

Patriot 1.0m Flyaway Antenna Systems

COBHAM

Manual Adjustment / Dual Axis Motorized / Auto Locate
Ku-Band Option

2009 Data Sheet

The most important thing we build is trust

Manual Adjustment

Basic Features

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

Unique Features

Azimuth and Elevation Hand Crank
5 Minute Setup

Dual Axis Motorized w/ Smart Jog Controller

Includes the same basic features of the manual adjustment antenna.

Unique Features

Motorized Az/EI Mount for Jog Control
Easy 15 Minute Setup w/Control Cable
Limited Motion Mount
Motorized Feed Assembly for Polarized Adjustment
Actuator Control
Manual Jog or Tracking Motions Available
RCI-3050 Controller and 2 or 3 Axis Motorization

Auto Locate

Includes the same basic features of the Dual Axis Motorized antenna.

Unique Features

RCI-3000A Controller
Automatically Locates Satellite w/out Manually Adjusting

RF Specifications

	Receive	Transmit
Frequency in GHz	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 Specifications

	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	-

Mechanical & Environmental 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

	Standard	Metric
Operational (No Ballast/Anchors)	25 mph	40kmh
Operation (w/Ballast/Anchors)	45 mph	72 kmh
Survival (w/Ballast/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
Reflector Case	100 lbs.	45 kg
	54 x14 x 30 in.	137 x 36 x 76 cm
Mount Case	90 lbs	41 kg
	41 x18 x17 in.	119 x 46 x 43 cm



1.0m Flyaway Antenna System

Other Available Bands:

Ka, C