



TracStar i450M

Critical Communication Solutions

The IMVS Series from TracStar is built to track a single satellite while mounted on a stationary or moving vehicle traveling over improved or unimproved road conditions.

Users now have the freedom and flexibility to move quickly *Anywhere/Anytime* on the road using a communications terminal that is very responsive and Internet/Intranet compatible.

The IMVS Series terminals are used for:

- Military wheeled or tracked vehicles
- Federal, State and Public Safety agencies for law enforcement, emergency response and home-land security communications
- Enterprise Organizations
- Trains, boats, limos, RV's and SUV's
- News Gathering and Multi-Media production crews

With TracStar's MVS Series antennas, users enjoy the same reliable, secure, high-speed IP based data communications they are accustomed to in the office, while moving. Users can get connected *Anywhere/Anytime* for applications such as:

- Secure digital communications up to 2 Mbps
- High-speed Internet access
- VoIP communications
- Teleconferencing
- Wide area private network extension
- Video broadcasting

TracStar Antennas Feature:

- Single button operation
- Rapid acquisition and reacquisition
- Worldwide Ku-Band Capable
- Works with L-Band satellite modems

- **Tracks satellite at vehicle speeds greater than 95 mph**

- FCC Licensed
- Installs in minutes

TracStar uses:

- Electromechanically steered AZ, EL, & POL Axii
- No Special Test Equipment for alignment
- No Computers or peripheral equipment to operate the antenna
- No external INU
- No Phone calls to network operators or service providers
- Control software from Commercial Markets

Every antenna comes equipped with the following standard equipment:

- Tracking antenna and LNB (HPA Optional)
- Built-in Attitude, Heading and Rate Sensors



IN-MOTION



TracStar i450M

Reflector/Pedestal

Size	45 cm Elliptical Equivalent
Mount Geometry	Elevation over Azimuth
Polarization	Linear Phase Shift

Travel

Azimuth	360° continuous
Elevation	20-70°
Polarization	±95°

Tracking

Acceleration	>200°/s ²
Velocity	>100°/s
Meets FCC Part 25.222	

Accuracy

Tracking	<0.5°
Peaking	<0.2°

Interface Vehicle Link

RF	50 ohm Tx / Rx TNC Connector
RF	Tx / Rx L-Band 950-1450 MHz
ACU	25 ft. Cable with Connectors
Power	120VAC, 500 watts, 5 amps (max.)

Antenna Characteristics

Transmit Gain (14.0 GHz)	35.5 dBi
Receive Gain (10.95 GHz)	31.5 dBi
EIRP (Typical with Radome)	44.5 dBw
G/T (Typical with Radome)	11.5 dB/K

Weights & Measures

Antenna System	
Weight	164.5 lbs (74.3kg)
Dimensions	45" x 11.5" (114.3 x 29.2cm)
Portable Power Supply/Display Unit	
Display Unit Only	
Weight	0.5 lbs (.22kg)
Dimensions	5 ½"W x 3 ¼"D x 1-3/8"H (114.3 x 29.2 cm)
Rack Mount (1RU) Unit	
Weight	8.0 lbs. (3.6 kg)
Dimensions	19.0"W x 8.0"D x 1.75"H (48.2 x 34.2 x 4.4 cm)



Antenna Controller

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

Environmental

Wind	100 mph (153 Kph)
Temperature	
Operational	-30°C - 50°C
Non-operational	-40°C - 50°C
Humidity	100% at -30o C - +30o C
Altitude	15,000'
Rain	2"/hr at 40mph
Shock and Vibration	MIL-STD-810F Pending
Joint Interoperability Test Command (JTIC) Certified	



Specifications Subject to Change Without Notice