

# 1243 NOVUS

## **1.2 Meter Motorized Vehicle-Mount Antenna**



The Sat-Lite Technologies Model 1243 vehicle-mount antenna is designed to offer the end user affordable performance for VSAT or SNG applications in a compact design. This antenna features an integrated auto-locate controller with manual override and includes handcranks. The integrated control system includes an option for a programmable digital video receiver that can be used to positively identify the satellite or interface directly to a modem to verify the satellite and automatically peak the antenna.

The antenna features a glass reinforced long focal length reflector designed to provide the necessary performance in a lightweight package. Up to 25 lbs of payload can be mounted on the feedboom for multiple integration packages and options. Options exist for heavier payloads as well. The antenna is designed to meet required Ku Band performance specifications for Intelsat and FCC applications.

- **High Performance VSAT Configuration**
- **Integrated Auto Locate Controller with Manual Override**
- **DVB Receiver or Modem Interface for Positive Satellite ID**
- **1.2 M Reflector – Glass Fiber Reinforced**
- **Handcranks Included**
- **Low Profile and Space-Optimizing Stowed Configuration**
- **Designed for Boom Mounted Single Thread Integration Packages up to 25 lbs**
- **Affordable SNG Applications**
- **Intelsat / FCC Compliant**



<i>Electrical Specifications</i>	<b>2 Port Cross Pol Ku Band Linear / VSAT Feed</b>		<b>2 Port Cross Pol Ku Band Linear / SNG Feed</b>	
	<b>Rx</b>	<b>Tx</b>	<b>Rx</b>	<b>Tx</b>
Frequency (GHz)	10.70 - 12.75	13.75 - 14.5	10.70 - 12.75	13.75 - 14.5
Gain (Midband, dBi)	41.7	43.2	41.7	43.2
Noise Temperature (°K)				
	10 deg El	45	43	
	20 deg El	31	31	
Axial Ratio				
Cross Pol				
	On Axis	-30 dB	-30 dB	-35 dB
	in 1 dB contour	-30 dB	-30 dB	-30 dB
Sidelobe Compliances		Meets ITU 580 / FCC 25.209		Meets ITU 580 / FCC 25.209
VSWR	1.50:1	1.30:1	1.30:1	1.25:1
Isolation				
Tx/Rx	-110 dB	0 dBm input	-85 dB	0 dBm input
Rx/Tx	0 dBm input	-35 dB	0 dBm input	-35 dB

<i>Mechanical / Environmental Specifications</i>	
Reflector	1.2 meters (48 in) Glass Reinforced Polyester
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	4.0°/sec
Elevation	3.0°/sec
Polarization	3.0°/sec
Temperature	
Operational	-17 to 50°C (0 - 122°F)
Survival	-30 to 70°C (-22 - 158°F)
Winds <sup>1</sup>	
Operational	40 mph (64 kph)
Survival	65 mph (104 kph) deployed any position
Antenna Stow Height	18 in (457 mm)
Weight	145 lb (65.9 kg) - with Ku Feed / Controller
Integration <sup>2</sup>	
Feedboom Mounted <sup>3</sup>	25 lbs
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

850-0018-B

<sup>1</sup> Dependent on vehicle capabilities

<sup>2</sup> Dependent on mounting position relative to elevation axis

<sup>3</sup> Std weight shown, consult factory for special requirements

Note: Specifications subject to change without notice