

# K60

## 60GHz Outdoor Wireless Network Radio Unit

The K60 is a 60GHz radio with integrated 128-element beamforming antenna that provides best-in-class link resiliency and full capacity range. It supports Point-to-Multi-Point (PtMP) and can be configured as either hub or remote for maximum flexibility.

The K60 is carrier-grade, manufactured in the USA and features IP67 weather-sealing for reliable operation outdoors and in harsh environments. It is ideal for both distribution and client applications where its second port can connect and power a collocated device.



### 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 AP, 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

<b>Configuration</b>	Point to Point and Point to Multipoint
<b>Frequency and Duplexing</b>	57.24 - 63.72GHz TDD
<b>Channel Bandwidths</b>	3 non-overlapping 2.16GHz channels
<b>Modulation</b>	8 levels of adaptive modulation and coding schemes
<b>Antenna</b>	Integrated beamforming antenna with wide scanning range: Horizontal: 90° Vertical: 40°
<b>Maximum EIRP</b>	40dBm
<b>Full Capacity Range</b>	Up to 1312ft (400m) MCS-8
<b>Capacity</b>	Up to 1.8Gbps aggregate
<b>Ethernet Frame Type</b>	Transparent bridging of all Ethernet types including VLAN and VLAN stacking
<b>Latency</b>	< 1ms
<b>L2 Switching</b>	Complete Layer 2 switching, including VLAN support
<b>Security</b>	AES 128
<b>PtMP Remote Support</b>	Up to 8 remote stations

## CONNECTIVITY

<b>Ethernet</b>	2 x 1000BASE-T HARTING PushPull V4 RJ45
<b>Voltage</b>	56VDC (802.3at, or 802.3bt PoE input)
<b>PoE Input</b>	Active, 802.3af/at/bt
<b>PoE Output</b>	Active, 802.3af/at up to 30W
<b>Power Consumption</b>	8W maximum (not including PoE output)

## MANAGEMENT

<b>Management</b>	Web GUI, CLI, REST API and AltoCommand (optional)
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## MECHANICAL

<b>Dimensions (H x W x D)</b>	6.2" x 3.9" x 1.9" (157 x 99 x 48mm)
<b>Weight</b>	14oz (400g)
<b>Operating Temperature</b>	-40° to +131°F (-40° to +55°C ) -22°F (-30°C) cold start
<b>Ingress Protection</b>	IP67 (requires HARTING connector)
<b>Regulatory</b>	FCC, IC
<b>ESD</b>	IEC EN 61000-4-2
<b>EMC</b>	IEC EN 61000-4-3