



# Model 6000 Systems

*For 6.0 - 8.0 Meter Reflectors*

The Model 6000 System delivers a robust platform for stationary and mobile autotracking antennas. The size of this mount makes for easy transportation on a trailer. Many of these systems have been deployed in remote locations.

This full-sky antenna system supports from a 19.7-foot (6.0 meter) to a 26.2-foot (8.0 meter) reflector. Both reflectors come in a multi-section configuration. The Model 6000 System moves from  $-5^{\circ}$  to  $185^{\circ}$  in Elevation and is offered in both continuous and cable-wrap configurations in the Azimuth Axis.

Our standard Model 6000 System comes with an autotracking feed that receives in the L- and S-Bands. This system can be configured to handle L-, S-, and C-Band autotracking in the cassegrain configuration as shown here. We can customize the 6000 System to handle other frequency bands as well. Please see your TCS representative for more information.

One of the great design features of all of the TCS Antenna Systems is their modularity. We designed each sub-system to plug together with connectors. No soldering here. This makes it easy to assemble and to maintain. All of the pedestal electronics are located in the Pedestal Interface Unit (PIU) at the base of the pedestal. Inside you will find our Pedestal Interface PCB along with power supplies, servos, and other pedestal electronics.

The Model 6000 System connects with the TCS Antenna Control Unit-M1 (ACU-M1) through a fiber optic connection. We can configure the system to support single-mode or multi-mode fiber. This is based on the distance from the ACU to the pedestal. These lightweight control cables make setup and transportation easy.

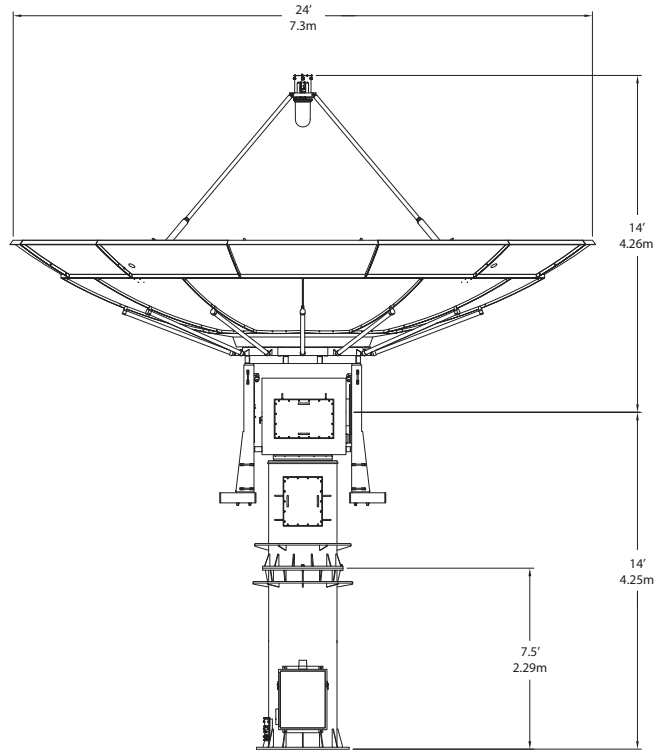


If you need to see where the antenna is pointing, we provide an optional camera. The video can either be picked up at a BNC connection at the base of the system, or brought back to the ACU-M1 over a fiber connection. Control of the camera is handled on the front panel of the ACU-M1.

With larger systems, we can provide more exotic feed configurations. The system above autotracks in L- and S-Band, but receives signals in UHF, VHF, L-Band, S-Band, and C-Band. This system also has up-link capability.



Here is a ship-stabilized, 7.3 meter Model 6000 System.



6000 - 7.3  
with 24' (7.3 m) Reflector

Reflector Types	Sectional, 7.3 Meter
Axis Speed	$\geq 25^\circ/\text{sec}$
Axis Acceleration	$\geq 40^\circ/\text{sec}^2$
Azimuth Travel	Continuous or $\pm 540^\circ$
Power Requirements	3-Phase 208V
System Weight	9,000 lb ( 4,082 kg )
Control Options	Single-Mode or Multi-Mode Fiber
Operating Temperature	$-25^\circ\text{C}$ to $+55^\circ\text{C}$
Storage Temperature	$-50^\circ\text{C}$ to $+70^\circ\text{C}$
Wind Speed	55 MPH (120 MPH Stowed)
System Options	Dual Drive, Camera (35x Zoom), System on Trailer, Dehydrator, Riser Extensions, Video Over Fiber, RF Over Fiber, Remote Stow



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