

# 1311 & 1411 Peloris SNG

## 1.27 & 1.45 Meter Vehicle-Mount Antennas



- 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 1311 & 1411 vehicle-mount antennas are high performance light weight designs 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.

Locate Stow

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.



Automatic Manual Settings

**Antenna Location**

Mode	Latitude	Longitude	True Heading	Pitch	Roll
Automatic					

**Target Satellite**

Satellite Index	Name	Longitude	Target Pol	Inclin	Band	Pol Offset
1	AMC 4	67.0 * W	Horz	0 *	CK	0.0 *
2	GALAXY 28	89.0 * W	None	0 *	CK	0.0 *
3	GALAXY 3C	95.0 * W	None	0 *	CK	0.0 *
4	GALAXY 23	121.0 * W	None	0 *	CK	0.0 *
5	GALAXY 14	125.0 * W	None	0 *	C	0.0 *

**DVB Signpost List**

Signpost Index	Longitude	Pol	Freq (MHz)	Symbol Rate (kS/sec)	FEC	Standard	Priority
1	67.0 * W	V	11800	28888	3/4	S1	Enabled
2	95.0 * W	H	11780	20760	3/4	S1	Enabled
3	125.0 * W	V	12180	30000	3/4	S2	Enabled

Save Settings

<i>Electrical Specifications</i>	2 Port X Band		2 Port Cross Pol Ku Band		2 Port Cross Pol Ku Band		2 Port Cross Pol Ka Band	
	Circular		Linear / SNG Feed		Mode Matched Linear / SNG Feed		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) - 1311	37.5	38.0	42.1	43.5	42.1	43.5	46.5	49.8
Gain (Midband, dBi) - 1411 / 1500	38.7	39.5	43.2	44.8	43.2	44.8	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		DSCS / 188-164A		Meets ITU 580 / FCC / Intelsat		Meets ITU 580 / FCC Intelsat / Eutelsat		DSCS / 188-164A
VSWR	1.30:1	1.30:1	1.30:1	1.25:1	1.4:1	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

<i>Mechanical / Environmental Specifications</i>		
Model	1311	1411 & 1500
Reflector (Carbon Fiber)	1.27 meters (50 in)	1.45 meters (58 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 <sup>1</sup>		
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	145 lb (66 kg)	155 lb (71 kg)
Integration <sup>2</sup>		
Feedboom Mounted <sup>3</sup>	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/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	

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