

# Bridge-in-a-Box

## Outdoor Wireless Ethernet Bridge

### QUICK LOOK:

Bridge-in-a-Box	Bridge-in-a-Box UHD	Bridge-in-a-Box UHD PRO
802.11n	802.11ac	802.11ac
Up to 200 Mbps	Up to 600 Mbps	Up to 600 Mbps
<b>All are Pre-Paired for Easy Installation</b>		
Enterprise	Enterprise/Prosumer	Industrial
2 mi / 3.2 km Range	1 mi / 1.6 km Range	5 mi / 8 km Range
IP55	IP55	IP67



Thousands of small businesses and residential users are using Bridge-in-a-Box to wirelessly extend their networks by simply connecting point A to point B. Each Bridge-in-a-Box comes with two wireless radio modules and power supplies that can be used to extend your network from wherever you have an Ethernet port to wherever you need one from 50 feet to 5 miles away (20 meters to 8 kilometers). The modules are extremely easy to deploy as they come pre-configured and pre-paired to connect.

#### HOW ARE PEOPLE USING BRIDGE-IN-A-BOX?

- Extending Internet Connectivity
- Connecting Remote Wi-Fi Hotspots
- Remote Camera or CCTV Video Feeds

#### WHAT ARE PEOPLE CONNECTING WITH BRIDGE-IN-A-BOX?

- Machine Shops / Garages / Storage Sheds
- Docks / Boat Ramps
- Any Remote or Outlying Buildings
- Remote Parking Lots
- Campus Buildings
- Building to Building
- Cabins and Lodges
- Construction Sites
- Temporary Events Such as Concerts, Farmers Markets, etc.
- Athletic Fields and Events

## Bridge-in-a-Box Outdoor Wireless Ethernet Bridge

### Features

	Bridge-in-a-Box	Bridge-in-a-Box UHD	Bridge-in-a-Box UHD PRO
<b>Wireless Standard</b>	ePTP proprietary protocol. Supports lower latencies, longer ranges and higher reliability.		
<b>Wired Interface</b>	Gigabit/Fast Ethernet (100/1000 BaseT)	Gigabit/Fast Ethernet (100/1000 BaseT)	Gigabit/Fast Ethernet (100/1000 BaseT)
<b>Functions</b>	Traffic Prioritization using QoS (Quality of Service), WEP security	Traffic Prioritization using QoS (Quality of Service), WEP security	Traffic Prioritization using QoS (Quality of Service), WEP security
<b>Radio Transmit Power</b>	Up to 30 dBm	Up to 29 dBm	Up to 28 dBm
<b>Antenna</b>	16 dBi	13 dBi	19 dBi
<b>Environmental</b>	IP55	IP55	IP67
<b>Operating Temperature</b>	-30°C to 60°C (-22°F to 140°F)	-30°C to 60°C (-22°F to 140°F)	-30°C to 60°C (-22°F to 140°F)
<b>Mounting</b>	Flexible Pole Mount supports 2.5 cm to 7.5 cm (1.0 in to 3.0 in)	Included Pole Mount supports 2.5 cm to 4.1 cm (1.0 in to 1.6 in)	Included Pole Mount supports 2.5 cm to 4.1 cm (1.0 in to 1.6 in)
<b>Security</b>	128-bit AES encryption, WEP, Password-protected HTTPS	128-bit AES encryption, WEP, Password-protected HTTPS	128-bit AES encryption, WEP, Password-protected HTTPS



