

# MVS750 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 home-land 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



*Convert Any Vehicle to a Mobile Wireless Broadband Hot-Spot*



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 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 sensor
- ▶ Automatic polarization alignment
- ▶ Safe and easy installation, no calibrations required



*Broadband Anywhere - Anytime*

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

# MVS 750 / 750P Specifications



## Mobile Satellite Link

The MVS750 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.



## Ease of Deployment

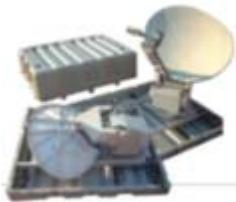
Easily configurable into any mobile environment, the MVS750 is ready to deploy anywhere. The base is designed to accommodate flat roof or rack mount vehicles. The antenna automatically compensates for sloped surfaces up to 10 degrees.

## OPTIONS



## Control Panel

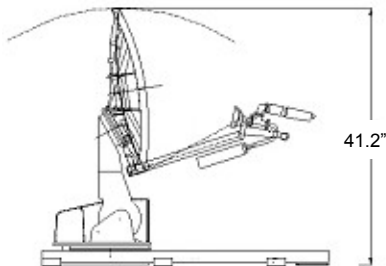
TracStar's One Touch Go and Stow technology maximizes ease of deployment. The menu driven control panel comes in a portable hand-held unit or a 1U rack mount panel. The controller is used for standard operation, or for configuring the antenna for worldwide operation.



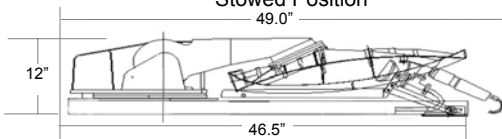
## Portability MVS750P

The MVS 750P 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.

## General Use Position

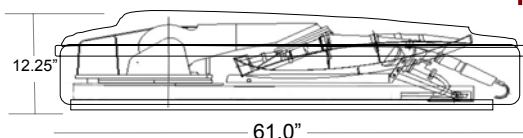


## Stowed Position



Antenna Stow Length is LNB Dependent

## MVS 750 Antenna POD



## Reflector

Size	75cm Ku-band elliptical (89 cm wide x 62 cm high)
Mount	3-Axis: Polarization over Elevation over Azimuth
Polarization	Linear, Co or Cross-Polarized

## Travel

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

## 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 (50Ω option)	Antenna only.
Interfacility Link	30 ft. 2ea. RG6 Coax, 1 Data Cable	Does not include RF or
Motors	24VDC Variable Speed	base band
Controller (1U) / Power Supply	50/60Hz, 110/220VAC, Single Phase	equipment.
Power Consumption – Motors Active	250 Watts	
Power Consumption – Idle	20 Watts	

## Antenna Characteristics

	Receive	Transmit
Frequency	11.7-12.75 GHz	13.75-14.5 GHz
Gain (±.2dBi)	37.8 dBi @11.95Ghz	39.3 dBi @ 14.25Ghz
VSWR		1.30:1
Beam width in Orbital Arc (degrees)		
	2.0 degrees @ 12.0Ghz	1.6 degrees @ 14.3Ghz
	-3dB	50°K
Antenna Noise Temperature @ 30° EI		
Polarization	Linear, Cross-pol Standard, Co-pol optional	
Sidelobe Envelope (Tx,Co-Pol, Major Axis)		
	1.8° < Θ < 20° 29-25 Log Θ dBi	
	20° < Θ < 26.3° -3.5 dBi	
	26.3° < Θ < 48° 32-25 Log Θ dBi	
	48° < Θ < 180° -10 (Typical) dBi	

## Physical Data

Approximate Weight (w/o BUC/ LNB)	92 lbs
Max. Length with IFL Cables Connected	53 inches
Height	
Stowed	10.5 in Cross-pol; 12.5 in Co-pol
Deployed	42 inches
Case Dimensions	55"W x 43.5"D x 20"H
Approximate Case Weight w/o antenna (Hardigg case)	115 lbs

## 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) / Display Only	4.5 lbs / .5 lbs.
Dimensions	Power Supply - 9"Wx 10.25"Dx2.5"H
	Display - 5½"W x 3¼"D x 1-3/8"H

### Rack Mount (1U)

Weight	4.5 lbs
Dimensions (inches)	19"W x 8.0"D x 1.75"H

## Environmental

MVS750 - Wind	
Survival - Stowed	125 mph
Operational	60 mph at 60° F
MVS750P - Wind	
Operational	30mph gusting to 45mph
Temperature	
Operational	-20°F to 125°F
Storage	-30°F to 150°F

*Specifications are subject to change without notice*



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