

# 3.8m Prime Focus Antenna System

## Ku-Band and C-Band Options

### Features

- Multi-Feed Systems Available (up to 4)
- Available in Dual Axis Motorized and Az-El Fixed Pipe Head Mounts
- 125 Mph Wind Survival
- High Accuracy Antenna, Low Transportation Cost
- Complete Turnkey Systems Available

### Description

The Challenger 3.8 Meter Prime Focus antenna is manufactured in the United States and is the symbol of quality in the antenna industry.

This antenna features an aluminum reflector which is powder coated for superior protection against the elements. Challenger offers a variety of mounting options and stainless steel hardware is standard.

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

RF Specifications	Ku-Band	C-Band
Receive Frequency (GHz)	10.95 - 12.75	3.625 - 4.2
Midband Gain	50.3 dBi	41.5 dBi
Noise Temperature	55 K @ 10°	50 K @ 10°
Ports/Polarization	1 or 2 port liner	1 or 2 port circular/1 or 2 port linear
Polarization Rotation		360° Continuous
Polarization Isolation	30 dB LP	30 dB LP
VSWR	Rx 1.4:1	Rx 1.4:1
Feed Flanges	Rx WR75	Rx CPR 229G

Mechanical Data	Az-El Head	Dual Axis Motorized
F/D Ratio	0.413	0.413
Focal Distance	62.625 in.	62.625 in.
Azimuth Travel	360° Continuous	120° Arc
Elevation Travel	5° to 90°	20° to 90°
Polarization Travel	±90°	±90°
Total Weight	685 lbs.	715 lbs.
Crate Dimensions	88 x 36 x 30 in.	88 x 36 x 30 in.
Units/40 ft Container	39 units	36 units

Environmental Data		
Wind Loading	Operational:	60 mph (100 km/h)
	Survival:	125 mph (200 km/h)
Temperature	Operational:	-40° to 140° F (-40° to 60° C)
	Survival:	-60° to 180° F (-51° to 82° C)
Rain	Operational:	.5 in./hr (1.25 cm/hr)
	Survival:	3 in./hr (7.6 cm/hr)
Ice	Survival:	1 in. (2.5 cm) radial
		.5 in. (1.25 cm) radial + 60 mph (100 km/h)

The 3.8m Prime Focus reflector consists of 16 draw die formed petals. Radial beams and outboard skirts are constructed of galvalume steel. The contoured petals, radial beams, outboard skirts, and hub assembly are powder coated for superior protection against the elements. Stainless steel hardware is included.



3.8m Prime Focus Antenna System  
Mounted on 6.625" Pipe.

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