

MVS1000-P4 SERIES

Mobile Broadband Satellite Communications

The MVS "P" 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 antennas are:

- ▶ Portable
- ▶ Fly-Away (ship as air cargo)
- ▶ Multi-piece Reflectors
- ▶ Easily Assembled
- ▶ Shipped in Ruggedized Cases

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



*Portable Deployment
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 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
Broadband Anywhere - Anytime

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

MVS 1000-P4 Specifications



Mobile Satellite Link

The MVS1000-P4 will convert from packed to automatically locked-on in a few minutes. Assembly is quick and easy, with quick-release captive hardware and matching number assembly techniques. The reflector comes in 4 pieces using matching numbers and quick snap locks for assembly.



Redundant Systems

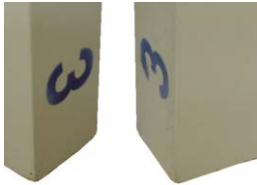
The MVS1000P4 has a manual backup system of hand-cranked to be used for antenna positioning.

OPTIONS



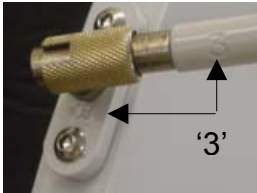
Control Panel

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 MVS1000-P4

The MVS1000-P4 solution provides a rugged 4-piece reflector, with two portable containers for a shippable and highly flexible rapid deployment requirement.



Simply matching the numbers on the various reflector assemblies, allows for quick assembly and full access to a ready-to-deploy antenna in minutes.



Ease of Deployment

Easily configurable into any mobile environment, the MVS1000-P4 is ready to deploy anywhere. The case opens easily to reveal the pedestal and the quick assembly reflector is designed to minimize setup time. The software automatically compensates for sloped surfaces up to 10 degrees.



Reflector

Reflector	1.0M Carbon Fiber-Four Sector
Feed System	Standard VSAT; Optional Global Mode-Matched
Mount Geometry	Elevation over Azimuth
Polarization	Rotation of Reflector/Feed about Boresight

Travel

	Computer Control	Manual Control (Crank)
Azimuth		
Full Coverage	±200° from Stow Position	±200° from Stow Position
Elevation		
Standard Configuration	10°- 65° of reflector boresight	10°- 90° of reflector boresight
Polarization	±95°	±95°

Travel Velocity

Slewing/Deploying	2°/second
Peaking	5°/second
Manual Jog	1.0° or 0.2°/second

Electrical Interface

RF	75Ω Tx / Rx Type F Connector (50Ω option)	<i>Antenna only. Does not include RF equipment or base band equipment.</i>
Interfacility Link	30 ft 2ea. RG6 Coax, 1 Control Cable	
Motors	24VDC Servo w/Optical Encoder	
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	10.95 – 12.75 Ghz	13.75 – 14.5Ghz
Gain (±2dBi)	39.7 dBi	41.6 dBi
VSWR		1.30:1
Beamwidth in Orbital Arc		
-3dB	1.63°	1.36°
First Sidelobe Level (±2dB)	-23dB	-23dB
Radiation Pattern	29-25 Log Θ	29-25 Log Θ
Antenna Noise Temperature		
30° EL	50° K	
Polarization	Linear	Linear
Allowable Transmit Power		25 Watts
Cross-Pol Isolation-Std VSAT		
On-Axis	-30dB	-30dB Max
Off-Axis within 1dB BW	-28dB	-26dB
Maximum Off-Axis	-21dB	-25dB
Cross-Pol Isolation – Global Mode-Matched Feed		
On-Axis	-35dB	-35dB Max
Off-Axis within 1dB BW	-30dB	-30dB
Maximum Off-Axis	-22dB	-30dB
Feed Port Isolation TX/RX		-80dB

Physical Data

Approximate Weight - Rugged Cases (Hardigg)	220 lbs
Positioner	140lbs. 27"x37"x16"
Reflector/Feed/BUC/Controller	80lbs. 27"x37"x16"

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 / Display Unit 4.5 lbs / .5 lbs.
Dimensions	Power Supply (C € Approved) 9"Wx10.25Dx2.5"H
	Display Unit 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

Wind	
Operational	45 mph @ 60° F
Stowed @ Zenith	60 mph
Temperature	
Operational	-20°F to 125°F

Specifications are subject to change without notice

TracStar Systems, Inc. • 2400 N. Orange Blossom Trail • Orlando, FL 32804

407.650.9054 • FAX 407.650.9086

www.tracstar.net sales@tracstar.net

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