

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!

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



Expected performance based on Line of Sight (LOS) between the two units.

Trees, buildings, and other obstructions will result in lower range and performance.

SPECIFICATIONS

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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/IPv6 (Dual Stack), UDP, TCP, ICMP, SNMPv2c, NTP, STP, IGMP, SSH
	Network Management	IPv4/IPv6, HTTPS, SNMPv2c, SSH, Cambium Networks CnMaestro™
	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