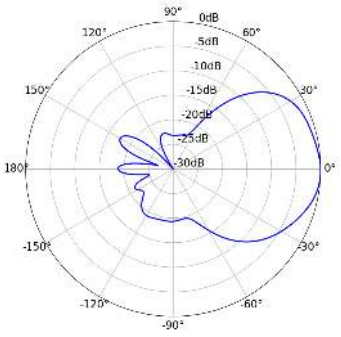
Bluetooth (GHz)	
Worldwide	2.400 - 2.4835



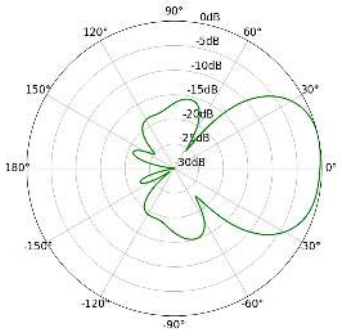
5 GHz Vertical Azimuth



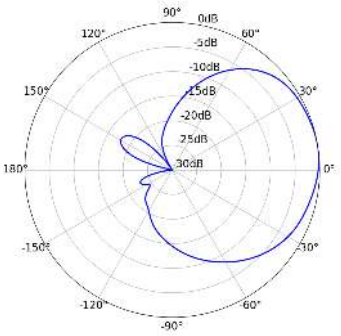
5 GHz Vertical Elevation



5 GHz Horizontal Azimuth



5 GHz Horizontal Elevation



Specifications are subject to change. Ubiquiti products are sold with a limited warranty described at: ui.com/support/warranty
The limited warranty requires the use of arbitration to resolve disputes on an individual basis, and, where applicable, specify arbitration instead of jury trials or class actions.
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