

# 1.8m Quick-Deploy Antenna System

## Ku-Band Option

### Features

- 4-Piece Aluminum Reflector
- Pre-Assembled Tripod Base Mount w/Pull Pins
- C, Ku and Ka Band Feed Systems Available
- Sturdy Boom Accommodates Outdoor Units
- Adjustable Feet for Uneven Surfaces
- Optional Lightweight Cases for Easy Transportation
- Azimuth and Elevation Hand Crank
- 10 Minute Setup, No Tools Needed

### Description

The Challenger Communications 1.8 Meter Quick-Deploy Antenna System incorporates precision assembled reflector panels with our rugged **Antenna Armor™** backing structure.

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

All reflectors and mounts are produced from high quality materials and are made in the USA.

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

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

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

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/ft²	1000 Kcal/h/m²



1.8m Quick-Deploy Antenna System

## Made in the USA

**Challenger Communications**  
 704 North Clark Street  
 Albion, Michigan 49224 USA  
**Authorized Distributor:**  
**Servsat Communications, Inc.**  
**Sales@servsat.com**  
**www.servsat.com**