**Bridge-in-a-Box**



**Bridge-in-a-Box UHD**



**Bridge-in-a-Box UHD PRO**

## Bridge-in-a-Box Outdoor Wireless Ethernet Bridge

### Specifications

	Bridge-in-a-Box	Bridge-in-a-Box UHD	Bridge-in-a-Box UHD PRO
<b>Frequency Range</b>	<b>5 GHz:</b> 4910 – 5970 MHz (exact frequencies as allowed by local regulations)	<b>5 GHz:</b> 4910 – 5970 MHz (exact frequencies as allowed by local regulations)	<b>5 GHz:</b> 4910 – 5970 MHz (exact frequencies as allowed by local regulations)
<b>Channel Spacing</b>	Configurable in 5 MHz increments	Configurable in 5 MHz increments	Configurable in 5 MHz increments
<b>Channel Bandwidth Options</b>	5   10   20   40 MHz	20   40   80 MHz	5   10   20   40   80 MHz
<b>Technology</b>			
<b>Ethernet Interface</b>	10/100/1000 BaseT, Compatible with Cambium PoE pinouts (V+ = 7 & 8, Return = 4 & 5) and Standard PoE pinouts (V+ = 4 & 5, Return = 7 & 8)	10/100/1000 BaseT, Compatible with Cambium PoE & Standard PoE pinouts	10/100/1000 BaseT, Compatible with Cambium PoE & Standard PoE pinouts
<b>Protocols</b>	IPv4/IPv6 (Dual Stack), UDP, TCP, ICMP, SNMPv2c, NTP, STP, IGMP, SSH	IPv4/IPv6 (Dual Stack), UDP, TCP, ICMP, SNMPv2c, NTP, STP, IGMP, SSH	IPv4/IPv6 (Dual Stack), UDP, TCP, ICMP, SNMPv2c, NTP, STP, IGMP, SS
<b>Network Management</b>	IPv4/IPv6, HTTPs, SNMPv2c, SSH, Cambium Networks cnMaestro™	IPv4/IPv6, HTTPs, SNMPv2c, SSH, Cambium Networks cnMaestro™	IPv4/IPv6, HTTPs, SNMPv2c, SSH, Cambium Networks cnMaestro™
<b>VLAN</b>	802.1Q with 802.1p priority	802.1Q with 802.1p priority	802.1Q with 802.1p priority
<b>ARQ</b>	Yes	Yes	Yes
<b>Nominal Receive Sensitivity (w/FEC)</b>			
<b>@ 20 MHz Channel</b>	MCS 0 = -93 dBm to MCS 15 = -72 dBm (per branch)	MCS 0 = -89 dBm to MCS 8 (256 QAM-3/4) = -68 dBm (per chain)	MCS 0 = -89 dBm to MCS 8 (256 QAM-3/4) = -68 dBm (per chain)
<b>@ 40 MHz Channel</b>	MCS 0 = -90 dBm to MCS 15 = -69 dBm (per branch)	MCS 0 = -87 dBm to MCS9 (256 QAM-5/6) = -66 dBm (per chain)	MCS 0 = -87 dBm to MCS 9 (256 QAM-5/6) = -66 dBm (per chain)
<b>@ 80 MHz Channel</b>	n/a	MCS 0 = -84 dBm to MCS9 (256 QAM-5/6) = -61 dBm (per chain)	MCS 0 = -84 dBm to MCS 9 (256 QAM-5/6) = -61 dBm (per chain)
<b>Modulation Levels</b>	MCS 0 (BPSK) to MCS15 (64 QAM 5/6)	MCS 0 (BPSK) to MCS9 (256 QAM-5/6)	MCS 0 (BPSK) to MCS9 (256 QAM-5/6)
<b>Transmit Power Range</b>	-17 to +30 dBm (combined, to regional EIRP limit) (1 dB interval)	0 to +28 dBm (combined up to the regional EIRP limit) (1 dB interval)	0 to +28 dBm (combined up to the regional EIRP limit) (1 dB interval)
<b>Surge Suppression</b>	2 Joule Integrated	1 Joule Integrated	1 Joule Integrated
<b>Weight</b>	0.50 kg (1.1 lb) (including mounting bracket)	0.48 kg (1.05 lbs) (including integrated mounting bracket)	1.45 kg (3.2 lbs) (including mounting bracket)
<b>Wind Survival</b>	145 km/h (90 mph) with antenna	180 km/h (112 mph)	180 km/h (112 mph)
<b>Dimensions</b>	12.4 x 25.1 x 11.9 cm (4.9 x 9.9 x 4.7 in) with mounting bracket attached	13.0 x 20.3 x 5.40 cm (5.1 x 8.0 x 2.1 in)	27.8 x 27.8 x 4.5 cm (10.9 x 10.9 x 1.8 in) without mounting bracket
<b>Power Consumption</b>	10 W Maximum, 5 W Typical	12 W	12 W (Up to 15 W in extreme cold temperatures when heater is activated)
<b>FCCID</b>	Z8H89FT0015	Z8H89FT0048	Z8H89FT0048
<b>Industry Canada Cert</b>	109W-0015	109W-0048	109W-0048
<b>CE</b>	<b>5.4 GHz:</b> EN 301 893 V2.11 <b>5.8 GHz:</b> EN 302 502 V2.11	<b>5.4 GHz:</b> EN 301 893 V2.11 <b>5.8 GHz:</b> EN 302 502 V2.11	<b>5.4 GHz:</b> EN 301 893 V2.11 <b>5.8 GHz:</b> EN 302 502 V2.11

