

## .75Meter, Vehicle Mount Antenna System Data Specification

The most important thing we build is trust

### TracStar 750 Antenna System

The TracStar Series of vehicle mount and fly-away antenna systems 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.

The TracStar Series of antennas are typically owned and operated by:

- Corporations with remote or mobile office and monitoring applications
- Federal, State and Public Safety agencies for law enforcement, emergency response and homeland security communications



- Military rapid deployment, SATCOM on the pause applications

With the TracStar Series of antennas, users enjoy the same reliable, secure, high-speed IP based data communications they are accustomed to in the office, while mobile. Users can get connected Anywhere/Anytime for applications such as Secure, high-speed digital communications, High-speed internet access, voice and FAX communications, Teleconferencing, Wide area private network extension and video broadcasting.

### Reflector

|              |  |
|--------------|--|
| Size         | 75cm Ku-band elliptical<br>(89 cm wide x 62 cm high) |
| Mount        | 3-Axis: Polarization over<br>Elevation over Azimuth  |
| Polarization | Linear, Co or Cross-Polarized                        |

### Travel

|                  |                                   |
|------------------|-----------------------------------|
| Azimuth          | 400° or ± 200° from Stow Position |
| EI - Operational | 0-65° (+) stow position           |
| Polarization     | ± 65°                             |

### Travel Velocity

|                     |                         |
|---------------------|-------------------------|
| Slewing / Deploying |                         |
| Azimuth             | 10° per second          |
| Elevation           | 5° per second           |
| Manual Jog          | 1.0° or 0.2° per second |

### Electrical Interface

|                              |  |
|------------------------------|--|
| RF                           | 75Ω Tx/Rx Type F Connector<br>(50Ω option) |
| Interfacility Link           | 32 ft. Twin RG6 Coax,<br>1 Data Cable      |
| Motors                       | 24 VDC Variable Speed                      |
| Controller                   | 50/60Hz, 110/220VAC,<br>(1U)/Power Supply  |
| Power Consumption–Peak       | Single Phase<br>150 Watts                  |
| Power Consumption–Continuous | 20 Watts                                   |

### Antenna Characteristics

| Ku                             | Rx   | Tx                    |
|--------------------------------|--|-----------------------|
| Frequency (Ghz)                | 11.7 - 12.75                                 | 13.75 - 14.5          |
| Gain (±2dBi)                   | 37.8 dBi<br>@11.95Ghz                        | 39.3 dBi<br>@14.25Ghz |
| VSWR                           | 1.30:1                                       | 1.30:1                |
| Beam width in Orbital Arc -3dB | 2.0°@12.0Ghz                                 | 1.6°@14.25Ghz         |
| Antenna Noise Temperature      | 50°K at 30° Elevation                        |                       |
| Polarization                   | Linear Cross Pol Standard<br>Co-pol optional |                       |
| Radiation Pattern Compliance   | FCC §25.209,<br>ITU-R S-580-6                |                       |

### Weights & Measures

|   |             |                    |
|---|-------------|--------------------|
| Approximate Weight  | 92 lbs      | (41.73 kg)         |
| Maximum Length with IFL Cables Connected<br>(LNB Dependent) | 53"         | (134.6 cm)         |
| Height  |             |                    |
| Stowed  | 12.5"       | (31.7 cm)          |
| Deployed  | 42"         | (106.68 cm)        |
| Width (Reflector)   | 36.2"       | (91.94cm)          |
| Load Frame  | 21" x 45.4" | (53.34 x 115.3 cm) |

### Antenna Controller

One button operation automatic satellite acquisition with integrated GPS/Compass/Level Sensors and user configurable satellite selection.

### Power Supply / Auxiliary Control Unit

|                       |                          |                           |
|-----------------------|--------------------------|---------------------------|
| Desk Top Power Supply | 9" x 10.25" x 2.5"       | (22.86 x 26 x 6.35 cm)    |
| Weight                | 4.5 lbs                  | (1.98 kg)                 |
| Display               | 5 1/2" x 3 1/4" x 1-3/8" | (13.96 x 8.25 x 3.45 cm)  |
| Weight                | 0.5 lbs                  | (.22 kg)                  |
| Rack Mount            | (1U) 19" x 8.0" x 1.75"  | (48.26 x 20.32 x 4.44 cm) |
| Weight                | 4.5 lbs                  | (1.98 kg)                 |

