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

Option 2

with Smart Jog Controller

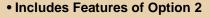
• Includes Basic Features of Option 1

Unique Features

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

Auto Locate

Option 3



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	$100\lambda/D < \theta < 20^{\circ}$	
	-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				
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		$100\lambda/D < \theta < 20^{\circ}$	
	-3.5		$20^{\circ} < \theta < 26.3^{\circ}$	
	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