

Total Corrosion Solutions Solar Power Supply

The operation of the cathodic protection solar system is used to convert the energy of the sun into D.C. Amperage for protection of metal surfaces from the effects of soil side corrosion. This is accomplished in the following manner:

The photovoltaic effect produces a flow of electrons. The electrons are excited by particles of light and find the attached electrical circuit the easiest path to travel from one side of the cell to the other. The solar cell merely takes a percentage of these electrons and directs them to flow in a path. This flow of electrodes is, by definition, electricity.

Photovoltaic modules (solar panels) convert sunlight into electricity. Wire conducts the electricity to batteries where it is stored until needed. On the way to the batteries, the electrical current passes through a controller (ProStar) which will shut off the flow when the batteries become full. The electricity is used from the batteries through the cathodic protection controller to the cathodic protection system.

Features:

- Skid Mount (no field assembly)
- Constant Current CP Regulator
- 20-Year Solar Panels
- Power Point Tracker Charge Controls
- Charging Circuit Indicators
- Easy to Read 50/50 Shunts
- Maintenance Free Batteries
- Easy to Mount
- Low Maintenance
- Solid State - No Rheostats to Adjust

Controller:

- Ideal for solar powered battery backed cathodic protection systems.
- Use adjustable output voltage, current limit and half-cell voltage regulation.
- Automation switching capabilities between different operating modes.
- Remote control and metering options available for sequenced operation.

- LED Metering for output current and voltage.
- 12-month warranty

Solar Panels

- High efficiency multi-crystal modules.
- Consistent time proven product.
- Cell efficiency over 14%.
- UL Listed.
- 25-year warranty.

Batteries

- 200 hours of lead acid battery reserve.
- Battery voltage meets or exceeds the voltage rating of the power supply.

Support Structure

- Aluminum brackets.
- Coated steel support structure.