# K60 Bridge Kit 60GHz Outdoor Wireless

# 60GHz Outdoor Wireless Network Bridge

The K60 Bridge Kit is a pair of 60GHz radios with integrated 128-element beamforming antennas that provide best-inclass link resiliency and full capacity range. These radios are pre-configured as a Point-to-Point (PtP) link solution with cables, PoE injectors and pole mounts included.

The K60 is carrier-grade, manufactured in the USA, features IP67 weather-sealing for reliable operation in harsh environments, and its PoE output port can be used to connect and power a collocated device.

The K60 Gigabit Bridge Kit includes everything needed to quickly install a gigabit point-to-point link.



# **High Capacity**

Up to 1.8Gbps aggregate

#### Low Latency

Sub 1ms latency

#### Dynamic Resource Allocation

Network capacity is automatically adjusted based on per endpoint downlink and uplink utilization

## Adaptive Beamforming

128 element, phased array, beamforming antenna with 90° horizontal and 40° vertical scanning for maximum link resiliency and ranges up to 1312ft (400m) at full capacity

## **Gigabit Ethernet**

Built-in gigabit Ethernet with PoE output for connecting a camera, Wi-Fi Access Point, or collocated Altowav radio unit

# Dense Network Ready

60GHz spectrum with beamforming and interference cancellation allows for extremely dense networks

# Security

AES 128 encryption with automatic secure key distribution

#### Carrier-Grade

IP67 rated enclosure (requires Harting connectors) and built in USA for reliable, long-term operation in the field

# Simple and Rapid Installation

Altowav's antennas auto-align for easy installs, and our Open API and native layer 2 architecture enable easy integration into operators' existing networks



# **Specifications**

#### **SYSTEM**

**Configuration** Point to Point and Point to Multipoint

Frequency and

**Duplexing** 57.24 - 63.72GHz TDD

Channel

**Bandwidths** 3 non-overlapping 2.16GHz channels **Modulation** 8 levels of adaptive modulation and

coding schemes

**Antenna** Integrated beamforming antenna with

wide scanning range:

Horizontal: 90° Vertical: 40°

Maximum EIRP

**Full Capacity** 

**Range** Up to 1312ft (400m) **Capacity** Up to 1.8Gbps aggregate

Ethernet

Frame Type Transparent bridging of all

40dBm

Ethernet types including VLAN

and VLAN stacking

**Latency** 250µs average TDD

**L2 Switching** Complete Layer 2 switching, including

VLAN support

**Security** AES 128

PtMP Remote

**Support** Up to 8 remote stations

#### CONNECTIVITY

**Ethernet** 2 x 1000BASE-T

HARTING PushPull V4 RJ45

Voltage 56VDC (802.3at, or 802.3bt PoE input)

**PoE Input** Active, 802.3af/at/bt

**PoE Output** Active, 802.3af/at up to 30W

Power

**Consumption** 8W maximum (not including

PoE output)

### **MANAGEMENT**

Management Web GUI, CLI, REST API and

AltoCommand (optional)

#### **MECHANICAL**

**Dimensions** 

(**H x W x D**) 6.2" x 3.9" x 1.9" (157 x 99 x 48mm)

**Weight** 14oz (400g)

Operating

**Temperature**  $-40^{\circ}$  to  $+131^{\circ}$ F ( $-40^{\circ}$  to  $+55^{\circ}$ C)

-22°F (-30°C) cold start

**Casing** Die-cast anodized aluminum

chassis with PC-ABS radome

**Ingress Protection** IP67 (requires HARTING

connector)

**Regulatory** FCC, IC

**ESD** IEC EN 61000-4-2 **EMC** IEC EN 61000-4-3

# **MODEL NUMBER**

AW2-K60-BRI-2C-MPG K60 60GHz Bridge Kit

# **INCLUDED ACCESSORIES (2 EA.)**

**AX-K60-M** Pole/wall mount bracket for K60

**AX-CBL-HR-1m** 3.3ft (1m) HARTING PushPull V4

RJ45 to RJ45 outdoor cable

AX-P-IN-BT-1G-US Indoor 802.3bt (60W) 1GbE PoE

injector with 0.8m US power cord

#### **OPTIONAL ACCESSORIES**

**AX-AW3-MT-WALL** Wall standoff bracket that

enables azimuth adjustment

**AX-PSW-OD-3AT-4C1** Outdoor 3 port PoE + 1 data uplink

1GbE switch

**AX-PSW-OD-4AT-4C25** Outdoor 4 port PoE 2.5GbE switch

**AX-PSW-OD-MOUNT** Pole mount bracket for Outdoor

PoE switch

#### **NETWORK DIAGRAM**



