



# Multi-Band Tracking Antenna



TRK-AUTO-SYS-02

## Portable, High-Performance Datalink for Manned or Unmanned Aircraft

The Multi-Band Tracking Antenna delivers the throughput to go the distance. Operate with up to two MPU5s for frequency redundancy with any aircraft up to 120+ miles.

### Long Range & High Throughput

- MIMO technology for high-bandwidth connectivity and reliability
- 360° continuous rotation & <1° pointing accuracy for optimal, bidirectional communication
- Operate in L-, S-, and C-Bands without switching feeds
- Dual band operation with two MPU5s or one MPU5 with a third party radio

### Resilience Against EW

- If one band becomes too congested, the other will continue to track without reconfiguration
- Continue tracking aircraft in GPS-denied environments

### Portable, Lightweight, & Durable

- Two-person setup in <15 minutes
- Rugged design for performance in harsh conditions

### 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

## NO NDA REQUIRED

[persistentsystems.com](https://persistentsystems.com)

© 2006 - 2022 Persistent Systems, LLC. All rights reserved. The Wave Relay® logo, the Persistent Systems, LLC logo and other designated trademarks and trade names are the property of Persistent Systems, LLC or their respective owners. Product specifications are subject to change without notice. This material is provided for informational purposes only; Persistent Systems, LLC assumes no liability related to its use and expressly disclaims any implied warranties of merchantability or fitness for any particular purpose.

The export and/or the release of certain products, technology and software to non-US persons might be subject to export restrictions. Please refer to the US export laws & regulations for details.

# SYSTEM SPECIFICATIONS

## RF

### Antenna Gain

L-Band: 20.8 dBi  
S-Band: 25 dBi  
Lower C-Band: 28.3 dBi  
Upper C-Band: 30.5 dBi

### Beamwidth

L-Band: 11.5°  
S-Band: 6°  
Lower C-Band: 3.5°  
Upper C-Band: 2.25°

### Polarization

Dual Polarized  
Twist-lock change between Vertical/Horizontal and Slant 45° polarization

### Feed Frequency Range

1.2 - 6 GHz  
Single Tri-Band Feed for all RF Module frequencies

RF Module Compatibility	
Freq. (MHz)	RF Module P/N
1350 - 1390 MHz	RF-1150
2025 - 2145 MHz	RF-2125
2200 - 2507 MHz	RF-2150
4400 - 5000 MHz	RF-4100
5100 - 6000 MHz	RF-5100

The Multi-Band Tracker supports 3rd party radios that operate in this frequency range

## PHYSICAL

### DISH

#### Diameter

5 ft. (Effective)

#### Coating

Hard Anodized

#### Transit Cases (2x)

37.4 x 27 x 13.6 in.  
95 x 68.6 x 34.5 cm  
58.2 lbs. & 51.4 lbs.  
26.4 kg & 23.3 kg

### FEED

#### Transit Case

45.1 x 16 x 13 in.  
114.6 x 40.6 x 33 cm  
30.1 lbs.  
13.7 kg

### POSITIONER

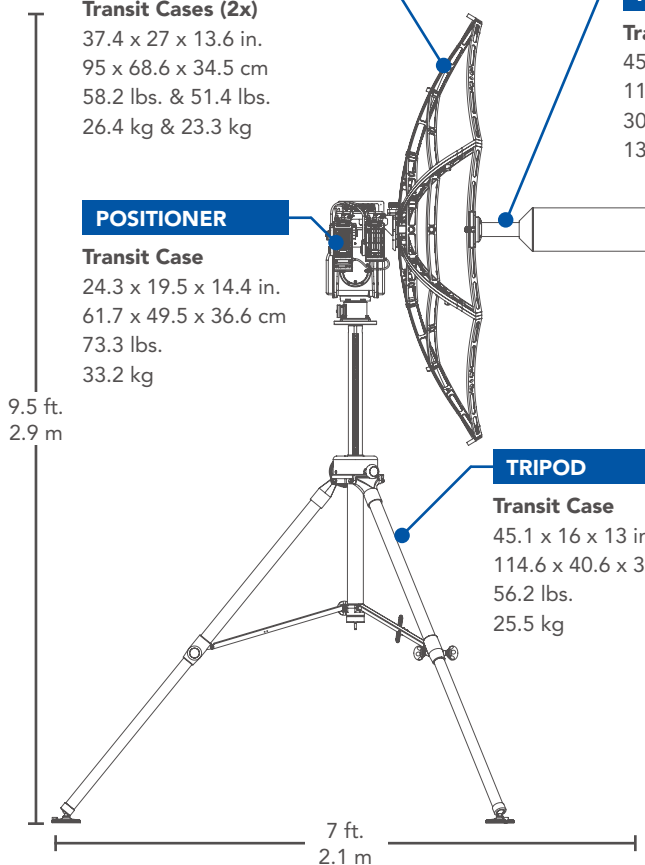
#### Transit Case

24.3 x 19.5 x 14.4 in.  
61.7 x 49.5 x 36.6 cm  
73.3 lbs.  
33.2 kg

### TRIPOD

#### Transit Case

45.1 x 16 x 13 in.  
114.6 x 40.6 x 33 cm  
56.2 lbs.  
25.5 kg



### Weight

124.54 lbs. / 56.5 kg (system only)  
269.2 lbs. / 122.1 kg (in cases)

### Color

Black

### Number of Cases

(5) rollable carrying cases with custom foam

### Total Case Volume

30.7 ft<sup>3</sup>

### Assembly/Setup Time (not including configuration)

15 minutes, 2 person

## OPERATIONAL

### Elevation

-5° to +80°

### Pan

360° continuous rotation

### Pointing Accuracy

<1°

### Calibration

Self-calibration via automatic heading system

## ELECTRICAL

### Input Voltage

100 - 240 VAC  
18-34 VDC (Compatible with BB-2557, BB-2590, and BA-5590 batteries or equivalent)

### Max. Power Consumption

240W

## ENVIRONMENTAL

### Operating Temperature

-15°C to +55°C

### Environmental

IP67

**Note:** Not RoHS compliant

## NO NDA REQUIRED

© 2006 - 2022 Persistent Systems, LLC. All rights reserved. The Wave Relay® logo, the Persistent Systems, LLC logo and other designated trademarks and trade names are the property of Persistent Systems, LLC or their respective owners. Product specifications are subject to change without notice. This material is provided for informational purposes only; Persistent Systems, LLC assumes no liability related to its use and expressly disclaims any implied warranties of merchantability or fitness for any particular purpose.

The export and/or the release of certain products, technology and software to non-US persons might be subject to export restrictions. Please refer to the US export laws & regulations for details.