

MODEL 10028

1 M Troposcatter Antenna



- **Compact Trans Horizon Communication System**
- **Digital Loop Carrier System for Over the Horizon Communication/ BLOS.**
- **Ships in 1 Ruggedized All Weather Case**
- **Upgradable for Satcom Application also**
- **Multi Segment Carbon Fiber Precision Reflector**
- **Compact Pedestal featuring easy point**
- **High Gain Design**
- **Optional Motorized Compact Controller**

The Sat-Lite Technologies Model 10028 manual flyaway antenna is highly portable and designed to meet beyond line of sight communication requirements in harsh environments. The antenna features a multi-segmented carbon fiber composite reflector. Assembly time is less than 10-15 minutes. The elevation-over- azimuth pedestal provides excellent stiffness characteristics and convenience for the user when pointing and peaking to a remote terminal. The system is designed to meet international performance specifications for Compact Trans Horizon Communication System Digital Loop Carrier System for Over the Horizon Communication/ BLOS.



Operational Benefits:

- DCCL, Line-of-Sight (LOS), Obstructed Line-of-Sight (OLOS), Over-The-Horizon (OTH) Communications,
- Designed for 0–70-mile range.
- Low Prime Power Requirement- operates off 120VAC, 24V DC power. Optional - Powered by battery, solar with battery backup, or vehicle power.
- Designed to be packed in ruggedized cases.
- Setup and operational in 15 minutes.



<i>Electrical Specifications</i>	2 Port C Band Linear Tropo Feed	
	Port 1	Port 2
	Frequency (GHz)	4.4 - 5.0 GHz
Gain (Midband, dBi)	32.0	32.0
Cross Pol (std)		
On Axis	-35 dB	-35 dB
in 1 dB BW	-35 dB	-35 dB
Half Power Beamwidth	4.5 deg Typ.	4.5 deg Typ.
VSWR	1.30:1	1.30:1
Isolation		
Port 1 / Port 2	-35 dB	-35 dB
Interface	WR187	WR187

<i>Mechanical / Environmental Specifications</i>	
Reflector	1 M Carbon Fiber
Reflector Configuration	1 M - 8 Piece Symmetrical
Antenna Travel	
Azimuth	+/-180° continuous with fine adjust
Elevation	-10° to +90° of reflector bore sight
Polarization	± 90° (std manual drive)
Packaging (Compression Molded Case)	37.5"x 27"x 13.5" (95 x 68.5 x 34.3 cm)
Weight	
Antenna / Pedestal / Feed	40 lbs (18.2 kg)
Packed in Case	79 lbs (35.9 kg)
Temperature	
Operational	-30 to 60°C (-22 - 140°F)
Survival	-40 to 70°C (-40 - 158°F)
Winds	
Operational (anchored)	30 mph Gusting to 40 mph (48 kph G 64 kph)
Survival (anchored, petals removed)	75 mph