

ESATCOM® 97cm Ka-Band Tx/Rx VSAT Antenna

Model: ESAT-097TXRXKA

Specifications	Transmit	Receive
Operation Frequency	29.0 - 31.0 GHz	19.2 - 21.2 GHz
Efficiency	70% Min.	70% Min.
Ka-Band Gain	46.9 dBi @ 29.0 GHZ	43.9 dBi @19.2 GHz
3dB Beamwidth	0.7° Max.	1.1° Max.
Tx/Rx Sidelobe Level	29-25 log θ dB $\theta_{min} \theta \leq 20^\circ$	
	-3.5 dB $20^\circ < \theta \leq 26.3^\circ$	
	32-25 log θ dB $26.3^\circ < \theta \leq 48^\circ$	
	-10 dB $48^\circ < \theta \leq 180^\circ$	
Cross Polarization on Axis within 1 dB Beamwidth	30 dB Min.	25 dB Min.
Reflector Type	Elliptical	
Offset Angle	18.44°	
Physical Size Short Axis	97 cm	
Physical Size Long Axis	99.8 cm	
Aperture Diameter	95.8 cm	
F/D Ratio	0.75	
Focus Length	710 mm	
Mounting Type	Pole Mount	
Adjustment Type	AZ /EL Adjustable	
Material	Galvanized Steel	
Finish	Polyester Coating	
Color	Light Grey / Dark Grey	
Elevation Range	10° - 90°	
Azimuth Range	0° ~ 360°	
Pole Diameter Acceptable	ø60 mm	
Operational Winds	55 mph	
Survival Winds	100 mph	
Ambient Temperature	-40°C - +60°C	
Relative Humidity	0 ~ 100%	