



## **GDT-2000**

### **S/C-Band Ground Data Terminal Antenna System**



#### **STANDARD FEATURES:**

- **Dual S/C-Band Capability**
- **L-Band Capability Available**
- **Largest Reflector Aperture in Class – 4 foot**
- **High Gain Performance**
- **Rugged and Lightweight – 15 min. Setup time**
- **Adjustable Tripod for Ground Slope Variation**
- **Transit Cases Available for Transport**

#### **APPLICATIONS:**

- **Tactical Data Link (L/S/C-Band)**
- **Data Relay**
- **Homeland Security/Border Surveillance**
- **Shadow 200, Hunter, Predator, Pioneer, Raven**

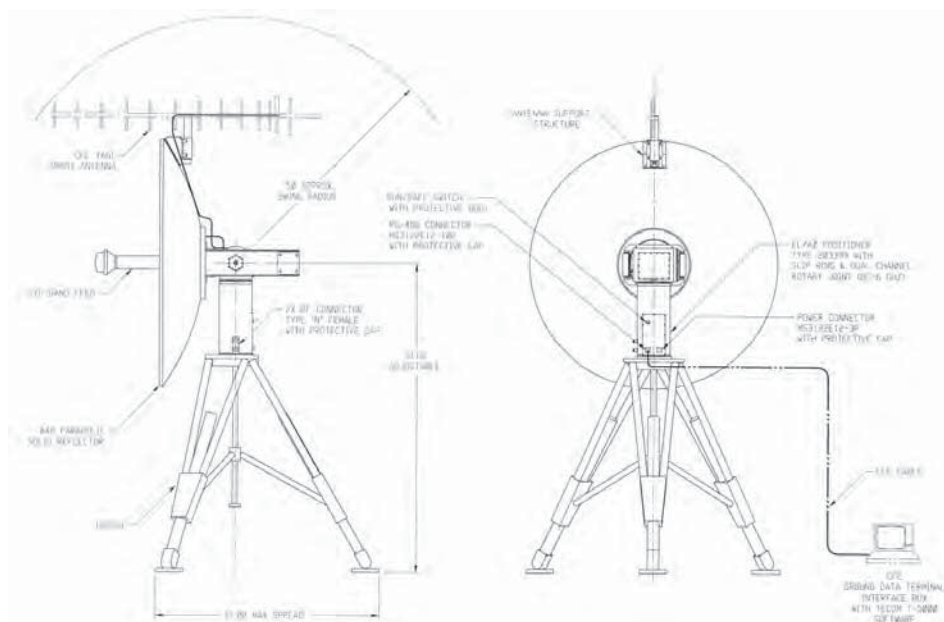
TECOM has a diverse line of rugged, high accuracy Directional Narrowband Systems that provide high data-rate Tactical Datalink communications for fixed ground applications and On-The-Move applications such as those encountered on military aircraft, naval vessels, and mobile ground vehicles. Our standard product line includes antenna system products that are scalable in frequency, and offer superior performance for mission requirements in the L, S, C, X, Ku and Ka frequency bands.

The S/C-Band Ground Data Terminal (GDT) for Shadow TUAV systems provide the U.S. Army with excellent capabilities to provide reconnaissance and tactical information to ground forces. Shadow systems have been successfully deployed by the Army in Operation Iraqi Freedom, providing critical support to coalition forces.

TECOM is a major supplier to AAI Corporation for the Shadow TUAV production program, providing small aperture antenna assemblies for Ground Data Terminals (GDT's) as well as Remote Video Terminal (RVT) equipment. The GDT antenna assembly consists of a positioner, controller, and parabolic feed assemblies that provide the critical command, control, and sensor connectivity of the TUAV to the ground control station.

TECOM's microprocessor-based Antenna Control Unit (ACU) is designed to provide cost-effective control of the antenna positioner assembly. The integrated controller can be operated over an RS-232, RS-485, Ethernet or Fiber Optic interface. The Windows-based software provides a programmable, man machine interface and allows for complete control of all antenna system functionality and operational modes that include Standby, Point, Step, Slew, Jog, Sector Scan and Program Track.

The combination of small size, rapid deployment, high data rate performance, and dynamic capability directly benefit the tactical user community by providing a scalable datalink communication asset able to fulfill future Wideband Line-of-Site, and Beyond-Line-Site secure communication at high data rates.



Antenna Performance*	
Frequency	
S-Band & C-Band (CONUS)	2.4 – 2.485 / 4.4 – 4.95 GHz
S-Band & C-Band (OCONUS)	2.4 – 2.485 / 5.25 – 5.85 GHz
Aperture Gain	
S-Band	+25 dBi
C-Band (CONUS)	+30.5 dBi
C-Band (OCONUS)	+32 dBi
Polarization	Linear Vertical
Power Handling Capability	
S-Band	10 Watt CW
C-Band (CONUS)	1 Watt CW
C-Band (OCONUS)	1 Watt CW
Dynamic Capability	
Velocity	12°/sec
Acceleration	20°/sec <sup>2</sup>
Positioning Range	
Elevation	-5° to +90°
Azimuth	360° (continuous)
Antenna Pointing Accuracy	< 0.3°
System Weight (packaged in transit cases)	< 150 lbs.
Communication Interface	RS-485 standard (RS-232, RS-422, Fiber Optic, Ethernet also available)
Power Interface	115/230 VAC, 50/60 300W peak, 100W avg. @115 VAC

\* Specifications subject to change