

# 6.0 - 8.0 METER ANTENNA SYSTEM

## MODEL 6000



### KEY FEATURES

- 2-Axis Elevation-Over-Azimuth
- Autotracking / Program Tracking
- 6M to 7.3M Sectional Reflectors
- Receive, Transmit
- UHF, L, S, C, X, Ku & Ka-Band
- iNET (Option)
- Swappable Feeds
- HD or SD Boresight Camera
- Shipboard Compatibility
- Radome
- Local and Remote ACUs

### GENERAL DESCRIPTION

The Model 6000 is engineered for precision tracking in both stationary and mobile environments. Built tough for reliability, it performs consistently—even under challenging conditions.

The system supports 6 to 7.3-meter sectional reflectors, making transport and setup more efficient. It's compatible with single, dual, and tri-band operations and supports both primary and Cassegrain feed architecture giving you the versatility to meet a wide range of mission demands. Swappable feed assemblies allow for quick adjustments to frequency or operational changes.

Mounting is flexible and straightforward. The Model 6000 can be deployed on towers, trailers, vehicles, rooftops, or marine platforms. Standard mounting kits are available, and we also offer custom-engineered solutions for unique installation needs.

It integrates smoothly with all our Antenna Control Units (ACUs), whether you're using a standalone console, rackmount, or embedded system—ensuring unified control and dependable performance across any setup.

With a modular design at its core, Model 6000 is offered in a variety of standard configurations and can be tailored to meet your specific operational requirements.



### RELATED PRODUCTS

ACU	Receiver	Recorder	Gateway

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### DIMENSIONAL DRAWINGS



DATA ACQUISITION

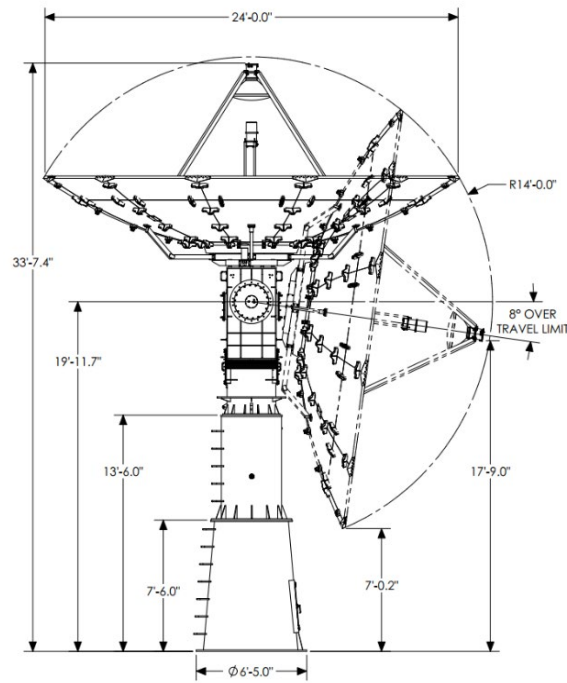


Figure 1: Model 6000-7.3M Drawing w/ Custom Riser Extension

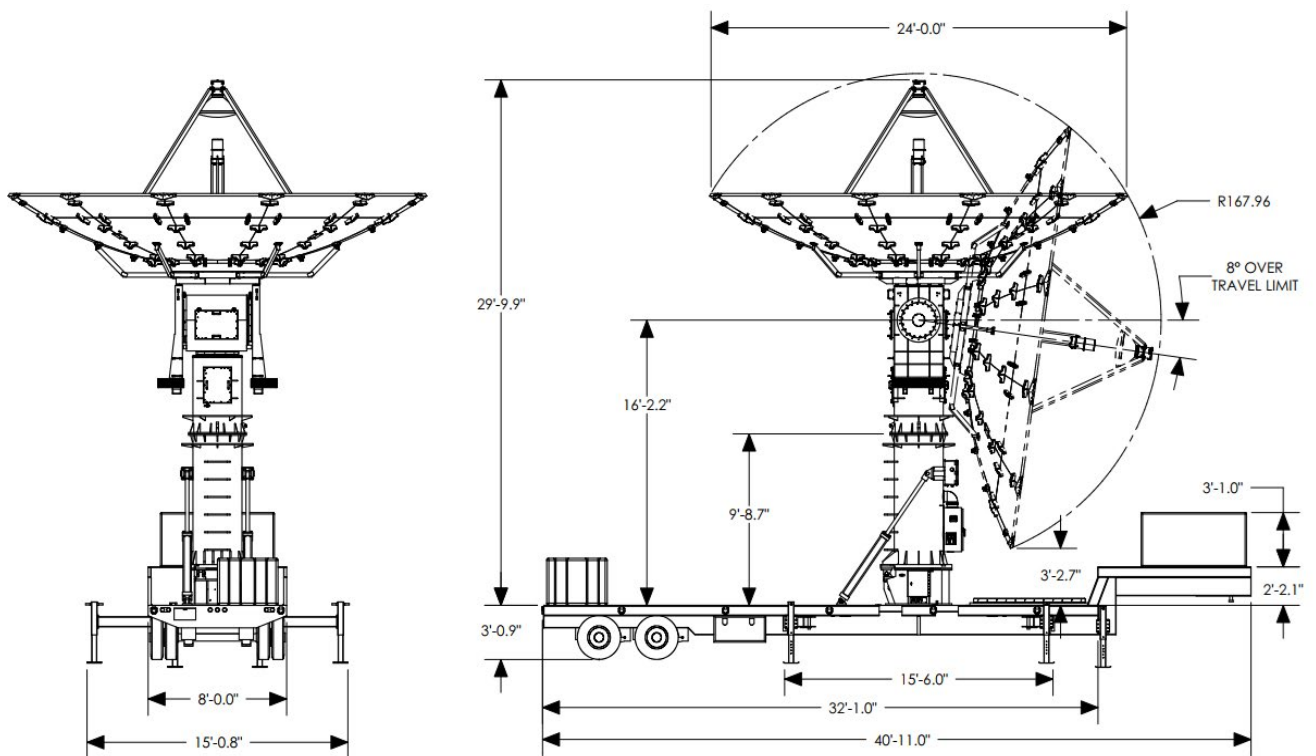


Figure 2: Model 6000M-7.3Meter Drawing

Drawings shown illustrate a subset of available configurations. Upon request, TCS can supply additional drawings or customize a solution to meet your exact requirements.

