

The TracStar auto-deploy auto-acquire antenna system allows personnel with little or no satellite experience to operate mobile Very Small Aperture Terminal (VSAT) satellite communications equipment, enabling the user to access any broadband application over satellite.

This 1.0M antenna features include -

- **Light Weight**—Most compact and light weight motorized 1M flyaway antenna available
- **Small**—Antenna and reflector segments store in a rugged case weighing less than 70 lbs (32kg) to meet airport requirements for checked baggage
- **Backpack Option** — Can be carried in canvas bag on your back
- **TracStar Versatility**—Integrates with any BUC, configures with any modem

- **Dependable**—Zero-Backlash Roto-Lok® Cable Drive
- **TracStar Pointing Accuracy** - even in high wind load conditions
- Deploy and Stow buttons located on antenna

With TracStar antennas, users enjoy the same reliable, secure, high-speed IP based data communications they are accustomed to in the office, while mobile. Further, complete solutions are available for one-stop shopping with field proven and reliable critical communication solutions. Featuring:

- Secure, high-speed digital communications
- High-speed internet access
- VoIP—voice calls & calling plans
- RoIP for connecting any 2 Way Radio into an IP communication group
- FAX communications

- Teleconferencing
- Wide area private network extension
- Video broadcasting
- Full time and part time Broadband bandwidth plans

TracStar antennas feature:

- Single button push for automatic satellite acquisition
- Rapid deployment and operation on every Ku-band satellite, worldwide
- Works with every satellite modem
- Eliminates the need for -
Leveling the antenna up to 10 degrees
Special test equipment for alignment
Computers or peripheral equipment to operate the antenna
Phone calls to network operators or service providers



SUITCASE

AIRLINE BAGGAGE CHECKABLE



TracStar1000P6

Reflector

Reflector Type	1.0M Carbon Fiber, Segmented, 6 Pieces
Optics	Offset, Prime Focus
Az/El Drive System	Patented Roto-Lok® Positioner
Mount Geometry	Elevation over Azimuth
Polarization Alignment	Motorized Rotation of Feed

Travel

Azimuth	180°
Elevation—Operational	15°-75° of reflector boresight
Polarization	Motorized ±95°

Travel Velocity

Slewing/Deploying	2°/second
Peaking	0.2°/second
Tracking	0.1°/second

Electrical Interface

RF	75Ω Tx / Rx Type F Connector (50Ω option)
Inter-facility Link	100 ft (30.48M) Dual RG6 Coax, 1 Control Cable Optional 50' / 80' / 100' / 150' Lengths
Motors	24VDC Servo w/Optical Encoder, Constant Torque
Controller (1U) - Power Supply	50/60Hz, 110/220VAC, Single Phase Power Consumption – Motors Active—250 Watts Power Consumption – Idle—30 Watts
Emergency Drive	Handcranks on all axii
Assembly and Acquisition in 10 minutes	

Antenna Characteristics

Ku-Band	Receive	Transmit
Frequency	10.95-12.75 Ghz	13.75-14.5 Ghz
Gain (Midband) 2 Port	39.8 dBi	41.5 dBi
VSWR -3dB	1.3:1	1.3:1
Beamwidth (degrees)		
-3dB	1.6	1.4
-10dB	2.8	2.3
Antenna Noise Temp @ 30° EL	50°K	
First Sidelobe Level (Typical)	-22dB	-25dB
Radiation Pattern Compliance	3dB better than FCC §25.209, ITU-R S.580.6	
Polarization	Linear Orthogonal	
Cross Pol Isolation	Standard Feed	Optional Feed
(Typical on axis)	30dB	35dB
(off axis—within 0.3°)	28dB	32dB

Satellite System Compliance	FCC, PanAmSat, Intelsat,(Eutelsat with Opt. Feed)
BUC/HPA Capacity	<25W in separate case via Power Coax to Feed
Available Power	-14dBw/4kHz per FCC, -0dBw/4kHz per ITU
Feed Port Isolation Tx to Rx	70dB

Antenna Controller

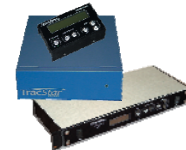
One button operation automatic satellite acquisition and cross-pol adjustment with integrated GPS/Compass/Level Sensors and user configurable satellite selection

Weights & Measures

Antenna Weight	68 lbs (31kg) in supplied suitcase
Carry-on suitcase for airline baggage	
Controller, Cables, BUC in auxillary suitcase	~45 lbs.

Controller—Rack Mount (1RU)

Weight	4.5 lbs (2.04 kg)
Dimensions (inches)	19"W x 8.0"D x 1.75"H (48.26 x 20.32 x 4.44 cm)



Environmental

Wind		
Operational	20 mph	(32 kph)
Operational / Anchored	30 mph	(48 kph)
Survival / Anchored	40 mph	(64 kph)

Pointing Loss in Wind

10 mph (16 kph)	0.1dB, 0.1° Typical
20 mph (32 kph)	0.5dB, 0.3° Typical

Temperature

Operational	± 15° to 125° F (-10° to 52° C)
Survival	-40° to 140° F (-40° to 60° C)

Sand and Dust

Method 510.4 per MIL-STD-810F

Humidity

Method 510.4 per MIL-STD-810F

Shock and Drop in Shipping Case

Method 510.4 per MIL-STD-810F

Solar Radiation

Method 510.4 per MIL-STD-810F

Options

Optional Power Supply with Handheld Operator Interface

Standard Power Supply with hand-held wt. 4-7 lbs (2.1kg)

Rack Mounted 1RU Chassis 8 in (20 cm) deep, wt. 4.6 lbs (2.1kg)

Input Power Requirements 90-256VAC, 300 watts peak, 60 watts continuous

Specifications subject to change without notice

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