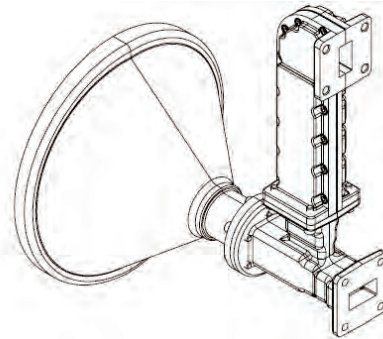


Satcom & Antenna Technologies Division



Overview

The CPI Satcom & Antenna Technologies Inc. (CPI SAT) 3.8 meter Ku-Band antenna delivers ideally suited for demanding commercial applications. The four (4) piece compression molded reflector is precision manufactured for high-efficiency C or Ku-Band operation. The Az/EI mount is designed for installation on 10.75" OD Pedestals, using the supplied pipe flange. The 4-piece reflector construction allows for the ease of handling and increased shipping efficiency.

The Series 1385 Antenna is available with a variety of feed options. The Tier-3 Feed Support is ideal for mid to heavy weight RF electronics packages. For even heavier RF equipment, a feed stabilizer is optional for 1385 Series. (Standard. with Ku-Band models)

FEATURES:

- Four piece transmit quality SMC reflector
- Fine azimuth & elevation adjustments
- 2 Port Ku-Band linear feed
- Durable & rugged construction for ease of shipping & handling
- Feed stabilizer for heavy RF packages up to 100 lb (45 kg) included in Ku-Band system

Specifications

ELECTRICAL ⁽¹⁾	Ku-Band Linear	
	Receive	Transmit
Antenna Aperture	3.8 m (150 in)	
Operating Frequency (GHz)	10.70 - 12.75	13.75 - 14.50
Antenna Gain, Midband ($\pm .3$ dB)	51.2 dBi	53.0 dBi
Antenna Noise Temperature		
10° Elevation	60 K	
20° Elevation	55 K	
30° Elevation	50 K	
Sidelobe Envelope (Co-Pol, dBi)		
$100\lambda/D < \theta \leq 20^\circ$	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	
$48^\circ < \theta < 180^\circ$	-10 dBi (typical)	
3 dB Beamwidth	0.5°	0.4°
Polarization	Linear, Orthogonal	
Cross Polarization Isolation	30 dB (on Axis)	
VSWR	1.3:1 Max	1.3:1 Max
Feed Interface Flange	WR75 Flat	WR 62 Flat
Power Handling	1 kW	

⁽¹⁾ Some specifications may vary based on the combination of equipment, options and/or upgrades ordered.

Specifications

MECHANICAL ⁽¹⁾		
Reflector Material		Glass fiber reinforced polyester SMC
Antenna Optics		Prime focus, offset feed, 4-piece (.6 F/D)
Mount Type		Elevation over azimuth
Elevation Adjustment Range		12° to 90° continuous fine adjustment (0° to 45° Inverted)
Azimuth Adjustment Range		360° continuous with ± 35° fine adjustment
Mast Pipe Interface		10 in Sch 40 Pipe, 273 mm (10.75 in) OD (special flange)
Max RF Electronics Weight		Tier 3 = 30 lb. (100 lb. w/ optional Feed Stabilizer)
ENVIRONMENTAL ⁽¹⁾		
Wind Loading	Operational Survival	45 mph (72 km/h) 125 mph (201 km/h)
Temperature	Operational Survival	-40° to 140° F (-40° to 60° C) -50° to 160° F (-46° to 71° C)
Rain	Operational	1/2 inch (13mm)
Ice	Survival	1/2 inch (13mm) radial
Atmospheric Conditions		Salt, pollutants and contaminants as encountered in coastal and industrial areas
Solar Radiation		360 BTU/h/ft ² (1,000 Kcal/h/m ²)

⁽¹⁾ Some specifications may vary based on the combination of equipment, options and/or upgrades ordered.