1500 Peloris SNG

1.5 Meter Vehicle-Mount Antenna

- ***High Performance SNG Applications***
- ***Intelsat / Eutelsat Compliant with Appropriate Feed***
- ***Sat-Lite Cirrus Controller***
- ***Carbon Fiber Reflector***
- ***Handcrank Included***
- ***Low Stow Height and Space-Optimizing Stowed Configuration***
- ***Designed for Boom Mounted Redundant RF Packages up to 100 lbs***
- ***Multiple Feed Options for X, Ku, and Ka Bands***

The Sat-Lite Technologies Model 1500 vehicle-mount antenna is a high performance light weight design for SNG (satellite news gathering) and military applications. Key features include a precision carbon fiber reflector combined with a light weight pedestal that provides the integrator with a low stow height, space saving profile. The elevation over azimuth pedestal provides excellent stiffness and low backlash characteristics for applications including Ka Band frequencies.

The antenna is also designed for mounting redundant RF packages of up to 100 lbs directly on the feedboom. A proprietary rack mount Sat-Lite Technologies Cirrus Antenna Controller offers autolocate features using GPS, compass, and DVB-S2 receiver to quickly identify the satellite. The standard product includes a keypad interface in the rack as well as an enhanced ethernet GUI for laptop or remote interface. The antenna is designed to meet international RF performance requirements for commercial and military applications including Intelsat, Eutelsat, and FCC specifications.

1969 Willow Lake Dr., White Oak, TX 75693 USA
T 903-295-3400 F 903-295-3433 sales@sat-litetech.com
www.sat-litetech.com

TECHNICAL SPECIFICATIONS

Electrical Specifications	2 Port X Band Circular		2 Port Cross Pol Ku Band Linear / SNG Feed		2 Port Cross Pol Ku Band Mode Matched Linear / SNG Feed		2 Port Cross Pol Ka Band Circular Polarization	
	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx
Frequency (GHz)	7.25 - 7.75	7.9 - 8.4	10.70 - 12.75	13.75 - 14.5	10.95 - 12.75	13.75 - 14.5	20.2 - 21.2	30.0 - 31.0
Gain (Midband, dBi)	38.7	39.5	43.3	45.0	43.3	45.0	47.5	51.0
Noise Temperature (°K)								
10 deg El	79		55		56		155	
20 deg El	61		46		48		120	
Axial Ratio	1.5 dB	1.5 dB					1.5 dB	1.0 dB
Cross Pol								
On Axis	-21.3 dB	-21.3 dB	-35 dB	-35 dB	-35 dB	-35 dB	-21.3 dB	-24.8 dB
in 1 dB contour	-21.3 dB	-21.3 dB	-30 dB	-30 dB	-25 dB	-35 dB	-21.3 dB	-24.8 dB
Sidelobe Compliances		ITU-580		Meets ITU 580 / FCC / Intelsat		Meets ITU 580 / FCC Intelsat / Eutelsat		ITU-580
VSWR	1.30:1	1.30:1	1.30:1	1.30:1	1.45:1	1.30:1	1.35:1	1.30:1
Isolation								
Tx/Rx	-110 dB	0 dBm input	-85 dB	0 dBm input	-85 dB	0 dBm input	-85 dB	0 dBm input
Rx/Tx	0 dBm input	-110 dB	0 dBm input	-35 dB	0 dBm input	-35 dB	0 dBm input	-30 dB

Mechanical / Environmental Specifications	
Model	1500
Reflector (Carbon Fiber)	1.5 M (58 13/16 in)
Reflector Configuration	Parabolic Single Offset, 0.8 F/D
Antenna Travel	
Azimuth	± 200° continuous
Elevation	0 - 90° of reflector bore sight
Polarization	± 90°
Antenna Drive Rate	
Azimuth	3.0°/sec
Elevation	2.5°/sec
Polarization	3.0°/sec
Temperature	
Operational	-30 to 60°C (-22 - 140°F)
Survival	-40 to 70°C (-40 - 158°F)
Winds[1]	
Operational	45 mph Gusting to 60 mph (72 G 96 kph)
Survival	80 mph (128 kph) deployed any position 100 mph (161 kph) stowed
Antenna Stow Height	16 11/16 in (424 mm)
Weight	155 lb (71 kg)
Integration[2]	
Feedboom Mounted[3]	100 lbs (45 kg)
Rain	
Operational	4 in/h (10 cm/h)
Survival	6 in/h (15 cm/h)
Relative Humidity	0 - 100%
Solar Radiation	360 btu/h/ft2 (1000 Kcal/h/m2)
Radial Ice (survival)	1 in (25.4 mm)
Corrosive Atmosphere	As encountered in coastal and/or industrial areas

1 Dependent on vehicle capabilities
2 Dependent on mounting position relative to elevation axis
3 Std weight shown, consult factory for special requirements
Note: Specifications subject to change without notice

1969 Willow Lake Dr., White Oak, TX 75693 USA
T 903-295-3400 F 903-295-3433 sales@sat-litetech.com
www.sat-litetech.com