

## 1.0m Quick-Deploy Antenna System

Ku-Band Option

## Features

2 or 6-Piece Aluminum Reflector Pre-Assembled Tripod or Low Profile 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 1.0 Meter Quick-Deploy Antenna System incorporates precision assembled reflector panels with our rugged **Antenna Armor**<sup>™</sup> 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     |  |
| Antenna Gain*                | 39.3 @ 11.7 GHz | 41.4 @ 14.25 GHz |  |
| Antenna Noise Temperature    |                 |                  |  |
| @ 10.7 GHz                   |                 |                  |  |
| 10° Elevation                | 66K             |                  |  |
| 20° Elevation                | 54K             |                  |  |
| 30° Elevation                | 52K             |                  |  |
| Cross Polarization Isolation |                 |                  |  |
| On Axis                      | >30 dB          | >30 dB           |  |
| within 1 dB Beamwidth        | >25 dB          | >26 dB           |  |
| VSWR                         | <1.5:1          | <1.2:1           |  |
| Port to Port Isolation       | >45 dB          | >80 dB           |  |
| Feed Interface               | WR75            | WR75             |  |
| Sidelobe Performance         |                 | ITU-R S.580      |  |



| Mechanical Specifications |                                 |
|---------------------------|---------------------------------|
| Antenna Optics            | Offset, Prime Focus             |
| Mount Type                | Azimuth over Elevation          |
| Elevation Adjustment      | $0^{\circ}$ to $90^{\circ}$     |
| Azimuth Adjustment        | 360° Continuous Fine Adjustment |

Durable Nylon backpack-style case with rollers and extension handle:

65 lbs. 34 x 20 x 15 in. ( 29.5 kg 86.4 x 50.8 x 15 cm)

Hard cases option also available.

| Environmental Performance        |                           |                         |
|----------------------------------|---------------------------|-------------------------|
| Wind Loading                     | Standard                  | Metric                  |
| Operational (No Ballast/Anchors) | 20 mph                    | 32.2 km/h               |
| Survival (w/Ballast/Anchors)     | 30-45 mph gusts           | 48.3-72 km/h gus        |
| Operational Temperature          | -20° to 125°F             | -28.9° to 51.7°C        |
| Survival Temperature             | -45° to 140°F             | -42.8° to $60^{\circ}C$ |
| Rain                             | .5 in./h                  | 1.3 cm/h                |
| Solar Radiation                  | 360 BTU/h/ft <sup>2</sup> | 1000 Kcal/h/m²          |

## Made in the USA

Challenger Communications 704 North Clark Street Albion, Michigan 49224 US

ventas@servsat.com www.servsat.com

\*Includes all losses

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