

# Patriot 1.8m 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

Preassembled Tripod Base Mount w/Pull Pins  
All Aluminum Cases for Easy Transportation  
Patented Four-Piece Dual Skin Metal Reflector  
Ku-Band  
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

	Linear	
	Receive	Transmit
Frequency in GHz	10.7 - 12.75	13.75 - 14.5
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

	Linear	
	Receive	Transmit
Efficiency	70%	70%
Cross Polarization On Axis	30 dB	30 dB
within 1 dB Beamwidth	22 dB	26 dB
Tx/Rx Sidelobe Level	Mainbeam < 0 < 7°	29 - 25 log θ
	7° < 0 < 9.2°	+8 dBi
	9.2° < 0 < 48°	32 - 25 log θ
	48° < 0 < 180°	-10
Midband Gain	45.3 dBi	47 dBi
Noise Temperature	55K @ 10°EL	-
	50K @ 30°EL	-

### Mechanical Data

Antenna Optics	Single Offset
Mount Type	Elevation over Azimuth Tripod
Elevation Adjustment	0° to 90° Continuous Fine Adjustment
Azimuth Adjustment	+ 30° Fine, 360° Continuous

### Environmental Data

	Standard	Metric
Wind Loading	50 mph	80 km/h
	75 mph	Survival
Temperature	-40° to 140°F	-40° to 60°C
Rain	.5 in/hr.	1.3 cm/h
Solar Radiation	360 BTU/h/ft <sup>2</sup>	1000 Kcal/h/m <sup>2</sup>
Reflector Case	88 lbs.	40 kg
	11 x 44 x 43 in.	28 x 112 x 109 cm
Mount Case	156 lbs	71 kg
	69 x 29 x 19 in.	175 x 74 x 48 cm



1.8m Flyaway Antenna System

Other Available Bands:  
Ka-Band & C-Band