



Model 1800 Systems

For 4 - 6 Foot Reflectors

TCS provides the Model 1800 System as a solution for applications that need a light, mobile autotracking antenna. This system fits on top of mobile vans, tripods, towers, and telescoping masts. Even the 6-foot system weighs in at only 230 lbs (104 kg).

The Model 1800 System can support either a 4-foot (1.2 meter) or a 6-foot (1.8 meter) reflector. The reflector is offered in both a single piece and multi-section configuration. The multi-section reflector is easy to setup and tear down and fits inside a transit case, as shown below.

This is a full-sky antenna system. The Model 1800 System moves from -5° to 185° in Elevation and is continuous in the Azimuth Axis. A slip-ring and rotary joint are standard on this pedestal.

Our standard Model 1800 System comes with an autotracking feed that receives in the L- and S-Bands. We can customize the 1800 System to handle other frequency bands as well. Please see your TCS representative for more information.

One of the great design features of the Model 1800 System is its modularity. We designed each sub-system to plug together with connectors. No soldering here. This makes it easy to assemble and to maintain.

For mobile applications, an optional tilt base can be added to the system. With the tilt-base, a single pin can be removed and the system can be folded down to lay flat for transportation. After reaching its destination, getting the system back in a stable upright form is as easy as tear down.

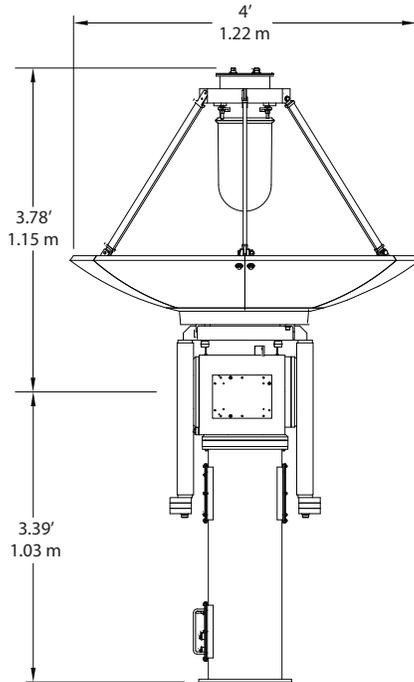


The Model 1800 System connects with the TCS Antenna Control Unit-M1 (ACU-M1) through either a serial connection or a fiber optic connection. These lightweight control cables make setup and transportation easy. We provide full functionality over both types of cable connections.

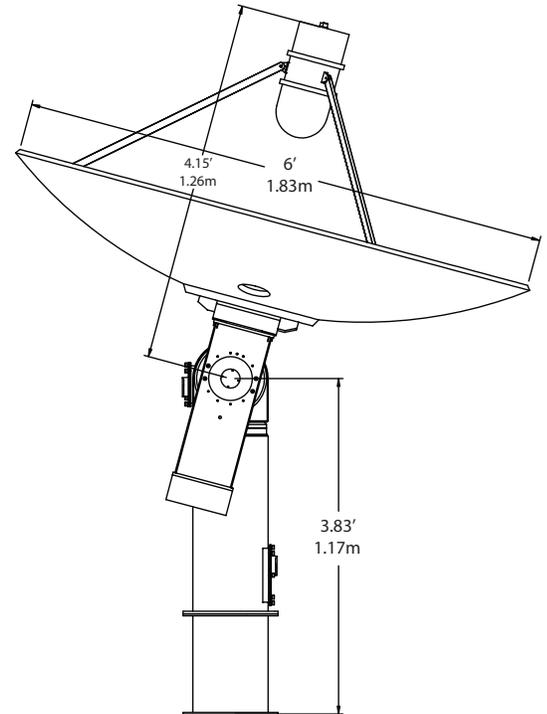
If you need to see where the antenna is pointing, we provide an optional camera. The video can either be picked up at a BNC connection at the base of the system, or brought back to the ACU-M1 over a fiber connection. Control of the camera is handled on the front panel of the ACU-M1.



With the Sectional Reflector Option, the Feed and Reflector compact into this transit case for easy transportation.



1800 - 4
with 4' (1.22 m) Reflector



1800 - 6
with 6' (1.83 m) Reflector

Reflector Types	Solid & Sectional	Solid & Sectional
Axis Speed	$\geq 30^\circ/\text{sec}$	$\geq 30^\circ/\text{sec}$
Axis Acceleration	$\geq 45^\circ/\text{sec}^2$	$\geq 45^\circ/\text{sec}^2$
Power Requirements	115V \pm 10% @ 60Hz or 220V @ 50Hz	115V \pm 10% @ 60Hz or 220V @ 50Hz
System Weight	200 lbs (91 kg)	230 lbs (104 kg)
Control Options	Serial or Fiber Optic	Serial or Fiber Optic
Operating Temperature	-25°C to +55°C	-25°C to +55°C
Storage Temperature	-50°C to +70°C	-50°C to +70°C
Wind Speed	60 MPH (120 MPH Stowed)	55 MPH (120 MPH Stowed)
System Options	Camera (NTSC or PAL), Tilt Base, Dehydrator, Riser Extensions, Video Over Fiber, RF Over Fiber, Remote Stow	



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