

ePMP Bridge-in-a-Box

Plug-n-Play Outdoor Wireless Ethernet Bridge

ePMP Bridge-in-a-Box is a pre-paired Point-to-Point (PTP) link comprised of two ePMP Force 180 devices designed to extend networks between two locations (up to 10 miles apart).

The Bridge-in-a-Box solution may be quickly installed to:

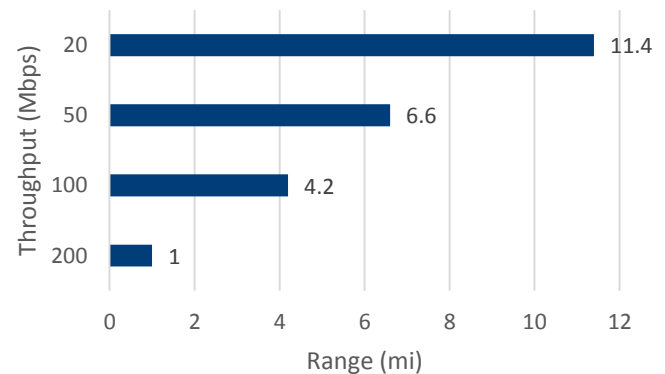
- Extend a local network to a remote building
- Extend your Wi-Fi link to a new location
- Provide a cost-effective solution to backhauling CCTV networks
- Support any application requiring network extension!



Bridge-in-a-Box Specifications

Feature	Specification
Wireless Standard	ePTP proprietary protocol. Supports longer ranges, lower latency, and greater performance. Optional Standard Wi-Fi mode of operation available.
Wired Interface	Gigabit / Fast Ethernet
Functions	Traffic prioritization using ePMP QoS (Quality of Service), WEP security.
Power	24-56V PoE at device
Radio Transmit Power	Up to 30 dBm
Environmental	Outdoor IP55 -4 to 131 deg F (-20 to +55 deg C)
Antenna	16 dBi integrated antenna
Mounting	Flexible pole mount. Supports diameters from 1-3 inches (2.5 – 7.5 cm)
Security	AES128 data encryption and RADIUS-based authentication

Line of Sight Range



Expected performance based on Line of Sight (LOS) between the two units. Trees, buildings, and other obstructions will result in lower range and performance.

Bridge-in-a-Box Additional Specifications

Feature		Specification
Spectrum	Frequency Range	4910 – 5970 MHz
	Channel Spacing	Configurable on 5 MHz increments
	Frequency Range	5 GHz: 4910 – 5970 MHz (exact frequencies as allowed by local regulations)
	Channel Width	5 10 20 40 MHz
	Physical Layer	2x2 MIMO/OFDM
	Ethernet Interface	10/100/1000BaseT, Compatible with Cambium PoE pinouts (V+ = 7 & 8, Return = 4 & 5) and Standard PoE pinouts (V+ = 4 & 5, Return = 7 & 8)
	Protocols Used	IPv4, UDP, TCP, IP, ICMP, SNMPv2c, HTTPs, STP, SSH, IGMP Snooping
	Network Management	HTTPs, SNMPv2c, SSH
	VLAN	802.1Q with 802.1p priority
Performance	ARQ	Yes
	Nominal Receive Sensitivity (w/FEC) @20MHz Channel	MCS0 = -93 dBm to MCS15 = -72 dBm (per branch)
	Nominal Receive Sensitivity (w/FEC) @40MHz Channel	MCS0 = -90 dBm to MCS15 = -69 dBm (per branch)
	Quality of Service	Three level priority (Voice, High, Low) with packet classification by DSCP, COS, VLAN ID, IP & MAC Address, Broadcast, Multicast and Station Priority
Physical	Transmit Power Range	-17 to +30 dBm (combined, to regional EIRP limit) (1 dB interval)
	Surge Suppression	2 Joule Integrated
	Weight	0.50 kg (1.1 lb.) (includes mounting bracket)
	Wind Survival	145 km/hour (90 mi/hour) with antenna
	Dimensions (h x w x d)	12.4 x 25.1 x 11.9 cm (4.9 x 9.9 x 4.7 in) – with mounting bracket attached
	Pole Diameter Range	1 – 1.6 in (2.5 – 4.1 cm) with included clamp ; up to 2.25 in (5.7 cm) with larger clamp
	Power Consumption	10 W Maximum, 5 W Typical
	Input Voltage	10 to 30 V