

1.0 meter Flyaway Systems

Manual Adjustment

Option 1



Basic Features

- Preassembled Tripod Base Mount with Pull Pins
- All Aluminum Cases for Easy Transportation
- Patented Two Piece Dual Skin Metal Reflector
- Ka and Ku Bands
- Sturdy Boom Accommodates Many Outdoor Units
- Self Leveling Feet for Uneven Surfaces

Unique Features

- Azimuth and Elevation Hand Crank for Easy Adjustment
- 5 Minute Setup

Dual Axis Motorized with Smart Jog Controller

Option 2



- Includes Basic Features of Option 1

Unique Features

- Motorized Az/EI Mount for Jog Control
- Easy 15 minute Setup with Control Cable
- Limited Motion Mount
- Motorized Feed Assembly for Polarization Adjustment
- Actuator Control
- Manual Jog or Tracking motions Available
- RCI-3050 Controller
- 2 or 3 Axis Motorization

Auto Locate

Option 3



- Includes Features of Option 2

Unique Features

- RCI-3000A Controller
- Automatically Locates Satellite without Manually Adjusting



www.sepatriot.com
ISO 9001/2000

1.0 m Flyaway Tx/Rx Antenna System

Ku-Band	Receive	Transmit
Polarity	Linear	Linear
Frequency	10.7 - 12.75 GHz	13.75 - 14.5 GHz
Feed - 2 Port Xpol		
Return Loss	17.7 dB typ	20 dB typ
Insertion Loss	0.3 dB typ	0.1 dB typ
Tx/Rx Isolation	40 dB	80 dB
Feed Interface	WR75	WR75
Antenna		
	Receive	Transmit
Efficiency	70%	70%
Cross Polarization On Axis	35 dB	35 dB
within 1 dB Beamwidth	22 dB	26 dB
Tx/Rx Sidelobe Level	29 - 25 log θ	100 λ /D < θ < 20°
	-3.5	20° < θ < 26.3°
	32 - 25 log θ	26.3° < θ < 48°
	-10	48° < θ
Midband Gain	40.2 dBi	41.9 dBi
Noise Temperature	61K @ 10°EL 53K @ 30°EL	---

Ka-Band	Receive	Transmit	Receive	Transmit
Polarity	Linear	Linear	Circular	Circular
Frequency	18.2 - 21.2 GHz	27.5 - 31 GHz	19.7-20.2 GHz	29.5-30 GHz
Feed - 2 - Port Xpol				
Return Loss	17.7 dB typ	20 dB typ	16 dB typ	18 dB typ
Insertion Loss	0.3 dB typ	0.1 dB typ	0.5 dB typ	0.3 dB typ
Tx/Rx Isolation	40 dB	80 dB	40 dB	80 dB
Feed Interface	WR42	WR28	WR42	WR28
Antenna				
	Receive	Transmit	Receive	Transmit
Efficiency	65%	65%	65%	65%
Cross Polarization On Axis	30 dB	35 dB	21 dB	21 dB
within 1 dB Beamwidth	22 dB	25 dB	21 dB	21 dB
Tx/Rx Sidelobe Level	29 - 25 log θ		100 λ /D < θ < 20°	
	-3.5		20° < θ < 26.3°	
	32 - 25 log θ		26.3° < θ < 48°	
	-10		48° < θ	
Midband Gain	44.2 dBi	47.8 dBi	44.6 dBi	48.1 dBi
Noise Temperature	78K @ 30°EL	---	90K @ 10°EL 83K @ 30°EL	---

Mechanical Data

Mechanical Data					
f/D Ratio	0.635				
Focal Distance	25 in / 63.5 cm				
Offset Angle	22°				
Antenna Optics	Single Offset				
Mount Type	Elevation over Azimuth Tripod				
Elevation Adjustment	0° to 90° Continuous Fine Adjustment				
Azimuth Adjustment	+ 30° Fine, 360° Continuous				
Weights & Dims		Standard	Metric	Standard	Metric
	Reflector Case	100 lbs.	45 kg	54x14x30 in	137x36x76 cm
	Mount Case	90 lbs.	41 kg	47x18x17 in	119x46x43 cm
Environmental Data		Standard	Metric		
Wind Loading					
	Operational (No Ballast or Anchors)	25 mph	40 kmh		
	Operational (With Ballast or Anchors)	45 mph	72 kmh		
	Survival (With Ballast or Anchors)	90 mph	145 kmh		
	Temperature	-40° to 140°F	-40° to 60°C		
	Rain	.5 in/hr	1.3 cm /h		
	Solar Radiation	360 BTU/h/ft ²	1000 Kcal/h/m ²		

**Weights may differ slightly depending on mount configuration



Our cases are constructed of Reinforced Tri-laminated panels with extruded aluminum angles and deep tongue-in-groove closure with stainless steel continuous piano hinges. The cases are lined with closed cell high density foam and the parts are custom fit and supported with the foam for extra protection. Each case is waterproof. Custom colors may be available.

**Meets or exceeds Mil Spec 810 and 28800*