

MVS960 SERIES

Mobile Broadband Satellite Communications

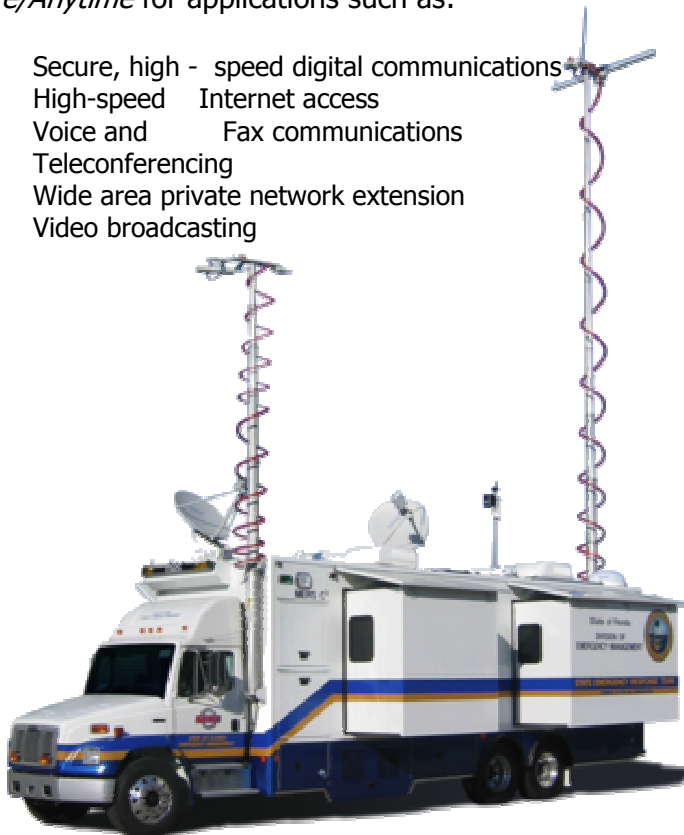
The MVS Series from TracStar allows non-skilled personnel to operate mobile Very Small Aperture Terminal (VSAT) satellite communications equipment enabling the user to access any broadband application over satellite.

The MVS Series antennas are typically owned and operated by:

- ▶ Corporations with remote or mobile office and monitoring applications
- ▶ Federal, state and local government 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



*Florida Department of Emergency Services
Command Center*



The MVS Series of auto-acquisition antennas feature:

- ▶ Automatic satellite acquisition with a single button push
- ▶ Rapid deployment and operation on every Ku-band satellite, worldwide
- ▶ Works with every satellite modem
- ▶ TracStar Technology eliminates the need for -
 - Special test equipment for antenna alignment
 - Computers or peripheral equipment to operate the antenna
 - Phone calls to network operators or service providers

Every antenna comes equipped with the following standard equipment:

- ▶ High precision and stiffness, low backlash drive system
- ▶ Built-in GPS and compass
- ▶ Built-in satellite receiver
- ▶ Built-in level compensation
- ▶ Automatic polarization alignment
- ▶ Safe and easy installation, no calibrations required

TracStar
SYSTEMS

Broadband Anywhere - Anytime

MOBILE WIRELESS BROADBAND
HIGH SPEED DATA - INTERNET - VOIP - FAX - VIDEO

MVS960/960P Specifications



Mobile Satellite Link

The MVS960 will convert from stowed to automatically locked-on in a few minutes. The simple push of a button will put the unit in either mode. There are no external computers or other devices needed to operate the antenna. Serial communications are available including a GPS string for satellite modems.



Mobile Satellite Link

Easily configurable into any mobile environment, the MVS960 is ready to deploy anywhere. The base is designed to accommodate flat roof or rack mount vehicles. The antenna automatically compensates for sloped surface up to 10 degrees.

