AltoReach S150 Bridge Kit

60GHz Outdoor Wireless Network Long Range Bridge

The S150 Bridge Kit is two 60GHz radios with integrated 150mm high-gain antennas that provide best-in-class range in a compact form factor. The pair is configured as a Point-to-Point (PtP) link with a range of up to 3 miles (5km).

The S150 is built-to-last and features IP67 weather-sealing for reliable operation outdoors and in harsh environments.

Models with GPS, Backup Link, and Wi-Fi Management features available Q4-2025.



Early units may vary in appearance

High Capacity

Up to 2Gbps+ aggregate.

Low Latency

Sub 1ms latency.

Adaptive Beamforming

Phased array, beamforming antenna with 4° azimuth and 4° elevation scanning for simplified installation of a long-range 60GHz link.

2.5 Gigabit Ethernet

Built-in 2.5GbE port for maximum throughput.

Backup Link and Wi-Fi Management (Q4-2025)

The S150 includes a IEEE 802.11be 5/6GHz backup connection for increased link resiliency. The S150 also features a 2.4GHz local Wi-Fi interface for direct radio management.

Long Range

The S150 Bridge Kit delivers best-in-class range using its integrated high-gain antenna plus support for 60GHz channels 5 and 6.

Security

AltoReach radios feature AES 256 encryption with GCMP (Galois/Counter Mode Protocol) that pairs fast, high-throughput counter-mode encryption with Galois authentication that is now standard in WPA3 and other wireless security.

Carrier-Grade

IP67 rated enclosure and designed for reliable, long-term operation in the field.

Simple and Rapid Installation

Altowav's Open API and native layer 2 architecture enable easy integration into operators' existing networks.



Specifications

SYSTEM

Configuration Point-to-Point and

> Point-to-Multipoint AP or Remote Station

Frequencies 57 - 71GHz

Channel

Bandwidths 6 non-overlapping

2.16GHz channels

Duplexing TDD

Modulation and

Coding Schemes 12 levels, adaptive-MCS-0 (BPSK)

to MCS-12 (16QAM)

Antenna Integrated 150mm 37.5dBi

antenna with 4° x 4° beamforming

scanning range

Maximum EIRP 55dBm

Up to 3 miles (5km) MCS8 PtP Range

Up to 2Gbps+ aggregate Capacity

Ethernet

Frame Type Transparent bridging of all

Ethernet types including VLAN

and VLAN stacking

Latency < 1ms

L2 switching Complete Layer 2 switching,

including VLAN support

AES 256 with GCMP Security

Fail-over Link (Q4-2025) IEEE 802.11be 5/6GHz wireless

fail-over radio link

Wi-Fi Management

IEEE 802.11be 2.4GHz wireless Interface (Q4-2025)

> management interface radio link (not intended for use as a Wi-Fi

data AP)

Integrated GPS receiver to locate Location (Q4-2025)

individual radios

CONNECTIVITY

Ethernet 1 x 2.5GbE RJ45

Voltage 56VDC **PoE Input** 802.3at+

Power

Consumption 25W maximum **MANAGEMENT**

Web GUI, CLI, REST API and Management

AltoCommand (optional)

MECHANICAL

Dimensions

 $(H \times W \times D)$ 5.1" x 4.7" x 7"

(130 x 120 x 178mm)

Weight 16.8oz (475g)

Operating

Temperature -40° to +131°F (-40° to +55°C)

-22°F (-30°C) cold start

Ingress Protection IP67

FCC, IC, CE Regulatory

MODEL NUMBER

AR-S150-BRI-C-PG S150 60GHz Long Range

Bridge Kit

INCLUDED ACCESSORIES (2 ea.)

AX-P-IN-AT-5G-US Indoor 802.3at (30W) 5GbE PoE

injector with 0.8m US power cord

Precision mounting kit for AR-MK-T1-EXT

AltoReach radios

ACCESSORIES

AX-PSW-OD-4AT-4C25

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

Pole mount bracket for Outdoor

PoE switch

