

SAT

SOLAR ARTICULATING TOWER

Shed some Light on Dark Territory

The Challenge

Providing solar power to communications & signaling systems in dark territories in a safe, cost-effective manner is a challenge. Solar powered systems are necessary in dark territory to provide power to existing C&S systems as well as new PTC installations. The mounting systems for these solar-powered systems must allow for safe & rapid installation, easy solar panel adjustment, low maintenance and safe operation.

The Solution

Pillar Innovations developed the Solar Articulating Tower or SAT, to provide a safe, cost-effective mounting structure for use in dark territory. In order to meet a multitude of site needs, 2 models were developed, the SAT 2010 and the SAT 2005. Both models provide a 20' high centerline mast for the panel mounting, allowing unobstructed solar access and increased vandalism resistance. The SAT 2010 has a 10 panel capacity, for areas with high power load requirements; and the SAT 2005 can hold up to 5 panels for a more cost-effective solution.

The SAT was designed with 4 major objectives:

Safe & Rapid Installation

- Fast installation with little field assembly required
- Simple pre-wiring & quick tie-in via cage clamp terminals
- Installation can be conducted at ground level – no ladders required
- Bolts directly to Dixie Pre-cast foundation
- Optional wind generator mount

Easy Solar Panel Adjustment

- Adjustment independent of foundation orientation
- 360° rotational adjustment
- 80° inclination adjustment



Low Maintenance

- Corrosion-resistant construction
- Static cable management – no moving cables to hang-up, twist or bind
- Vandal-resistant locking security panel

Safe Operation

- Positive articulation control – will not free-fall or lose control
- Articulates with ½" drill (2-3 minutes) or back-up handwheel (< 10 minutes)
- Operable by a single person
- Maximum wind speed rating of 120 mph



Customer Testimonial

"Your design of the tower makes it a lot easier to install and maintain the panels as when the tower is lowered it puts all of the work waist high so there is never a need for a maintainer to be on a ladder. The installation was easier as you don't have to worry about orientation of the foundation because the tower itself has adjustments to get the panels facing the right direction."

- SAT Customer, New Construction Manager

Conclusion

Although it is a challenge to provide solar power in dark territory in a safe and cost-effective manner, Pillar Innovations has engineered a solution. Pillar's solution, the SAT, can satisfy a multitude of needs between its two models. The SAT is easy to install, adjust, maintain and operate safely. Pillar has streamlined the SAT to remove the everyday headaches caused by providing solar power in dark territory. Whether the problem lies in difficult installation or cumbersome maintenance, Pillar's SAT is the answer.

