



**Turkish
Electric
Power**

8.9kW PV Solar Power Pole with Two-Axis Tracker



Introduction

TEP Two-Axis Solar Power Pole equipment pre-engineered for ease of installation and scalability. The Two-Axis Solar Power Pole has been optimized for easy integration on to electric utility grid.

Technical Description

The Two-Axis Solar Power Pole has designed with all components matched for high-performance in large-scale applications. The Two-Axis Solar Power Pole has a standardized 7m x 8m layout and includes solar modules, inverters, communications (RS485), earth ground, DC collection wiring and equipment, weather data collection sensors, assembly and reference installation documentation.

Solar inverter, included in the Two-Axis Solar Power Pole, that comes enabled grid-friendly features that are designed to maximize Solar Power Plant performance, including:

- MPPT
- Reactive power control through all operating conditions
- Low voltage, zero voltage and high voltage ride- through of grid disturbances
- Plant-level monitoring and controls including a SCADA system,
- software tools, and diagnostics needed to increase system availability



Features and Benefits

Two-Axis Solar Power Pole delivers benefits including:

- 40% more energy when compared to fixed-axis PV solar
- Scalability-plants can be grouped to support the size and scope of your project
- Flexibility-designed to fit a variety of solar module technologies
- Integration-grid-friendly features deliver performance similar
- to a conventional power plant

In addition, TEP has resources and experience to help customers meet their needs for cleaner and more reliable energy.



Flexible Options

TEP Two-Axis Solar Power Pole can be customized to meet your Specific needs, including siting and layout adjustments and equipment specifications. Options include:

- Full-scope installation
- Designs for varying environmental conditions (cold/hot weather, high wind, rocky soil, seismic, etc.)

System Design Conditions

Design ambient temperature -20 C to 50 C
Array tilt Azimuth and Zenith Tracker
Wind applicable Code(ASCE 7-05) 120 km/h
Snow load 115 kg/m²