

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 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 (other bands available)</i>	2 Port X Band		2 Port Cross-Pol Ku Band		4 Port Ka Band	
	Circular Polarization		Linear Std Feed		Circular Polarization	
	Rx	Tx	Rx	Tx	Rx	Tx
Frequency (GHz)	7.25-7.75	7.9-8.4	10.70 - 12.75	13.75 - 14.5	17.7 - 21.2	27.5 - 31
Gain (midband, dBi) (Includes Feed Losses & Filter Losses)	43.4	44.1	47.4	49.4	52.3	55.4
Noise Temperature (K)						
10 deg El	85		69		160	
20 deg El	75		61		125	
40 deg El	70		58		110	
Typical G/T (40 deg El)	22.3 dB/K		26.3 dB/K		28.3 dB/K	
	7.5 GHz / 50K LNB					
	11.8 GHz / 55 K LNB		26.3 dB/K			
	20.7 GHz / 110 K LNB				28.3 dB/K	
Cross Pol						
On Axis	-21.3 dB	-24.8 dB	-35 dB	-35 dB	-21.3 dB	-24.8 dB
in 1 dB BW	-21.3 dB	-24.8 dB	-35 dB	-35 dB	-21.3 dB	-24.8 dB
Axial Ratio	1.5 dB	1.5 dB			1.5 dB	1.0 dB
Sidelobe Compliances	Meets ITU 580		ITU 580 FCC 25.209		Meets ITU 580	
VSWR	1.30:1	1.30:1	1.30:1	1.30:1	1.30:1	1.30:1
Isolation						
Tx/Rx	-110 dB	0 dB input	-85 dB	0 dB input	-85 dB	0 dB input
Tx/Tx	-	-	-	-	17 dB	17 dB
Rx/Rx	-	-	-	-	17 dB	17 dB
Rx/Tx	0 dBm input	-110 dB	0 dB input	-30 dB	0 dB input	-70 dB
Max Power Handling (Continuous)		600 W		400 W		100 W
WG Interface	WR112	WR112	WR75	WR75	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 5 Cases + RF)	
Reflector	46 x 41 x 24" @ 172 lbs (78 Kg)
XY Positioner (2 Cases)	27 x 21 x 18" @ 95 lbs (43 Kg) Ea.
Pedestal / Controller / Struts / Footpads	54 x 24 x 17" @ 154 lbs (70 Kg)
Pedestal Legs / Struts	66 x 22 x 14" @ 110 lbs (50 Kg)
RF Case (per band - with Room for BUC & Integration)	32 x 21 x 13" @ 80 lbs (36 Kg) typical
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 / Conical Scan
On Axis Encoders	High Precision 25 Bit
Temperature	
Operational	-20 to 60°C (-4 - 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)

Performance dependent on proper assembly and anchoring.
Note: Specifications subject to change without notice

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