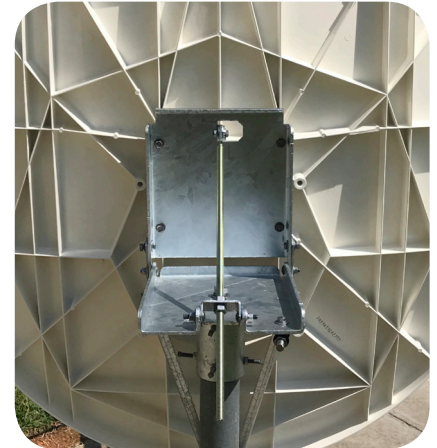


# 1.2M Ku-Band Antenna - Receive Transmit

*Series 1134*



Transmit Quality Precision SMC Reflector

Fine Elevation and Azimuth Adjustments

Available with a variety of feed and feed support options

Long Focal Length Optics for Low Cross-Pol

Durable and Rugged Construction for Ease of  
Shipping and Handling

Heavy Gauge Galvanized Steel Az/EI Mount

Tier 3 Feed Support for larger RF packages

Optional Feed Stabilizer for heavy RF equipment

## Overview

General Dynamics SATCOM Technologies' 1.2m Ku-Band VSAT Antenna Series 1134 is ideally suited for demanding commercial applications. The one-piece compression molded reflector is precision manufactured for high-efficiency Ku-Band operation. The Az/EI mount is designed for easy installation on standard 2-7/8" OD Installation Mounts, and features fine Azimuth and Elevation Adjustments. The Az/EI mount is constructed from heavy gauge galvanized steel for strength and corrosion resistance.

# 1.2M Ku-Band Antenna - Receive Transmit

## Electrical

- **Antenna Size**
  - 1.2m (48 in.)
- **Operating Frequency (GHz)**
  - Receive = 10.70-12.75 GHz
  - Transmit = 13.75-14.50 GHz
- **Midband Gain (+/- .3 dBi)**
  - Receive = 41.5 dB
  - Transmit = 43.0 dB
- **Antenna Noise Temperature**
  - 20° Elevation = 46°K
  - 30° Elevation = 43°K
- **Antenna Sidelobe Envelope**
  - Per ITU-R S.580-6
- **Antenna Beamwidth**
  - Receive = 1.5°
  - Transmit = 1.2°
- **Polarization**
  - Linear, Orthogonal
- **Cross-Pol Isolation**
  - 30 dB on Axis
  - 26 dB in 1 dB Contour

## Feed Specifications – Standard RxTx

- **Operating Frequency (GHz)**
  - Receive = 10.70-12.75 GHz
  - Transmit = 13.75-14.50 GHz
- **Port-Port Isolation**
  - Transmit = 85 dB Min
  - Receive = 30 dB Min
- **VSWR**
  - Transmit = 1.3:1 Max
  - Receive = 1.5:1 Max
- **Insertion Loss**
  - Transmit = 0.2 dB Max
  - Receive = 0.4 dB Max

## Mechanical Performance

- **Reflector Material**
  - Glass Fiber Reinforced Polyester SMC
- **Antenna Optics**
  - Prime Focus, Offset, 0.8 F/D
- **Mount Type**
  - Elevation over Azimuth
- **Elevation Adjustment Range**
  - 5° to 90° Continuous Fine Adjustment
- **Azimuth Adjustment Range**
  - 360° Continuous, +/- 20° Fine Adjustment
- **Mast Pipe Interface**
  - 2.5 SCH Pipe (2.88"OD, 73 mm OD)
- **Max RF Equipment Weight**
  - Tier 3 Feed Support = 20 lb. (9 kg)

## Environmental Performance

- **Wind Loading**
  - Operational = 50 mi/h (72 km/h)
  - Survival = 125 mi/h (200 km/h)
- **Temperature**
  - Operational = -40° to 140° F (-40° to 60° C)
  - Survival = -50° to 160° F (-46° to 71° C)
- **Rain**
  - Operational = ½ inch/h (13mm/h)
  - Survival = 2 inch/h (51mm/h)
- **Ice**
  - Survival = ½ inch (13mm) Radial Ice
- **Atmospheric Conditions**
  - Salt, Pollutants, and Contaminants as Encountered in Coastal and Industrial Areas
- **Solar Radiation**
  - 360 BTU/h/ft<sup>2</sup> (1135 W/m<sup>2</sup>)

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