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### AZIMUTH-OVER-ELEVATION TECHNICAL SPECIFICATIONS





FEATURES		6000-7.3M	
Tracking		Autotracking or Program Tracking	
Pedestal Type		Dual Drive Elevation-Over-Azimuth	
Reflector Size		7.3 Meter	
Reflector Type		Solid	
Velocity & Acceleration (Up To)		Dual Drive: $\geq 25^\circ/\text{sec}$ & $\geq 40^\circ/\text{sec}^2$	
Power Requirements		Standard: 3-Phase 115/208 VAC @ 60Hz Custom Options Available	
Torque (Continuous & Peak)		8,000 / 18,000 ft-lbs	
System Weight		9,000 lbs	
Feed Type		Conical Scan	
Feed Option		iNET	
Data Transfer		Receive / Transmit	
Frequency Bands		*UHF, L, S, C, X, Ku, Ka	
Polarization Options		Linear, LHCP, RHCP	
G/T		Provided Upon Request	
Control Options		Local/Remote: Serial or Fiber Optic	
ACU Operating System	Local	Red Hat Enterprise Linux v8, v9, (v10 coming soon)	
	Remote	Red Hat Enterprise Linux v8, v9, (v10 coming soon) or Windows 11	
ACU Operation Temperature		0°C to +35°C	
Operating Temperature		-25°C to +55°C	
Storage Temperature		-50°C to 70°C	
Wind Speed	Operating	55 mph	
	Stowed	120 mph	
Azimuth Travel (Options)		Standard: $\pm 540^\circ$ Cable Wrap Continuous: Slip Ring & 2 Ch or 3 Ch RJ	
Elevation Travel	Electrical	-5° to +185°	
	Mechanical	-8° to +188°	
Standard System Options		ACU Local and/or Remote Borsite Camera GPS & IMU Hydraulic Tilt Base Radome Remote Stow	RF over Fiber Riser Extension Test Inject Transmit Trailer Video over Fiber
<p>* Available frequency bands vary by application, and not all can be included in a single antenna. TCS can modify existing antennas or develop custom designs to meet your specific needs. Alternative XY and 3-Axis Systems are available upon request.</p>			



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### ANTENNA CONTROL UNITS

ACUM1	Dimensions	7U (10.25" x 19" x 13")	
	Weight	< 30lbs	
	Power	90VAC to 220VAC, < 200W (Typical)	
	Purpose	Userfriendly interface for operator control. Maximum hardware expansion possibilities.	
	Display	15" Color Touchscreen	
	Supported Interfaces	Up to 8 Receiver AM & AGC Inputs Optional: GPS/IRIG Interface	
ACUM2	Dimensions	2 U (17" x 19" x 3.5")	
	Weight	< 30lbs	
	Power	90VAC to 220vac , < 200W (Typical)	
	Purpose	Useful in unmanned, remotecontrol applications as part of a constellation with many systems. Minimal hardware expansion is possible.	
	Display	No Display, External VGA Connection (Optional Display)	
	Supported Interfaces	Asynchronous Serial Synchronous Serial Ethernet	
ACUM3	Dimensions	6" x 6" x 4.5"	
	Weight	3.25lbs	
	Power	28VDC - Less than 40W (Typical)	
	Purpose	Remote interface only Program Tracking Antenna system is a "node on the network" Designed to be embedded inside pedestal and rugged for outside use.	
	Display	No display, External VGA Connection for Troubleshooting	
	Temperature	Operational/Storage: 40°C to +85°C	
	Supported Interfaces	Ethernet Asynchronous Serial	
ACUM4	Dimensions	4U (20" x 19" x 7")	
	Weight	< 30lbs	
	Power	90VAC to 220VAC - Less than 200W (Typical)	
	Purpose	Useful in unmanned, remotecontrol applications Classified operations where data storage is not feasible Full Autotracking Capability	
	Display	No Display, External VGA/HDMI connection (Optional Display)	
	Supported Interfaces	Asynchronous Serial Synchronous Serial Ethernet	



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### ANTENNA CONTROL UNIT DISPLAY OPTION



The ACU-M4LR is designed to be compatible with any ACU unit and is engineered to manage multiple antenna systems concurrently. In standard configurations, it controls a local antenna via the internal fiber optic interface and connects to a remote antenna over ethernet. It also provides the ability to control a pan-and-tilt camera system through ethernet.

All designs are modular, with customizable displays to support a broad set of applications. Customizations include:

- Multiple Remote-Control Options
- Control Receivers and Support Equipment
- Time Code Readers and GPS
- Single Console for Mission Operations
- Acquisition Data Hardware

Recognizing that no standard product fits every mission, Delta Telemetry Systems is ready to deliver tailored solutions for your unique application requirements.

Specifications subject to change without notice.