

1.2m Quick-Deploy SMC Antenna System

Ku-Band Option

Features

- 2 or 4-Piece Glass Fiber Reinforced Polyester SMC
- Pre-Assembled Tripod Base Mount w/Pull Pins
- Adjustable Feet for Uneven Surfaces
- Fast Setup, No Tools Needed

Description

This cost effective SMC 1.2 Meter Quick-Deploy Antenna System incorporates precision assembled reflector panels with the Challenger light weight aluminum tripod mount.

To ensure quality and performance, segmented panels are inspected for R.M.S. accuracy using the latest in laser measurement techniques.

Challenger can custom segment most brands of SMC reflectors.

RF & Antenna Specifications	Ku Linear	
	Receive	Transmit
Frequency (GHz)	10.70 - 12.75	13.75 - 14.50
Midband Gain ($\pm .5$ dB)	41.4	43.3
Cross Polarization On Axis	30 dB	35 dB
within 1.0 dB Beamwidth	25 dB	27 dB
VSWR	1.5:1 Max	1.3:1 Max
Sidelobe Envelope, Co-Pol	$100\lambda/D^2 \leq \theta \leq 20^\circ$	29 - 25 Log θ dBi
	$20^\circ < \theta \leq 26.3^\circ$	-3.5 dBi
	$26.3^\circ < \theta \leq 48^\circ$	32 - 25 Log θ dBi
	$48^\circ < \theta$	-10 dBi (averaged)
Antenna Noise Temp	57K @ 20°EL	56K @ 30°EL
Feed Interface	WR75	

Mechanical Specifications		
Antenna Optics	Single Offset	
Mount Type	Elevation over Azimuth Tripod	
Elevation Adjustment	0° to 90° Continuous Fine Adjustment	
Azimuth Adjustment	360° Continuous Fine Adjustment	

Reflector Case (2-piece)	91 lbs./41.2 kg	55 x 15 x 32 in. 139.7 x 38.1 x 81.3 cm
Reflector Case (4-piece)	91 lbs./41.2 kg	28 x 19 x 33 in. 71.1 x 48.2 x 83.8 cm
Mount Case	86 lbs./39 kg	48 x 18 x 18 in. 121.9 x 45.7 x 45.7 cm

Environmental Performance		
Wind Loading	Standard	Metric
Operational (No Ballast/Anchors)	25 mph	40 km/h
Operational (w/Ballast/Anchors)	45 mph	72 km/h
Survival (w/Ballast/Anchors)	90 mph	145 km/h
Temperature	-40° to 140°F	-40° to 60°C
Rain	.5 in./h	1.3 cm/h
Solar Radiation	360 BTU/h/ft ²	1000 Kcal/h/m ²



Pictured Left: 4-piece reflector
Pictured Right: 2 piece reflector

Made in the USA

Challenger Communications
704 North Clark Street
Albion, Michigan 49224 USA
Tel: +1 (517) 680 0125
Fax: +1 (517) 680 0133
info@challengercommunications.com
www.ChallengerCommunications.com