AltoReach S150

60GHz Outdoor Wireless Network Long Range Remote Station

The S150 is a 60GHz radio with an integrated 150mm high-gain antenna that provides best-in-class range in a compact form factor. It can be configured as a PtMP remote station, or a pair can be setup as a PtP link.

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

Security

AltoReach radios feature AES 128 encryption for 60GHz and AES 256 encryption for 802.11be communication.

Carrier-Grade

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

Simple and Rapid Installation

Altoway'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 - 71 GHz

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

Range Up to 3 miles (5km) MCS8 PtP

Up to 1.1 miles (1800m) MCS-8

PtMP with AP90

Capacity Up to 2Gbps+ aggregate

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

Security AES 128 on 60GHz

AES 256 on IEEE 802.11be

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

fail-over radio link

Wi-Fi Management

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

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

data AP)

Location (Q4-2025) Integrated GPS receiver to locate

individual radios

CONNECTIVITY

Ethernet 1 x 2.5GbE RJ45

Voltage 56VDC PoE Input 802.3at+

Power

Consumption 25W maximum

MANAGEMENT

Management Web GUI, CLI, REST API and

AltoCommand (optional)

MECHANICAL

Dimensions

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

(130 x 120 x 178mm)

Weight 16.8oz (475g)

Operating

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

-22°F (-30°C) cold start

Ingress Protection IP67

Regulatory FCC, ISED, CE

MODEL NUMBER

AR-S150-C-G S150 60GHz Long Range

Remote Station Radio

INCLUDED ACCESSORIES

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

injector with 0.8m US power cord

ACCESS POINT MODEL NUMBERS

AR-AP90-C-G AP90 60GHz Access Point Radio

ACCESSORIES

AR-MK-T1-EXT Precision mounting kit for

AltoReach radios

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

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

PoE switch

