

# 1.8m FCC Compliant Tx/Rx Antenna System

Model Number TXFCC-180KU

Ku-Band	Transmit	Receive
Polarity	Linear	Linear
Frequency	13.75 - 14.5 GHz	10.7 - 12.75 GHz
<b>Feed - 2 Port Xpol</b>		
Return Loss	20 dB typ	17.7 dB typ
Insertion Loss	0.1 dB typ	0.3 dB typ
Tx/Rx Isolation	80 dB	40 dB
Feed Interface	WR75	WR75
<b>Antenna</b>		
Efficiency	70%	70%
Midband Gain (14.125 Tx, 11.725 Rx)	47.0 dBi	45.3 dBi
Noise Temperature	---	35 K @ 10°
Cross Polarization On Axis 1 dB beamwidth	35 dB 26 dB	35 dB 26 dB
Tx/Rx Sidelobe Level	29 - 25 log $\theta$ -3.5 32 - 25 log $\theta$ -10	100 $\lambda/D < \theta \leq 20^\circ$ $20^\circ < \theta \leq 26.3^\circ$ $26.3^\circ < \theta \leq 48^\circ$ $48^\circ < \theta$
<b>Mechanical Specifications</b>		
Antenna Optics	Single Offset	
Mount Type	Elevation over Azimuth	
Mast Pipe Size	4" O.D. 3-1/2" I.D. SCH 40	
Elevation Adjustment Range	8° to 90° Continuous Fine Adjustment	
Azimuth Adjustment Range	± 3° Fine, 360° Continuous	
<b>Environmental Specifications</b>		
Wind Loading	Operational Survival	50 mph 125 mph
Temperature	Operational Survival	-40° to 140° F (-40° to 60°C) -60° to 180°F (-51° to 82°C)
Rain	Operational Survival	1/2" per hour 3" per hour
Ice	Survival	1" radial or 1/2" radial + 60 mph



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### Features

- AZ/EL interface to 4" Pipe
- Backframe Preassembled to Reflector
- Preassembled Mount
- Boom Supports 50 lbs.
- Dual side galvanized steel powder-coated with a 10 year or 700 hrs salt spray warranty
- Includes Two port Linear Tx/Rx Feed assembly

### Description

Why pay more for a transmit/receive antenna? The 180A is an FCC Compliant transmit antenna. The stamping process that produces the solid metal reflector results in superior surface accuracy and repeatability. The pre-assembled steel back structure adds strength and stability to the system and keeps the installation process simple.

The Navigator Style fine tune Azimuth and Elevation cap reduces pointing errors during installation, allowing more accurate boresighting on the satellite. Increased pointing accuracy leads to greater link availability. Special packaging techniques are employed for every system shipped to protect the surface of the dish.