

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 2.0M antenna features include -

- **POD Option**—Stows safely behind attractive ergonomic windbreak barrier
- **TracStar Controller Options**—Available Options include DirectPoint and inclined orbit satellite tracking
- **HPA Mounting Options**— Feed Boom and Dual HPA minimizes waveguide losses and maximizes EIRP
- **Solid Carbon-Fiber Reflector**—High EIRP - High-Performance and Light-weight Fully-Compliant for FCC, Intelsat, Panamsat, Eutel-

sat. May be used as Ku Band or C Band

- **Reliable**—Zero-Backlash Roto-Lok[®] Cable Drive Durability in Extreme and Harsh Conditions Unrivaled Az Range of 400°, Elevation 0-90°, Pol ±95°

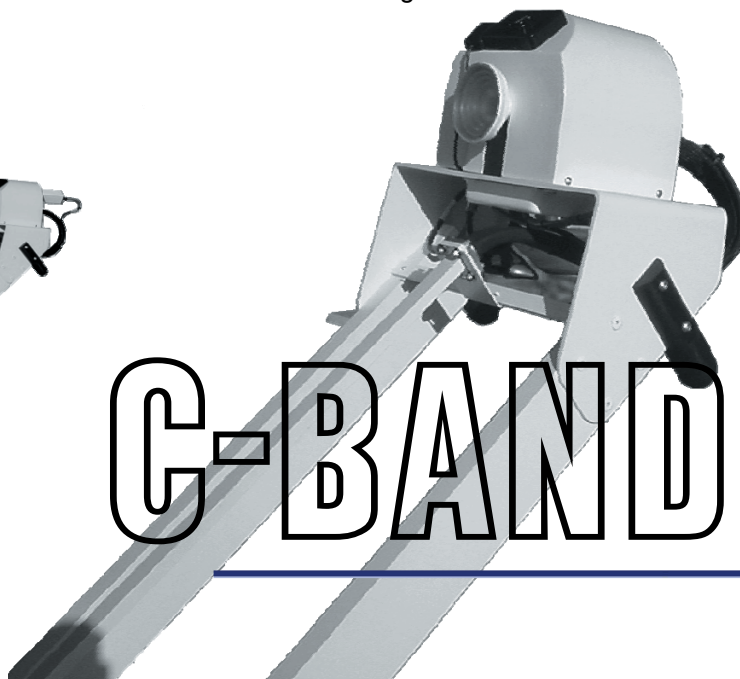
With TracStar antennas, users enjoy the same reliable, secure, high-speed IP based data communications they are accustomed to in the office, while mobile. Further, complete solutions are available for one-stop shopping with field proven and reliable critical communication solutions. Featuring:

- 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 C-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



C-BAND



TracStar2000C

Reflector

| | |
|--------------------|-------------------------------|
| Reflector Type | 2.0M Carbon Fiber |
| Optics | Offset, Prime Focus, 0.8 F/D |
| Feed | Precision Horn |
| Az/El Drive System | Patented Roto-Lok® Positioner |
| Mount Geometry | Elevation over Azimuth |
| Polarization | Motorized Rotation of Feed |

Travel

| | |
|-----------------------|--|
| Azimuth | 400° |
| Elevation—Operational | 0-90° of boresight with 400° Az Travel |
| Polarization | ±95° for 2 Port Feed |

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 | 30 ft (9.14M) 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 | Handcrank on Az, El; 12V leads on pol |
| BUC Mounting | Feed Boom or Rear of Reflector |
| Waveguide | WR 75 Groove Flange at Interface Point |

Antenna Characteristics

| C-Band | Receive | Transmit |
|--------------------------------|------------------------------------|-----------------|
| Frequency | 3.625-4.2 Ghz | 5.850-6.425 Ghz |
| Optional Insat | 4.5-4.8 Ghz | 6.725-7.025 Ghz |
| Gain (Midband) 2 Port | 36.3 dBi | 40.1 dBi |
| VSWR –3dB | 1.3:1 | 1.3:1 |
| Beamwidth (degrees) | | |
| -3dB | 25 | 17 |
| -15dB | 4.8 | 3.2 |
| Antenna Noise Temp @ 10° EL | 48°K | |
| First Sidelobe Level (Typical) | -20dB | -23dB |
| Radiation Pattern— Transmit | 1.8° to 30° | 29-25 Log Ø |
| Receive | 2.7° to 30° | 32-25 Log Ø |
| Polarization | Linear Standard, Optional Circular | |

Cross Pol Isolation (minimum on axis)

| | | |
|------------------------------|-------|--------------------|
| Linear | 35 dB | 35dB |
| Circular | 19dB | 25dB |
| Power Handling Capability | | 500 watts per port |
| 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

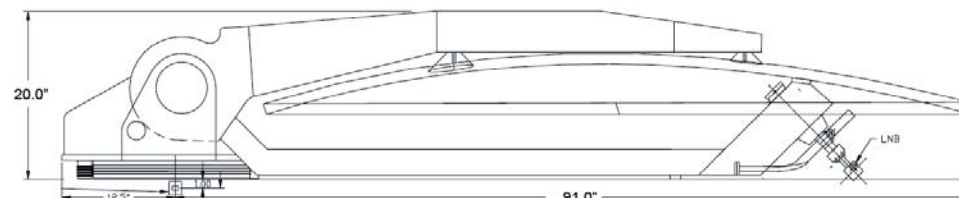
| | | |
|-----------------------------|-----------------------|---------------------------|
| Antenna Stowed Height | 20" | (51 cm) |
| Antenna Stowed Length | 103.5" | (263 cm) |
| Antenna Deployed Height | 102" | (259 cm) |
| Antenna Width | 80" | (203 cm) |
| Weight | 300 lbs | (136 kg) |
| Controller—Rack 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

| | | |
|-------------|---------|--------------------------------------|
| Survival | | |
| Deployed | 60 mph | (121kmph) |
| Stowed | 100 mph | (161kmph) |
| Operational | 45 mph | (72 kmph), Gusts to 60 mph (97 kmph) |

| | | |
|--------------------------------------|--|----------------|
| Pointing loss in Wind | | |
| 20 mph (32 kmph) | | 0.2 dB Typical |
| 30 Gusting to 45 mph (48 to 72 kmph) | | 1.0 Typical |

| | | |
|-------------|--|--------------------------------|
| Temperature | | |
| Operational | | ± 5° to 125° F (-15° to 52° C) |
| Survival | | -40° to 140° F (-40° to 60° C) |



Specifications subject to change without notice

TracStar Systems • Cobham—SatCom

1551 College Park Business Center Road • Orlando, FL 32804 • +407.650.9054 • FAX +407.650.9086 • <http://www.tracstar.com> • sales@tracstar.net
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