

6 - 8 FOOT ANTENNA SYSTEM

MODEL 2400



KEY FEATURES

2-Axis Elevation-Over-Azimuth
Autotracking / Program Tracking
6' and 8' Solid or Sectional Reflectors
Receive, Transmit
UHF, L, S, C, X, Ku Band
iNET (Option)
FTS Systems
Swappable Feeds
HD or SD Boresight Camera
Shipboard Compatibility
Radome

GENERAL DESCRIPTION

The Model 2400 is a high-reliability tracking antenna system designed for both stationary and portable applications. Whether deployed in the field or installed permanently, it delivers consistent performance in demanding operational environments.

Its modular design supports 6-foot and 8-foot reflectors, available in solid or sectional formats for ease of transport and setup. Users can choose between single-band, dual-band, or tri-band configurations, with primary and Cassegrain feed options. Swappable feed assemblies allow quick reconfiguration to meet evolving mission requirements.

Mounting versatility is a key feature of the Model 2400. It can be installed on ships, towers, rooftops, trailers, vehicles, or custom platforms. Standard mounting kits are available for common surfaces, and custom-engineered solutions are offered when unique integration is required.

The system is fully compatible with a range of Antenna Control Units (ACUs), including standalone interfaces, rackmount units, and embedded pedestal-integrated options. This ensures seamless control and integration across all deployment scenarios.

We offer a variety of pre-configured systems for typical cases, while also specializing in custom solutions. Our modular approach allows us to build around your specific needs—leveraging proven components and design expertise to deliver a system that fits your mission, not the other way around.



