



TracStar2000P9

Critical Communication Solutions

The TracStar antenna system 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.

TracStar antennas are typically owned and operated by:

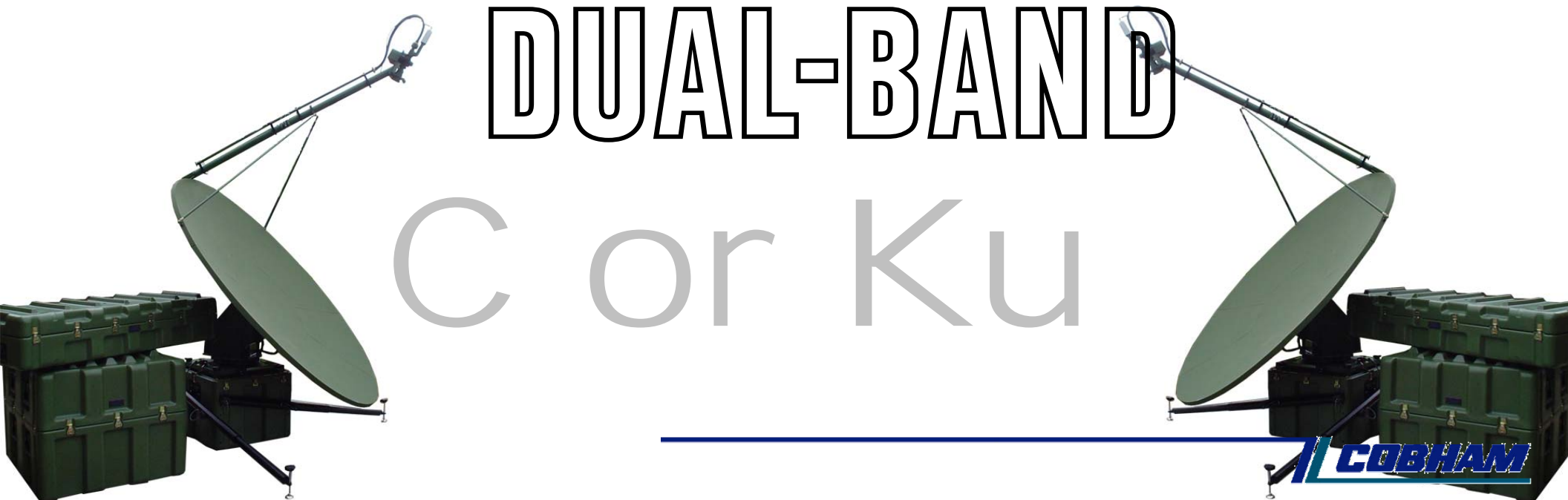
- Corporations with remote or mobile office and monitoring applications
- Federal, State and Public Safety agencies for law enforcement, emergency response and homeland security communications
- Military rapid deployment, SATCOM on the pause applications

With TracStar' 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

- 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

TracStar antennas feature:



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Reflector

Reflector Type	2.0M Carbon Fiber, 9 Segments
Optics	Offset, Prime Focus, 0.8 F/D
Interchangeable Feeds	CLP, CCP, Ku LP
Positioner	Case-based Jack-in-the-Box
Az/El Drive System	Patented Roto-Lok® Positioner
Mount Geometry	Elevation over Azimuth
Polarization	Motorized Rotation of Linear Feeds

Travel

Azimuth	400°
Elevation—Operational	15-90° of boresight with 400° Az Travel
	0-90° of boresight with ± 15° Az Travel
Polarization	±95/ of Linear Feeds, Adjustable within <1°

Travel Velocity

Slewing/Deploying	
2°/second	
Peaking	0.2°/second
Tracking	0.1°/second

Electrical Interface

RF	75Ω Tx / Rx Type F Connector (50Ω option)
Interfacility Link	32 ft (9.75M) 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
Emergency Drive	Handcrank on Az, El; 12V leads on pol
BUC Mounting	Feed Boom or Rear of Reflector
Waveguide	WR 75 Groove Flange at Interface Point
Coax	RG6 from feed to base plus 32ft. (9.75M) Twin RG6 IFL Cable

Antenna Characteristics

C-Band	Receive	Transmit
Frequency	3.40-4.20 Ghz	5.85 -6.65 Ghz
Polarization	Linear or circular, convertible to either RCP or LHCP	
Gain (Midband)	35.7 dBi	47.5 dBi
Antenna Noise Temp @ 30°	50°K	
G/T with 20°K LNB	17.0 dB/° K	
Radiation Pattern Compliance	IESS-601 and FCC	47CFR25.209
Axial Ratio within Tracking Cone	1.3 dB	
Linear Polarization with Tracking Cone	>30 dB	
Power Handling Capability		1000 watts per port

Ku-Band

Frequency	10.95-12.75 Ghz	13.75-14.5 Ghz
Polarization	Orthogonal Linear, Optional Co-pol Linear	
Gain (Midband)	45.7 dBi	47.5 dBi
Antenna Noise Temp @ 30°	47°K	
G/T with 43°K LNB	25.4 dB/° K	
Radiation Pattern Compliance	IESS-601 Std. G and FCC 47CFR25.209	
Cross Pol Isolation	35 dB within cone of tracking error	
Power Handling Capability	500 watts per port	

Antenna Controller

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



Weights & Measures

Configuration -	Rugged Hardigg Cases
Motorized Positioner	26" x 27" x 25" 148 lbs.
Outriggers/Feed Boom	20" x 59" x 12" 105 lbs.
Ku-LP Feed	20" x 59" x 12"
Reflector Panels	36" x 34" x 12" 165 lbs. standard 150 lbs. optional
Feeds	
C-CP and C-LP	30" x 30" x 16" 60 lbs.
X-CP, X-LP	30" x 30" x 16" 60 lbs.
RF Interface	
HPA Mounting	Separate case or rear of reflector
Set-up Time	Less than 30 minutes

Environmental

Wind - Operational-mph	
Without anchoring	35 mph
With anchoring	45 mph
Survival	80 mph in stowed position
Temperature - Operational	+15° to 125°
Survival	-40°F to 140°F

Specifications Subject to Change
Without Notice.

TracStar Systems - Cobham SatCom