

# Patriot 7.5m Earth Station Antenna System

# COBHAM

Ku-Band Option  
2009 Data Sheet

The most important thing we build is trust

## Basic Features

C, Ku, X-Band Feed Options

Circular Foundation Interface

Full Line of Options to Meet Any Requirement

High Wind and Full Motion Options Available

No on -Site Panel Alignments Required

Installation Teams and Supervisors Available

Factory Assembled Mount Reduces Installation Time

## Description

The Patriot Prime Focus antenna is manufactured in the United States and is the symbol of quality in the antenna industry.

It features a variety of mounting options and a dual sided galvanized reflector which is powder coated for superior protection against the elements.

The contoured petals with matched radial beams and hub assembly ensure easy installation without field alignment.

Complete turnkey systems are available.

## RF Specifications

### Receive Only

Receive Frequency in GHz	10.95 - 12.75
Midband Gain	57 dBi
Noise Temperature	50 K @ 10°
Ports/Polarization	1 or 2 port Linear
Polarization Rotation	360° Continuous
Polarization Isolation	30 dB LP
VSWR	Rx 1.4:1
Feed Flanges	Rx CWR75

## Mechanical Data

Antenna Diameter	7.5 m
Azimuth Travel	120° Standard
Elevation Travel	0° to 90° Standard
Drive System: Elevation	Mechanical Screw Jack Standard
Drive System: Azimuth	Mechanical Screw Jack Standard
Mount Type	Tube Pedestal
Structure Material & Finish	Stell Hot Dip Galvanized
Reflector Material & Finish	Aluminum w/high diffusive white finish on reflective surface

## Environmental Data

Wind Loading	Operational: 45 mph, gusts to 60 mph Survival: 125 mph @ 58° F
Temperature	Operational: +5° to 122° F (-40° - 60° C) Survival: -22° to 140° (-51° to 82° C)
Rain	Up to 4 in./h
Relative Humidity	0% to 100% with condensation
Solar Radiation	360 BTU/h/ft <sup>2</sup>
Radial Ice (survival)	1 in. all surfaces or 1/2 in. all surfaces w. 80 mph

Other Bands Available:

C, X



7.5m Prime Focus Antenna System