

The Av-Comm 2.4m Ku Band Inclined Orbit Antenna System has been designed to provide a reliable and cost effective solution for inclined orbit tracking applications. Our solution utilises a high performance 2.4m reflector integrated with an Antenna Control Unit (ACU) which provides the motorisation and tracking functionality. Our solution can be configured for use in a variety of frequency bands and can support tracking via Step, Memory, or TLE methods.

The Av-Comm 2.4m Ku Band Inclined Orbit Antenna System is designed for teleport and uplink providers who require accurate and reliable antenna positioning required for inclined orbit tracking operations. The antenna system can also be used as a motorised system allow for fast and accurate positioning of the antenna between satellites.

Note: Additional frequency band solutions available

Main Features

- 2.4m aperture antenna
- Step Track/Memory Track
- Linear DC Actuators for azimuth and elevation motor control
- Two axis motorisation (Az/El)
- Ethernet interface
- Support SNMP monitoring
- Local antenna jog control
- Hard and soft position limit interlocks
- Integrated beacon receiver for satellite position tracking*

*Optional

Antenna Specifications cat# D1048

Parameter	Receive	Transmit
Operating Frequency (GHz)	10.95 -12.75	13.75 -14.5
Midband Gain (+/- .2dB)	47.60dB	49.20dB
Sidelobes Envelope, Co-Pol (dBi)		
$100\lambda/D^\circ \leq \Theta \leq 20^\circ$	29 - 25 Log Θ dBi	
$20^\circ < \Theta \leq 26.3^\circ$	-3.5dBi	
$26.3^\circ < \Theta \leq 48^\circ$	32 - 25 Log Θ dBi	
$48^\circ < \Theta$	-10dBi (averaged)	
VSWR	Max. 1.3:1 Rx	1.5:1 Max. Tx
Feed Interface	WR-75	WR-75
Cross Polarization Isolation(Linear)	>30dB, on Axis	or Direct Radio Mounting

Environment Specifications

Wind Loading Operational	80km/h
Wind Loading Survival	201km/h

Mechanical Specifications

Mechanical Specifications	Parameters
Azimuth Adjustment	360° continuous
Elevation Adjustment	5° to 90°
Mast Pipe Size	SCH 40 Pipe 16.83cm

