

## Gravity Base Towers

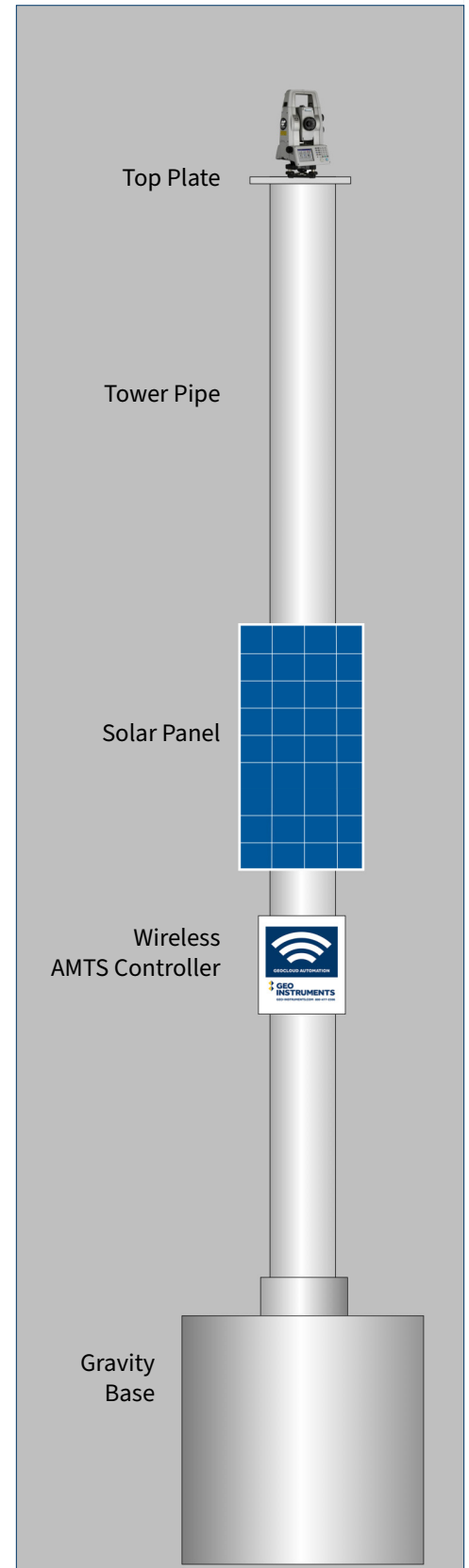
Gravity-base towers improve sight-lines between the total station and the prisms, provide stability for higher quality measurements, and ensure security for the AMTS equipment.

## Components

**The gravity base** anchors the system. As the name implies, the gravity-base is heavy. The GEO standard is a 42-inch diameter cement-filled steel form with an embedded socket for the tower pipe. It weighs approximately 4,000 pounds. Alternative bases might include deadman anchors or bases cast in sonotubes.

**The tower pipe** provides an elevated location for the total station. The GEO standard tower pipe has a 12-inch diameter and is 21 feet high. The large diameter pipe provides excellent stability and easily accommodates additional solar panels and other instruments, such as wireless gateways and construction site cameras. Smaller diameter pipe sizes can also be used, especially for shorter heights.

**The top plate** provides a surface for mounting the total station with its tribrach leveler. Top plates are provisioned for mounting optional top hats that protect the total station from rain and snow.



Top plate for two total stations



Towers can be located nearly anywhere