Control Panel

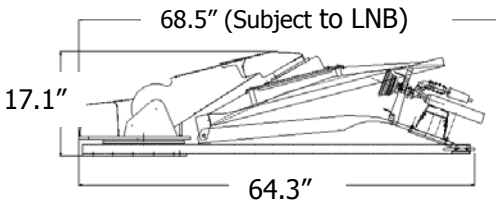
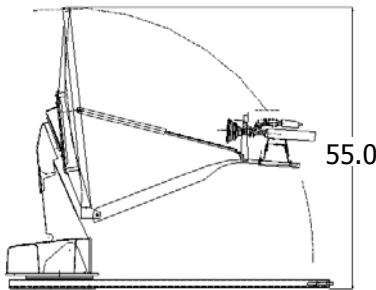


TracStar's One Touch Go and Stow technology maximizes ease of deployment. The menu driven control panel comes in a portable unit or a 1U rack mount panel for systems level configurations. Panel may be used for standard operation, or performing custom configurations.



Portability MVS960P

The MVS 960P solution provides a rugged, portable container for a shippable and highly flexible rapid deployment requirement. Quick removal of the cover allows full access to a ready-to-deploy antenna.



Reflector

Size	96cm Ku-band round
Mount	3-Axis; Polarization over Elevation over Azimuth
Polarization	Rotation of Reflector/Feed System about bore sight

Travel

Azimuth	400° or ± 200° from Stow Position
Elevation -Operational	0-65° (+) stow position
Polarization	±55° or ± 95°

Travel Velocity

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

Electrical Interface

RF	75Ω Tx / Rx Type F Connector
Interfacility Link	30 ft. 2ea. 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	300 Watts
Power Consumption – Motors Idle	20 Watts

Antenna only. Does not include RF or base band equipment.

Antenna Characteristics

	Receive	Transmit
Frequency	10.70-12.75 Ghz	13.75-14.5 Ghz
Gain (±.2dBi) Midband	39.7 dBi @ 11.95 GHz	41.2 dBi
Beamwidth in Orbital Arc (degrees)		
-3dB	1.8 @ 12Ghz	1.5 @ 14.3 Ghz
Antenna Noise Temperature	10° Elevation Angle	53°K
	20° Elevation Angle	39°K
	30° Elevation Angle	32°K
Antenna Cross-Polarization	≥30dB in 1 dB Contour	
Sidelobe Envelope (Tx, Co-Pol,dBi)	1.8°<θ<20°	29-25Log θ
	20°<θ<26.3°	-3.5
	26.3°<θ<48°	32-25Log θ
	48°<θ<180°	-10 (Typical)
VSWR	1.3:1 Max	
Isolation	35dB Min	70dB Min
Feed Interface	WR75 cover Flange (UBR120)	WR75 cover Flange (UBR120)

Physical Data

Approximate Weight (w/o BUC / LNB)	100lbs
Max. Length w/FL Cables Connected	68.3"
Height	
Stowed	17.1" – 15" Option
Deployed	55.0"
Case Weight / Dimensions	
Pedestal Case	170 lbs. / 43.0"L x 28.5"W x 20.5"H
Reflector Case	126 lbs. / 42.75"L x 42.0"W x 25.5"H

Antenna Controller

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

Portable Power Supply/Display Unit

Weight	Power Supply (CE Approved) – 4.5 lbs. / Display Unit - 0.5 lbs.
Dimensions	Power Supply – 9"W x 10.25"D x 2.5"H
	Display Unit – 5 1/2"W x 3 1/4"D x 1-3/8"H

Rack Mount (1U)

Weight	4.5 lbs.
Dimensions	19.0"W x 8.0"D x 1.75"H

Environmental

MVS960 - Wind	
Survival Stowed	125 mph
Operational	60 mph @ 60° F
MVS960P – Wind	
Operational	30mph gusting to 45mph
Temperature	
Operational	-20°F to 125°F
Storage	-30°F to 125°F

Specifications are subject to change without notice