

# TECHNICAL SPECIFICATIONS



## Electrical

Tx & Rx cables	2 RG6 cables (10m each)
Control Cables	10m Ext. Cable with MIL Connectors
Standard	upto 75m available
Optional	

## Mechanical

Reflector	1.5 m Carbon Fibre Reinforced Polymer
Reflector Configuration	Parabolic Single Offset, 0.78 F/D (16.9° offset)
Mount Geometry	Elevation over Azimuth
Deployment Sensors	GPS antenna
	Compass ± 2°
	Tilt sensor ± 0.2°

## Physical

Mounting Plate	L: 52" (1321mm) W: 22" (559mm)
Stowed Dish Ext. Dims	L: 74.5" (1892mm) W: 60.5" (1537mm)
	H: 19.25" (488mm)
Deployed Height	71" (1803 mm) Max.
Reflector Weight	16 lbs (7.3 kg)
Total Weight w/ Reflector	183 lbs (83.2 kg)

## RF Interface

Radio Mounting	Feed Arm / Rear of Base / Inside Vehicle
Axis Transition	Twist-Flex Waveguide
Waveguide	WR75 Cover Flange Interface
Coaxial	RG6U from Feedhorn to Base
Feed	2 port Xpol

## Warranty

Standard	2 years
----------	---------

## Environmental Survival

Wind Deployed	70 mph (112 km/h)
Wind Stowed	140 mph (225 km/h)
Temperature	-40°F to 150°F (-40°C to 65°C)
Rain	
Operational	4 in/h (10 cm/h)
Survival	6 in/h (15 cm/h)
Relative Humidity	0 - 100%
Solar Radiation	360 btu/h/ft <sup>2</sup> (1000 Kcal/h/m <sup>2</sup> )
Radial Ice (survival)	1 in (25.4 mm)
Corrosive Atmosphere	As encountered in coastal and/ or industrial areas

## Operational

Wind	45 mph (72 km/h)
Temperature	-22°F to 130°F (-30°C to 55°C)

## Motors

Electrical Interface	12V DC 15A max.
----------------------	-----------------

## Maximum Mount Rotation

Azimuth	Full 360° in overlapping 200° sectors
Elevation	0 - 75°
Polarization	±90°
Elevation Deploy Speed	Variable 2°/sec typ
Azimuth Deploy Speed	Variable 15°/sec max, 10°/sec typ
Peaking Speed	0.2°/sec



### 2 Port C Band (Linear)

	Receive	Transmit
Standard Frequency (GHz)	3.4-4.2	5.850-6.725
INSAT Frequency (GHz)	4.5-4.8	6.725-7.025
Gain (Midband, dBi)	33.4	37.2
Noise Temperature (°K)		
10 deg El	45	
20 deg El	40	
Cross Pol		
On Axis (Std)	-30 dB	-30 dB
On Axis (INSAT)	-35 dB	-35 dB
in 1 dB BW	-26 dB	-26 dB
Sidelobe Compliances	IESS 601	Std G
VSWR	1.50:1	1.30:1
Isolation		
Tx / Rx (Std)	-60dB	0 dBm input
Tx / Rx (INSAT)	-70 dB	
Rx / Tx	0 dBm input	-35 dB

### 2 Port Cross Pol (Ku Band)

	Receive	Transmit
Standard Frequency (GHz)	10.70-12.75	13.75-14.5
Gain (Midband, dBi)	43.6	44.9
Noise Temperature (°K)		
10 deg El		65
20 deg El		58
Cross Pol		
On Axis	-35 dB	-35 dB
in 1 dB BW	-28 dB	-28 dB
Sidelobe Compliances	Meets ITU 580, INTELSAT	
VSWR	1.50:1	1.30:1
Isolation		
Tx / Rx	-85 dB	0 dBm input
Rx / Tx	0 dB input	-35 dB

Note:

C band Linear & INSAT specifications are the same except where stated separately