

# Auto-Tracking Antenna

## Portable Ground-to-Air System

### Long Range & High Throughput

- MIMO technology for highbandwidth connectivity and reliability
- 360° continuous rotation & <math><1^\circ</math> pointing accuracy for optimal, bidirectional communication
- Interchangeable feeds for quick changes between L, S, and C-Band

### Portable, Lightweight, & Durable

- Designed for two-person setup in under 15 minutes
- Sectional parabolic dish disassembles for easy transport in rollable cases that can ship via standard shipping
- Rugged design ensures performance in harsh climates & weather

### The Soldier Empowered With Information

- Stream HD Video & IP Data from aircraft over long distances
- Meet growing data exfiltration requirements
- Layer 2 connectivity between payloads and the enterprise

### Stream HD Video

- Fully integrated H.264 HD video encoding/decoding
- Connect video cameras directly to the unit
- View multiple video streams simultaneously
- HD output enabling connection to HDMI-compatible displays
- Stream video and voice simultaneously

### Portable & Powerful

Introducing the Auto-Tracking Antenna System - a deployable system that works in concert with the MPU5 radio to deliver high throughput at long ranges to keep you in constant communication with your aircraft.

Disassembling into five, easy-to-transport cases, the system can travel with you wherever you go. Long range high throughput communication to manned and unmanned aircraft has never been so simple.

### Automatic Self-Calibration

Eliminate human error, track with increased precision, and simplify set-up with automatic alignment and self-calibration. The Auto-Tracking Antenna System utilizes an Automatic Heading System to self-calibrate prior to operation.

The tracker provides higher accuracy than ever before, enabling your team to focus their attention where it truly matters: the mission.

### Modular Antenna Feed

The Auto-Tracking Antenna System includes a set of L-Band, S-Band, and C-Band interchangeable MIMO feeds. These (3) feeds cover all of the frequency bands over which Persistent's (5) Radio Modules operate, allowing the tracking antenna to operate on any existing MPU5 frequency band, thus supporting the Interchangeable Frequency Architecture.

The feeds twist-lock into place for quick and simple installation. The feeds can be quickly installed for Horizontal / Vertical Polarization or Slant Left / Right Polarization to match the antenna configuration on the air platform.



# Specifications

Total Weight	117 lbs / 53.1 kg (system only) 233.5 lbs / 106 kg (in cases)
Colour	Black
Number of Cases	5 x Rollable carrying cases with custom foam
Total Case Volume	30 ft <sup>3</sup>
Assembly / Set Up Time	15 minutes / 2 person (not including configuration)
Elevation	-5° to +82°
Pan	360° continuous rotation
Pointing Accuracy	<1°
Calibration	Self-calibration via automatic heading system
Input Voltage	100 - 240 VAC 18 - 34 VDC (Compatible with BB-2557, BB-2590 & BB-5590 batteries). 200W Max. power consumption
Operating Temperature	-15°C to +55°C (5°F to 131°F)

Environmental	IP67 rated
Antenna Gain	L-Band: <b>24 dBi</b> S-Band: <b>28 dBi</b> Lower C-Band: <b>35 dBi</b> Upper C-Band: <b>36 dBi</b>
Beamwidth	L-Band: <b>10°</b> S-Band: <b>6°</b> Lower C-Band: <b>3°</b> Upper C-Band: <b>2.5°</b>
Polarisation	Dual polarised Twist-lock change between vertical / horizontal & slant 45° polarisation

RF Module Compatibility		
Antenna Feed	Frequency (MHz)	RF Module P/N
L-Band	1200 - 1600 MHz	RF-1150
S-Band	1700 - 2700 MHz	RF-2125 RF-2150



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Technical Specifications quoted are verified but do not indicate the maximum performance limitations of the equipment. Specifications are subject to change without notice. E & OE Issue A.

