

26138 XY LEO MEO GEO Tracking Antenna

2.6 Meter Multiband



- **Portable Package, Ships in Cases, Sets Up in 30 Minutes.**
- **Full Motion XY Pedestal with +/- 90 Degs of Travel in Both Axes**
- **High Speed Capable – Up to 12°/Sec Each Axis**
- **Multi-Band Capable Including S, C, X, Ku, and Ka Band Frequencies**
- **Integrated High Performance Servo Control System with Precision Tracking**
- **Optional Integrated L Band Beacon Receiver with Spectrum Analyzer**
- **Precision Carbon Fiber Reflector, No Special Tools / Bolt Together Design for Ka Performance**

Options

- **Antenna & Hub mounted Integration**
- **Elevation over Azimuth Mount Head**
- **Higher Speed Drives**
- **Multi-Carrier X Band**

The Sat-Lite Technologies Model 26138 Portable X-Y antenna is designed for high performance portability in a lightweight package. The antenna features a 9-pc segmented carbon fiber composite reflector and a high-performance servo control system. Assembly time is less than 30 minutes. The X-Y Axis pedestal provides excellent high-speed performance for multiple applications, up to 12°/sec. The antenna is designed to meet international performance specifications for LEO / MEO / GEO applications with tracking requirements. The integrated servo system provides full-motion control for continuous operation.



<i>Electrical Specifications</i>	2 Port X Band		4 Port Ka Band	
	Circular Polarization		Circular Polarization	
	Rx	Tx	Rx	Tx
Frequency (GHz)	7.25-7.75	7.9-8.4	17.7 - 21.2	27.5 - 31
Gain (midband, dBi)	43.4	44.1	51.8	55.0
Noise Temperature (K)				
	10 deg El	78	160	
	20 deg El	74	120	
	40 deg El	69	105	
Typical G/T (20 deg El)				
	35 deg LNA			
	55 deg LNA	21.7 db/K		
	70 deg LNA			
	110 deg LNA		28.1 db/K	
Cross Pol				
On Axis	-21.3 dB	-24.8 dB	-24.8 dB	-24.8 dB
in 1 dB BW	-21.3 dB	-24.8 dB	-24.8 dB	-24.8 dB
Axial Ratio	1.5 dB	1.5 dB	1.0 dB	1.0 dB
Sidelobe Compliances	Meets ITU 580		Meets ITU 580	
VSWR	1.30:1	1.30:1	1.30:1	1.30:1
Isolation				
Tx/Rx	-110 dB	0 dBm input	-85 dB	0 dBm input
Rx/Tx	0 dBm input	-110 dB	0 dBm input	-70 dB
Max Power Handling (Continuous)		1.0 kW		200 W
WG Interface	WR112	WR112	WR42	WR28

<i>Mechanical / Environmental Specifications</i>	
Reflector	2.6 M Carbon Fiber
Reflector Configuration	9 Piece Symmetrical Ring Focus
Antenna Travel/ Speed	
X-Axis	+/-90° continuous, Up to 12° / sec
Y-Axis	0 - 180°, Up to 12° / sec
Polarization	Optional
Packaging (Includes 4 Cases + RF)	
Reflector	172 lbs (78 Kg)
Positioner (2 Cases)	125 lbs (63 Kg) Ea.
Pedestal / Controller Components	120 lbs (54.5 Kg)
RF Case (per band - with Room for BUC & Integration)	Depending on BUC / Integration
Servo Control System	
Pedestal Mounted with Ethernet Interface	90 - 265 VAC Input Power, 500 Watts
Autolocate Features	GPS / Compass / Sun Tracking
Tracking	TLE Tracking / Memory / Orbit
On Axis Encoders	High Precision 25 Bit
Temperature	
Operational	-30 to 60°C (-22 - 140°F)
Survival	-40 to 70°C (-40 - 158°F)
Winds	
Operational (anchored)	30 mph Gusting to 45 mph (48 kph G 72 kph)
Survival (anchored, petals removed)	90 mph (144 kph)