



TracStar750P5

Critical Communication Solutions

The MVS Series from TracStar 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 MVS 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 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 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
- Video broadcasting

TracStar antennas feature:

- Single button push for automatic satellite acquisition
- Rapid deployment and operation on every Ku-band satellite, worldwide
- Works with every satellite modem
- Eliminates the need for -
Leveling the antenna up to 10 degrees
Special test equipment for alignment
Computers or peripheral equipment to operate the antenna
Phone calls to network operators or service providers

BAGGAGE CHECKABLE



TracStar750P5

Reflector

Size	75cm Ku-band elliptical (90 cm wide x 66 cm high)
Optics	Offset, Prime Focus
Axis Drive System	3-Axis: Polarization over Elevation over Azimuth Roto-Lok®
Mount Geometry	Elevation over Azimuth
Polarization	Reflector Rotation/feed aligns major axis with orbital arc

Travel

Azimuth	180°
Elevation	True Elevation readout from calibrated inclinometer
Mechanical	15° to 75° of Reflector Boresight
Polarization	Motorized ±75° with Manual H/V selection

Travel Velocity

Slewing/Deploying	
Azimuth	10°/second
Elevation	5°/second
Polarization	5°/second
Manual Jog	1.0° or 0.2°/second

Electrical Interface

RF	Rx—L-band with Type N at rear of antenna Tx—Ku with Type-N at feed flange
Interfacility Link	32 ft: Twin RG6 Coax, 1 Data Cable
Motors	24VDC Variable Speed w/optical encoders
Controller (1U) / Power Supply	50/60Hz, 110/220VAC, Single Phase
Power Consumption – Motors Active	250 Watts
Power Consumption – Idle	20 Watts

Antenna Characteristics

	Receive	Transmit
Frequency	10.95-12.75 GHz	13.75-14.5 GHz
Gain (±2dBi)	37.0 dBi @ 10.95GHz	39.3 dBi @ 14.25GHz
VSWR	1.30:1	1.30:1
Beam width in Orbital Arc (degrees)		
-3dB	1.8°	1.6°
-10dB	3.3°	2.8°
Antenna Noise Temperature @ 10° EI	55°K	
Polarization	Linear, Orthogonal	
Cross-Pol Isolation	STD Feed	OPT Feed
On Axis	30 dB	35dB/35dB
Off Axis (within 0.3°)	28dB	28dB/32dB
First Sidelobe Level (Typical)	-18dB	-21dB
TX Radiation Pattern Compliance > 1.73°		§FCC 25.209, ITU-R S-580-6
Satellite System Compliance		FCC, PanAmSat, Intelsat, Eutelsat

Satellite Approval	PanAmSat USA-8189
BUC/HPA Capacity	<25W / Separate Case via Coax to Feed
Allowable Power	-14dBw/4kHz per FCC, -0dBw/4kHz per ITU
Feed Port Isolation Tx to Rx	70dB

Weights & Measures (metric)

Approximate Weight (w/o BUC/ LNB)	40 to 50 Lbs - Case dependent	(18.14 to 22.67)
Stowed Sizes (Dual)	Carry On Suitcase and Cabin Baggage Sizes	
Manual Operation	Handcranks on all axii	
Deployed Height	42"	(106.67cm)
Case Dimensions (2 Cases [Ant+Ref] and [Aux Equip])	25"H x 20"W x 15"D	(63.5 x 5.8 x 38.1cm)
Antenna and Reflector	66 lbs	(29.93 kg)
Auxillary Equipment (Modem, Buc, LNB, Controller, Cables)	40 lbs	(18.14kg)
Portable Power Supply/Display Unit		
Weight: Power Supply/Display Unit	4.5 lbs / .5 lbs.	(2.04 / 0.22 kg)
Dimensions		
Power Supply	9"W x 10.25"D x 2.5"H	(22.86 x 26 x 6.35 cm)
Display Unit	5½"W x 3¼"D x 1-3/8"H	13.96 x 8.25 x 3.45 cm)
Rack Mount (1RU)		
Weight	4.5 lbs	(2.04 kg)
Dimensions (inches)	19"W x 8.0"D x 1.75"H	(48.26 x 20.32 x 4.44 cm)

Antenna Controller

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

Environmental

Wind—Survival - weighted	30 mph gusting to 45 mph	(38.3 to 72.45 kph)
Operational	20 mph	(32.2 kph)
Pointing loss in 10 mph Wind		0.1db, 0.1° typical
Pointing loss in 20 mph Wind		0.2db, 0.2° typical
Temperature—Operational		+15°F to 125°F
Survival		-40°F to 140°F
Sand and Dust		Method 510.4 per MIL-STD-810F
Humidity		Method 507.4 per MIL-STD-810F
Solar Radiation		Method 505.4 per MIL-STD-810F

Specifications are subject to change without notice