### Environmental

|              |                           |
|--------------|---------------------------|
| Wind         |                           |
| Stowed       | 125 mph (201.25 kph)      |
| Operational* | 60 mph @ 60° F (96.6 kph) |
| Temperature  |                           |
| Operational  | -20° F to 125° F          |
| Storage      | -30° F to 150° F          |

\*Anchored

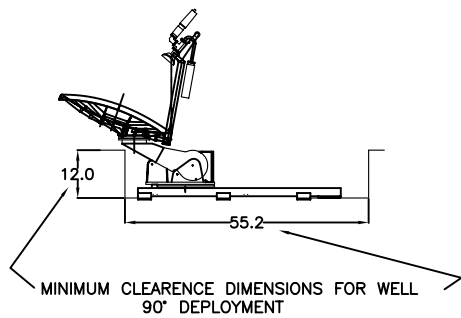
Specifications subject to change without notice.

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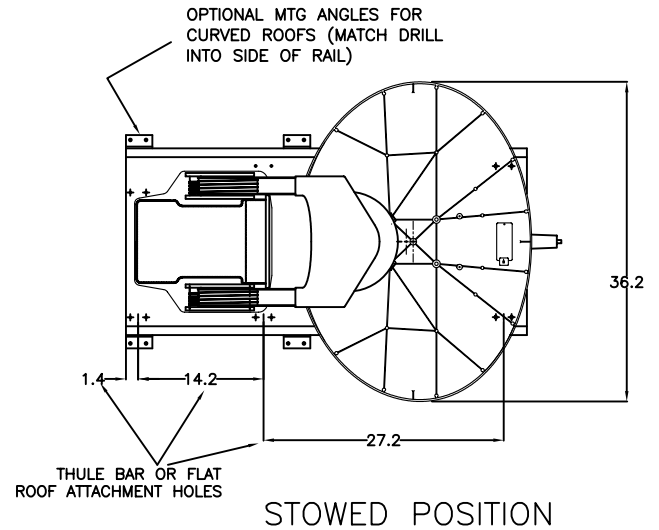
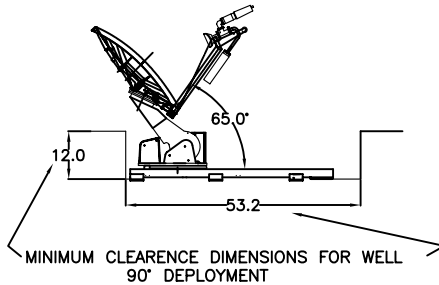
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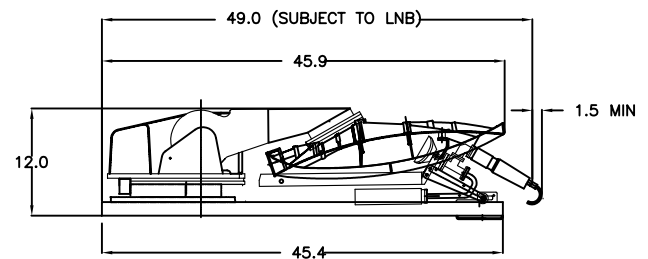
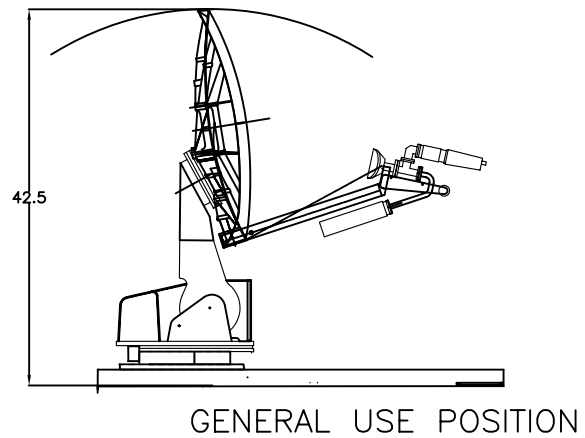
90° DEPLOYMENT



65° DEPLOYMENT



STOWED POSITION



|                        |             |      |       |
|------------------------|-------------|------|-------|
| TracStar Systems, Inc. |             |      |       |
| Orlando, FL            |             |      |       |
| DESIGNED BY            | CHECKED BY  | DATE | SCALE |
| DRAWN BY               | APPROVED BY |      |       |
| 750 IMO AVSAT          |             |      |       |
| REV                    | DATE        | BY   | APP   |
| D                      |             |      |       |