

# **Tactical Tracker 1350**

The Tactical Tracker 1350 is a compact tracking antenna, designed to be modular, enabling resilient communications in any orbit, constellation, or band. Optimized for the modern warfighter, it provides secure, critical data connectivity. Its rapid deployment and proven reliability ensure command at the tactical edge in demanding operational environments.



### **Multi-Orbit, Multi-Band Performance**

Supports GEO, MEO, LEO, HEO, and future constellations with RF options for S, C, X, Ku, and Ka-bands.

# **Rapid Deployment**

From case to "on the air" in as little as 20 minutes with a user-friendly, tool-free assembly process.

#### **Industry-Leading Retrace Speed**

An advanced controller and drive system deliver an industry-leading retrace capability, enabling single-antenna NGSO operation without dropping modem encryption.

### Rugged & Reliable

Designed for the rigorous duty cycle of LEO tracking and built to comply with rigorous DISA standards for secure communications at the edge.

#### **Modular & Mission-Ready**

Field-swappable RF packages and feeds allow for seamless adaptation to virtually any frequency band or mission set.

# **Precision Tracking**

A high-precision carbon fiber reflector and sophisticated, time-tested pointing algorithms ensure superior tracking accuracy and full hemispheric coverage with no keyhole.

#### **Control Interface**

- Controller is embedded into pedestal
- OpenAMIP and closed loop mode compatible
- Enhanced GUI for ease of setup and operation
- Advanced software tracks the best signal available
- Support for TLE as well as CLI protocols

# **Options**

- RF kits available: Ka, Ku, X Bands available
- · BUC options with mounting kits available
- Anchoring kit options available
- Spare Parts kit available
- Custom packaging configurations available

| Mechanical Specifications |                                 |  |  |  |  |
|---------------------------|---------------------------------|--|--|--|--|
| Drive                     | Motorized X over Y Positioner   |  |  |  |  |
| Polarization              | Circular Ka, X, Linear Ku       |  |  |  |  |
| Reflector                 | Segmented 10-Piece Carbon Fiber |  |  |  |  |
| Retrace Speed             | 30 Degrees per second           |  |  |  |  |
| Power Supply              | 110/220 V 50/60 Hz              |  |  |  |  |

| Packaging Specifications (4 Cases)    |                                       |  |  |  |  |
|---------------------------------------|---------------------------------------|--|--|--|--|
| Reflector Case                        | 26.5 in x 26.5 in x 15.6 in - 65 lbs  |  |  |  |  |
| Positioner Case                       | 37.5 in x 27.5 in x 14.5 in - 90 lbs  |  |  |  |  |
| Pedestal/Controller Case              | 44.9 in x 25.3 in x 16.5 in - 115 lbs |  |  |  |  |
| RF Case<br>(Varies per configuration) | 26.5 in x 26.5 in 15.6 in - 60 lbs    |  |  |  |  |

| Environmental Specifications                         |                          |                            |  |  |  |  |  |
|--|--------------------------|----------------------------|--|--|--|--|--|
| Wind - Operational (When anchored per specification) | 30 MPH gusting to 45 MPH | (48 KPH gusting to 72 KPH) |  |  |  |  |  |
| Wind - Survival (When anchored per specification)    | 60 MPH                   | (96 KPH)                   |  |  |  |  |  |
| Temperature Operational                              | -22° to 140° Fahrenheit  | (-30° to 60° Celsius)      |  |  |  |  |  |
| Temperature Survival                                 | -40° to 158° Fahrenheit  | (-40° to 70° Celsius)      |  |  |  |  |  |

| RF / Electrical                 | Ka Band Military     |                      | Ka Band Commercial                  |                                     | Ku Band                      |                              | X Band               |                      |
|---------------------------------|----------------------|----------------------|-------------------------------------|-------------------------------------|------------------------------|------------------------------|----------------------|----------------------|
| RF Parameters                   | Receive              | Transmit             | Receive                             | Transmit                            | Receive                      | Transmit                     | Receive              | Transmit             |
| Frequency                       | 20.2-21.2<br>GHz     | 30.0-31.0<br>GHz     | 17.7-20.2<br>GHz                    | 27.5-30.0<br>GHz                    | 10.7-12.75<br>GHz            | 13.75-14.5<br>GHz            | 7.25-7.75<br>GHz     | 7.9-8.4<br>GHz       |
| Polarization                    | Circular Xpol        | Circular Xpol        | Circular Xpol                       | Circular Xpol                       | Linear Xpol                  | Linear Xpol                  | Circular Xpol        | Circular Xpol        |
| Gain @ Mid Band<br>(dBi)        | 47.3 dBi             | 49.6 dBi             | 46.4 dBi                            | 49.4 dBi                            | 42.5 dBi                     | 43.8 dBi                     | 38.4 dBi             | 38.6 dBi             |
| VSWR                            | 1.3: 1 Typical       | 1.3: 1 Typical       | 1.3: 1 Typical                      | 1.3: 1 Typical                      | 1.3: 1 Typical               | 1.3: 1 Typical               | 1.3: 1 Typical       | 1.3: 1 Typical       |
| Radiation Pattern<br>Compliance | Mil-STD-<br>188-164A | Mil-STD-<br>188-164A | FCC 25.209,<br>Mil-STD-<br>188-164A | FCC 25.209,<br>Mil-STD-<br>188-164A | FCC 25.209,<br>ITU-R S.580-6 | FCC 25.209,<br>ITU-R S.580-6 | Mil-STD-<br>188-164A | Mil-STD-<br>188-164A |
| Power Handling<br>Capability    | NA                   | 250 Watts            | NA                                  | 250 Watts                           | NA                           | 400 Watts                    | NA                   | 500 Watts            |
| G/T @ Mid-Band                  | 24.5 dB/K            | NA                   | 23.9 dB/K                           | NA                                  | 20.7 dB/K                    | NA                           | 18.4 dB/K            | NA                   |
| Axial Ratio                     | 1.5                  | 1.0                  | 1.5                                 | 1.0                                 | NA                           | NA                           | 1.2                  | 2.0                  |
| Cross Pol Isolation             | >22 dB<br>Typical    | >25 dB<br>Typical    | >22 dB<br>Typical                   | >25 dB<br>Typical                   | >30 dB                       | >30 dB                       | >23 dB<br>Typical    | >20 dB<br>Typical    |
| Feed Port Isolation             | > 35 dB              | > 80 dB              | > 35 dB                             | > 80 dB                             | > 35 dB                      | > 80 dB                      | > 110 dB             | > 110 dB             |

<sup>\*</sup>All specs subject to change. All trademarks are the property of their respective owners. Information in this document is subject to change without notice.