RELATED PRODUCTS

ACU	Receiver	Recorder	Gateway

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DIMENSIONAL DRAWINGS

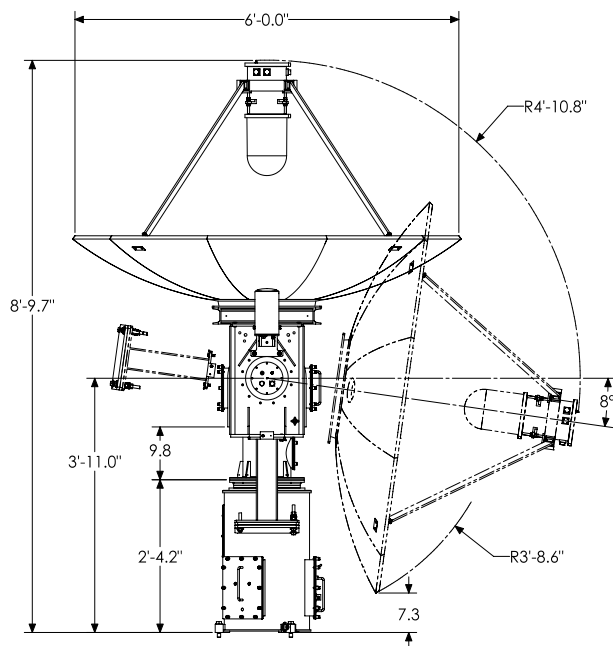


Figure 1: Model 2400-6

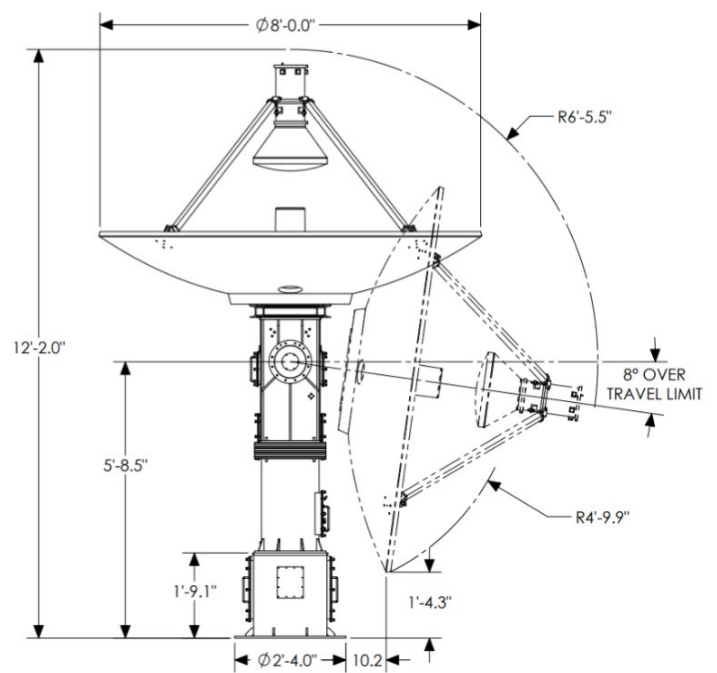


Figure 2: Model 2400-8

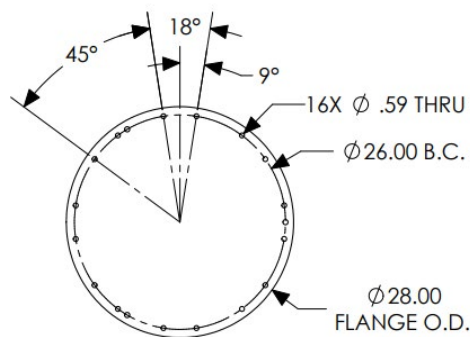


Figure 3: Standard Mounting for Fixed 2400-6 and 2400-8

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		2400-6	2400-8
Tracking		Autotracking or Program Tracking	
Pedestal Type		Single Drive or Dual Drive, Elevation-Over-Azimuth	
Reflector Size		6-Foot	8-Foot
Reflector Type		Solid or Sectional	
Velocity & Acceleration (Up To)		$\geq 20^\circ/\text{sec}$ & $\geq 35^\circ/\text{sec}^2$	
Power Requirements		Standard: 115V $\pm$ 10% @ 60Hz or 220V $\pm$ 10% @ 50Hz Custom Options Available	
Torque (Continuous & Peak)		600 / 750 ft-lbs	
System Weight		570 lbs	720 lbs
Feed Type		Conical Scan	
Feed Option		N/A	iNET
Data Transfer		Receive / Transmit	
Frequency Bands		*UHF, L, S, C, X, Ku	
Polarization Options		Linear, LHCP, RHCP	
G/T		Provided Upon Request	
Control Options		Local/Remote: Serial or Fiber Optic	
ACU	Local	Red Hat Enterprise Linux v8, v9, (v10 coming soon)	
Operating System	Remote		
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 Boresight Camera GPS & IMU Radome RF over Fiber Riser Extension Test Inject	Tilt Base Transit Cases Transmit Trailer Tripod Video over Fiber
* 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, KA, and 3-Axis Systems may be available upon request.			

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ANTENNA CONTROL UNITS

ACU-M1	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	Ethernet Synchronous Serial	Asynchronous Serial
ACU-M2	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	Up to 2 Receiver AM & AGC Inputs Optional: GPS/IRIG Interface	
ACU-M3	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	GPS Timing Networking Timing	
ACU-M4	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	Embedded Receiver Capable Up to 8 Receiver AM & AGC Inputs Optional: GPS/IRIG Interface	



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ANTENNA CONTROL UNIT DISPLAY OPTION



The ACU-M4LR is a centralized operator interface designed to work in conjunction with existing ACU systems. The ACU-M4LR does not replace the antenna control unit; rather, it provides a single display and control environment that allows operators to monitor and manage multiple ACU-controlled antenna systems from one workstation. In a standard configuration, the ACU-M4LR interfaces with a local ACU through an integrated fiber-optic connection and communicates with remote ACU-controlled antenna systems over Ethernet. The system can also provide Ethernet-based control of pan-and-tilt camera systems, enabling antenna and site monitoring from the same user interface.

The primary advantage of the ACU-M4LR is the consolidation of multiple control functions into a single operator display. By integrating local and remote ACUs into one interface, operators can control and monitor multiple antenna systems without the need for separate consoles, reducing complexity and improving operational efficiency. The ACU-M4LR features a modular design with customizable displays to support a broad range of operational requirements, including:

- Multiple remote-control options
- Receiver and support equipment monitoring and control
- Time code reader and GPS integration
- Single-console operations
- Acquisition and data hardware integration

This approach allows organizations to leverage their existing ACU infrastructure while providing operators with a unified interface for managing multiple antenna systems from a single location

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.



DATA ACQUISITION