



TracStar1800C

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:

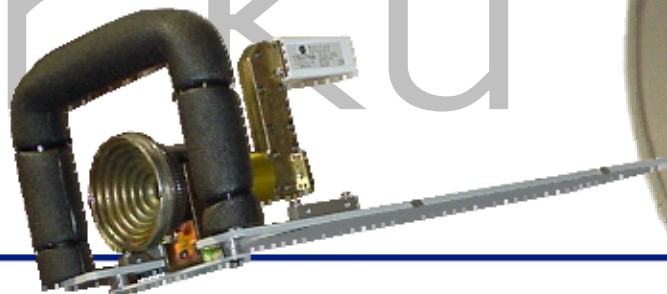
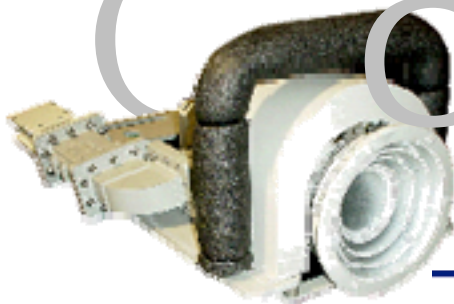
- Single button push for automatic satellite acquisition
- Rapid deployment and operation on every Ku-band satellite, worldwide
- Works with every satellite modem
- Eliminates the need for -
Leveling the antenna up to 10 degrees
Special test equipment for alignment
Computers or peripheral equipment to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

Features:

- Easily interchangeable feed to operate on C or Ku band systems.
- TracStar DirectPoint* acquisition method

DUAL-BAND

C or Ku



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Reflector

Reflector	1.8 meter Single-skin Steel C Band Feed Corrugated Horn, .6 F/D
Optics	Offset, Prime Focus
Drive System	Patented Roto-Lok® Positioner
Mount Geometry	Elevation over Azimuth
Polarization Adjustment	Rotation of Feed



Travel

Azimuth	400° ±200° from Stow Position
Elevation	0-65° of reflector boresight
Polarization	±95°
Emergency Drive	Handcrank on Az, El & Pol

Travel Velocity

Slewing/Deploying (Ax/El)	10.0°/second / 5.0° /second
Peaking	0.2°/second
Manual Jog	1.0° or 0.2°/second
Manual Drive	Handcrank on Az and El Axii, Leads from 12V DC Pol Motor

Electrical Interface

RF	75Ω Tx / Rx Type F Connector (50Ω option)
Interfacility Link	32 ft: Dual RG6 Coax, 1 Control Cable Optional 50' / 80' / 100' / 150' Lengths
Motors	24VDC Servo w/ Optical Encoder, Constant Torque
Controller (1U) / Power Supply	50/60Hz, 110/220VAC, Single Phase
Power Consumption – Motors Active	250 Watts
Power Consumption – Idle	30° Watts

Antenna Characteristics

	Receive	Transmit
Frequency (GHz)		
Standard	3.625-4.2	5.85-6.425
Insat	4.500-4.8	6.75-7.025
Gain (Midband)		
2-port	35.5 dBi	39.2 dBi
VSWR	1.30:1	1.30:1
Beamwidth (degrees)		
-3 dB	3.0	2.0
-15 dB	5.1	3.3
First Sidelobe Level (Typical)	-16 dB	-16 Db
Radiation Pattern Compliance	32-25 Logi 3.2° to 7°	29-25 Logi 2.2° to 7°
Antenna Noise Temperature	45° K at 10° Elevation	
Polarization—Linear		
Power Handling Capability	40 watts at TX Port	
Cross-Pol Isolation On-Axis (minimum)	30 dB	30 dB
Feed Port Isolation - TX to RX	40 dB	70 dB

Antenna Controller

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



RF Interface

BUC Mounting	Feed Boom or Rear of Reflector
Waveguide	WR 75 Groove Flange at Interface Point
Coax	RG6 from feed to base plus 32ft. Twin RG6 IFL Cable
Electrical Interface	32 ft. (9.75m) Cable with Connectors for Controller

Weights & Measures

Weight	360lbs. (163 kgs)
Stowed Dimensions w/o Feed	103½ L x 74¼ W x 22 H inches (263 L x 189 W x 56 H cm)
Stow Height w/Ku Band Feed	28" (71.11 cm)

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" (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)

Environmental

Wind	
Survival	
Deployed	60 mph (96 kph)
Stowed	80 mph (128 kph)
Operational	30 mph (48 kph), Gusts to 45 mph (72 kph)
Pointing Loss in Winds	
20 mph (32 kph)	0.2 dB RMS, 0.2 degrees Typical
30 Gusting to 45 mph (48 to 72 kph)	0.7 dB RMS, 0.4 degrees Typical
Temperature	
Operational	±5° to 125°F (-29° to 52° C)
Survival	-40° to 140°F (-40° to 60° C)

Related Products

MVS1800K

Specifications Subject to Change Without Notice.

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