



Features and Benefits

- Extreme Portability - GATR TRAC transports in as few as six cases weighing less than 100 lbs each
- Lower Logistical Cost - Ultralight tracking antenna and compact Az/EI pedestal deliver significant reduction in transportation expenses
- Rapid Slew - Lightweight design enables quick return slew between satellite tracks and continuous tracking
- Quick and Easy Setup - Ready to track in 45 minutes

GATR TRAC

The GATR TRAC is a tactical, mobile, sensor agnostic direct downlink terminal providing assured, timely receipt of commercial imagery that integrates with data from other sources to satisfy field commanders' requests for information. The terminal is compatible with Commercial Common Imagery Processors that process raw satellite data into standard formats and allow for near real-time connectivity and distribution of imagery.

Currently operational and successfully retrieving and exploiting commercial MEO/LEO satellite imagery from sources such as WorldView 1-2, GeoEye-1, RADARSAT-2, and NASA earth observation satellites. The terminal has been demonstrated in cooperation with the Army Geospatial Center (AGC) Remote Ground Terminal (RGT), TITAN prototype, NRL's Coalition Tactical Awareness and Response (CTAR), and as the SMDC Kestrel Eye ground station.

The lightweight carbon-fiber pedestal and inflatable 2.4-meter antenna enable transportation of the GATR TRAC via any available means (land, sea, or air). When compared to other deployable rigid terminals, the low pack-out weight and volume make the GATR TRAC ideal for forward deployments, remote applications, and contingency scenarios where transportation and space are limited.

Field serviceable with interchangeable multi-frequency feed modules including X-Band and S-Band, the GATR TRAC ensures users can switch between bands quickly and easily – further reducing deployment time and transportation costs. GATR TRAC's ability to communicate with multi-orbit (GEO, MEO, LEO) constellations supports multi-domain operations to enable deep sensing from space sensors.

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Specifications

Operation		
Set Up Time	45 minutes, 2 operators	
Antenna Case	94 lbs (42.6 kg)	
Tracking Pedestal	97.6 lbs (44.3 kg)	
Feed Case	35.2 lbs (15.9 kg)	
Legs Case	52.3 lbs (23.7 kg)	
Arms Case A	45.6 lbs (20.7 kg)	
Arms Case B	42.9 lbs (19.5 kg)	
Antenna Performance	X-Band (Rx)	S-Band (Rx)
Reflector	2.4m Prime-Focus Parabolic	
Frequency	7.6 - 8.4 GHz	2.02 - 2.3 GHz
Polarization	Circular (RHCP/LHCP)	Circular (RHCP/LHCP)
LNA/LNB	50 dB	58 dB
G/T	22 dB/K @ 30°	9 dB/K @ 30°
Track Pedestal Operation		
Slew Rate	15° / second	
Pointing Accuracy	0.1°	
Elevation	0° to + 120°	
Azimuth	Continuous 360° rotation	
Calibration & Offsets	Automatic Calibration: Tilt, GPS RF Calibration to GEO satellite beacons	
Satellite Tracking	MEO, LEO, GEO and HEO Satellites Accepts TLE Files Scheduling of Satellite passes by NORAD ID SGP4 Library Compliant	
Interfaces		
Pedestal	RCHP: N-Type (50 Ohm) LHCP: N-Type (50 Ohm) Ethernet: RJ45 M&C Port RS422: RJ45 Console/Maintenance Port Power: NEMA 5-15 plug	
Environmental		
Temperature	Operational: -15 to +50° C	
Wind Load	Operational: 20 mph sustained, 25 mph gusts Survivable: 45 mph sustained, 60 mph gusts *with anchors and/or ballasts*	
Power		
Input Power	100 ~ 240 VAC, 50/60 Hz	
Power Consumption	< 600 Watts	