

# TracStar 900P5



## 0.9m Fly Away Antenna System with Extended Elevation Data Specification

The most important thing we build is trust

### TracStar 900P5 Antenna System

The TracStar 900P5 series provides a heavy-duty, ruggedized, self contained mobile VSAT terminal, for Ku- and Ka-band operations. A 90cm carbon fiber reflector (5-Piece) and three-axis fly-away antenna system enable users to access any broadband application over satellite in less than 10 minutes.

With superior ease of use, TracStar products allows personnel with little or no satellite experience to operate mobile Very Small Aperture Terminal (VSAT) satellite communications equipment.



The system is designed for use by:

- Federal, State and Private Security Agencies for law enforcement, emergency response and homeland security communications
- Military rapid deployment, SATCOM on the pause applications

With the TracStar Series of 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 and Video broadcasting.

**NEW "TracLRI"™ GUI CONTROL OPTION:** The Live Remote Interface (LRI) is a web-based satellite antenna terminal configuration accessory. TracLRI communicates with any TracStar Antenna Controller Unit (ACU) and allows the user to easily configure and remotely monitor satellite auto-acquisition operations using a standard web browser. Available on a variety of devices such as PC's, tablets and smart phones.



### Antenna Controller

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

### Reflector

5-Segment Carbon Fiber Size Four (4) panels attach to (1) center hub  
90 cm elliptical, Ku-band (Ka-ready)  
Optics Offset, Prime Focus  
3-Axis Drive System 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° per second  
Elevation 5° per second  
Polarization 5° per second  
Manual Jog 1.0° or 0.2° per second

### Antenna Characteristics

	Ku-Band (Ka-Ready)	Rx	Tx
Frequency (GHz)		10.95-12.75	13.75-14.5
Gain (Midband) dBi		37.8	39.3
VSWR		1.3:1	1.3:1
Beamwidth (-3dB)		1.8°	1.6°
		3.3°	2.8°
First Sidelobe Level (Typical)		-18dB	-21dB
Cross Pol Isolation (dB)			
(On Axis)		30	35
(Off Axis within 0.3°)		28 Std (28 opt)	28 Std (32 opt)
Antenna Noise Temp @ 30° El		50°K	
G/T with 55°K LNB, Midband		17.5 dB/°K	
Power Handling Capability			500W Per Port
Feed Port Isolation Tx to Rx (dB)		70	
BUC / HPA Capacity		16, 25, 40 Watt Available	
Polarization		Linear Orthogonal	
Radiation Pattern Compliance		ITU-R S.580.6	
Allowable Input Power Spectral Density		-0dBw/4kHz per ITU-R S.524	
Eutelsat Characterized			
- Satellite spacing ≥ 2.5°		EIRP Density 32.4dBw/40kHz	
- Satellite spacing < 2.5°		EIRP Density 31.0dBw/40kHz	



### TracLRI (Live Remote Interface) Features:



- Ethernet-based (wired or wireless) access to the antenna controller
- One-Button "Run/Deploy" and "Stop/Stow" functionality
- Advanced modification of parameters including data satellite and modem setup
- Custom profiles for major satellite modems and satellite networks
- Built-in display of antenna acquisition parameters, alert status, signal-to-noise ratio, signal strength, azimuth, elevation and polarization
- Local & Remote System Diagnostics
- Available on new products and provides for upgrade to fielded antennas and controllers

### Weights & Measures

Approximate Weight (w/o BUC/ LNB)	53.5 lbs (24.3 kg)
Stowed Sizes (Dual)	Carry-on Baggage Sizes
Manual Operation	Handcranks on each axis
Case Dimensions	
Hard Cases	25" x 20" x 15" (63.5 x 5.8 x 38.1cm)
Auxillary Equipment (Modem, BUC, LNB, Controller, Cables)	40 lbs (18.14 kg)
Portable Power Supply	
Weight	4.5 lbs - .5 lbs
Power Supply	9" x 10.25" x 2.5" (22.86 x 26 x 6.35 cm)
Display Unit	5 1/2" x 3 1/4" x 1-3/8" (13.96 x 8.25 x 3.45 cm)
Rack Mount (1RU)	
Weight	4.5 lbs (1.98 kg)
Dimensions	19" x 8.0" x 1.75" (48.26 x 20.32 x 4.44 cm)

### Environmental

Wind—Survival - anchored	
Operational	30 mph gusting to 45 mph (38.3 to 72.45 kph) 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

### Options

Soft case (Antenna w/o BUC or LNB)	<65 lbs (<29.4 Kg)
Hard case (for transporting soft case)	<25 lbs (<11.3 Kg)
Hard case for transporting auxillary equipment including LNB and BUC (40W CPI or 25W Wavestream)	<60 lbs (<27.2 Kg)
Hard case for transporting 6RU Rack containing Antenna Control Unit, Modem, VoIP, Router, Inverter and Power Supply -- pictured below)	<70 lbs (<31.8 Kg)



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