

TracStar750P5

Critical Communication Solutions

The MVS Series from TracStar allows personnel with little or no satellite experience to operate mobile the same reliable, secure, high-speed IP based data 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 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

Trac. Star 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 oper ate the antenna
 - Phone calls to network operators or service providers



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Reflector

Size 75cm Ku-band elliptical (90 cm wide x 66 cm high)
Optics Offset, Prime Focus
Axis Drive System3-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	e @ 10° El	
Polarization	Linear, Orthogor	nal
Cross-Pol Isolation	STD Feed	OPT Feed
On Axis	30 dB	35dB/35dB
Off Axis (within 0.3°)	28dB	28dB/32dB
First Sidelobe Level (Typica	I) -18dB	-21dB
TX Radiation Pattern Comp	liance > 1.73°	§FCC 25.209, ITU-R S-580-6
Satellite System Compliance	е	FCC, PanAmSat, Intelsat, Eutelsat

Satellite Approval

BUC/HPA Capacity

Allowable Power

Feed Port Isolation Tx to Rx

PanAmSat USA-8189

<25W / Separate Case via Coax to Feed

-14dBw/4kHz per FCC, -0dBw/4kHz per ITU

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"Hx 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"Wx 10.25"Dx2.5"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