## Bridge-in-a-Box Outdoor Wireless Ethernet Bridge

### Bridge-in-a-Box Ordering Information

**C050900B071A** Bridge-in-a-Box 5 GHz (RoW) (No Cord)

**C050900B073A** Bridge-in-a-Box 5 GHz (EU)

**C050900B171A** Bridge-in-a-Box 5 GHz (RoW) (US Cord)

**C050900B172A** Bridge-in-a-Box 5 GHz (IC)

**C050900B271A** Bridge-in-a-Box 5 GHz (RoW) (EU Cord)

**C058900B072A** Bridge-in-a-Box 5 GHz (FCC)

### Bridge-in-a-Box UHD Ordering Information

**C058900B701A** Bridge-in-a-Box UHD 5 GHz (FCC) (US cord)

**C050900B701A** Bridge-in-a-Box UHD 5 GHz (IC) (Canada/US cord)

**C050900B702A** Bridge-in-a-Box UHD 5 GHz (EU) (EU cord)

**C050900B703A** Bridge-in-a-Box UHD 5 GHz (EU) (UK cord)

**C050900B704A** Bridge-in-a-Box UHD 5 GHz (ROW) (no cord)

**C050900B705A** Bridge-in-a-Box UHD 5 GHz (ROW) (US cord)

**C050900B706A** Bridge-in-a-Box UHD 5 GHz (ROW) (EU cord)

**C050900B707A** Bridge-in-a-Box UHD 5 GHz (ROW) (UK cord)

**C050900B708A** Bridge-in-a-Box UHD 5 GHz (ROW) (India cord)

**C050900B709A** Bridge-in-a-Box UHD 5 GHz (India) (India cord)

**C050900B710A** Bridge-in-a-Box UHD 5 GHz (ROW) (China cord)

**C050900B711A** Bridge-in-a-Box UHD 5 GHz (ROW) (Brazil cord)

**C050900B712A** Bridge-in-a-Box UHD 5 GHz (ROW) (Argentina cord)

**C050900B713A** Bridge-in-a-Box UHD 5 GHz (ROW) (ANZ cord)

**C050900B714A** Bridge-in-a-Box UHD 5 GHz (ROW) (South Africa cord)

## Bridge-in-a-Box Outdoor Wireless Ethernet Bridge

### Bridge-in-a-Box UHD PRO Ordering Information

<b>C058900B901A</b>	Bridge-in-a-Box UHD PRO 5 GHz (FCC) (US cord)
<b>C050900B901A</b>	Bridge-in-a-Box UHD PRO 5 GHz (IC) (Canada/US cord)
<b>C050900B902A</b>	Bridge-in-a-Box UHD PRO 5 GHz (EU) (EU cord)
<b>C050900B903A</b>	Bridge-in-a-Box UHD PRO 5 GHz (EU) (UK cord)
<b>C050900B904A</b>	Bridge-in-a-Box UHD PRO 5 GHz (ROW) (no cord)
<b>C050900B905A</b>	Bridge-in-a-Box UHD PRO 5 GHz (ROW) (US cord)
<b>C050900B906A</b>	Bridge-in-a-Box UHD PRO 5 GHz (ROW) (EU cord)
<b>C050900B907A</b>	Bridge-in-a-Box UHD PRO 5 GHz (ROW) (UK cord)
<b>C050900B908A</b>	Bridge-in-a-Box UHD PRO 5 GHz (ROW) (India cord)
<b>C050900B909A</b>	Bridge-in-a-Box UHD PRO 5 GHz (India) (India cord)
<b>C050900B910A</b>	Bridge-in-a-Box UHD PRO 5 GHz (ROW) (China cord)
<b>C050900B911A</b>	Bridge-in-a-Box UHD PRO 5 GHz (ROW) (Brazil cord)
<b>C050900B912A</b>	Bridge-in-a-Box UHD PRO 5 GHz (ROW) (Argentina cord)
<b>C050900B913A</b>	Bridge-in-a-Box UHD PRO 5 GHz (ROW) (ANZ cord)
<b>C050900B914A</b>	Bridge-in-a-Box UHD PRO 5 GHz (ROW) (South Africa cord)

#### ABOUT CAMBIUM NETWORKS

Cambium Networks empowers millions of people with wireless connectivity worldwide. Its wireless portfolio is used by commercial and government network operators as well as broadband service providers to connect people, places and things. With a single network architecture spanning fixed wireless and Wi-Fi, Cambium Networks enables operators to achieve maximum performance with minimal spectrum. End-to-end cloud management transforms networks into dynamic environments that evolve to meet changing needs with minimal physical human intervention. Cambium Networks empowers a growing ecosystem of partners who design and deliver gigabit wireless solutions that just work.