

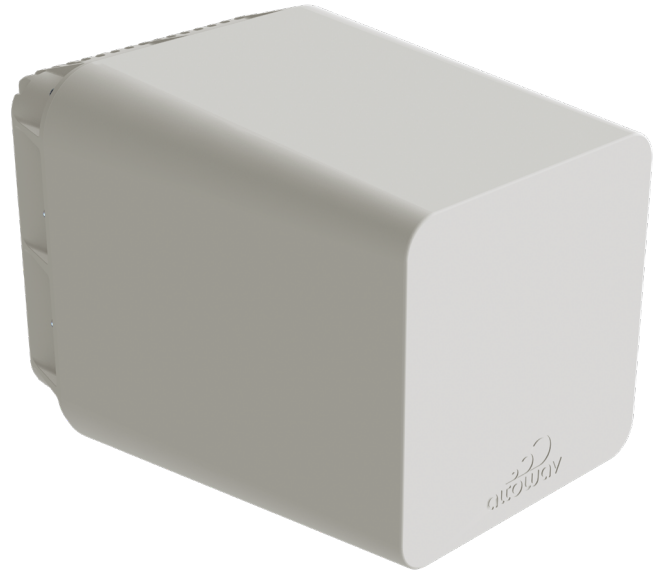
# AltoReach S150

## 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 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

<b>Configuration</b>	Point-to-Point and Point-to-Multipoint AP or Remote Station
<b>Frequencies</b>	57 - 71GHz
<b>Channel Bandwidths</b>	6 non-overlapping 2.16GHz channels
<b>Duplexing</b>	TDD
<b>Modulation and Coding Schemes</b>	12 levels, adaptive—MCS-0 (BPSK) to MCS-12 (16QAM)
<b>Antenna</b>	Integrated 150mm 37.5dBi antenna with 4° x 4° beamforming scanning range
<b>Maximum EIRP</b>	55dBm
<b>Range</b>	Up to 3 miles (5km) MCS8 PtP Up to 1.1 miles (1800m) MCS-8 PtMP with AP90
<b>Capacity</b>	Up to 2Gbps+ 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 256 with GCMP
<b>Fail-over Link (Q4-2025)</b>	IEEE 802.11be 5/6GHz wireless fail-over radio link
<b>Wi-Fi Management Interface (Q4-2025)</b>	IEEE 802.11be 2.4GHz wireless management interface radio link (not intended for use as a Wi-Fi data AP)
<b>Location (Q4-2025)</b>	Integrated GPS receiver to locate individual radios

## CONNECTIVITY

<b>Ethernet</b>	1 x 2.5GbE RJ45
<b>Voltage</b>	56VDC
<b>PoE Input</b>	802.3at+
<b>Power Consumption</b>	25W maximum

## 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>	5.1" x 4.7" x 7" (130 x 120 x 178mm)
<b>Weight</b>	16.8oz (475g)
<b>Operating Temperature</b>	-40° to +131°F (-40° to +55°C) -22°F (-30°C) cold start
<b>Ingress Protection</b>	IP67
<b>Regulatory</b>	FCC, IC, CE

## MODEL NUMBER

<b>AR-S150-C-G</b>	S150 60GHz Long Range Remote Station Radio
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## INCLUDED ACCESSORIES

<b>AX-P-IN-AT-5G-US</b>	Indoor 802.3at (30W) 5GbE PoE injector with 0.8m US power cord
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## ACCESS POINT MODEL NUMBERS

<b>AR-AP90-C-G</b>	AP90 60GHz Access Point Radio
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## ACCESSORIES

<b>AR-MK-T1-EXT</b>	Precision mounting kit for AltoReach radios
<b>AX-PSW-OD-4AT-4C25</b>	Outdoor 4 port PoE 2.5GbE switch
<b>AX-PSW-OD-MOUNT</b>	Pole mount bracket for Outdoor PoE switch