

7905 State Street Salem, Oregon 973187 **1 (503) 581-5550** 

# **Solar Harvester<sup>™</sup>- Power Generator**

A complete, rugged, stand-alone, solar power supply that provides AC or DC power to crucial equipment in remote locations from desert to mountain tops. Perfect for industrial, telecom, military and security applications.



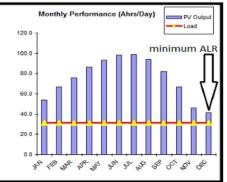
Power Generator with Custom Mount

### The Value Proposition

- Eliminates expensive utility power connections or visits to refuel conventional generators
- Pre-engineered system saves costly engineering, procurement, and manufacturing time
- Pre-assembled and prepped sub-assemblies cut installation errors and time
- Standard configurations from 10Watt to 700Watt with 12/24/48VDC or 120AC output
- 7-day quick ship available for some configurations
- Installs in approximately 1 hour with no specialized equipment
- Rugged design withstands extreme temperatures, wet, sandy and windy environments
- Durable and low maintenance; designed for 5 year battery cycle life and 20 year system life
- Complimentary engineering analysis ensures proper sizing for power requirements and location

### The Sizing Criteria

- All steady, transient and quiescent electrical loads are considered
- Daily, monthly and annual solar energy and climate data from NASA for the specific location is charted
- Worst case days of autonomy (cloudy days) are established
- Tilt angle, temperature, solar energy and loads determine the Array and Array-to-Load ratio (ALR). typical min is 1.10 to 1.30
- Battery voltage and size is determined by automony, loads and optimum depth of discharge for long battery life



## Solar Harvester<sup>™</sup>- Product Features

#### **Battery/Controller Enclosure Features**

- Powder coated steel construction; Optional alluminum or stainless steel construction
- One, two and four battery enclosure, optional shelving and enclosure configurations
- Mounts to optional square steel pole with 1/2" steel bolts; to 3 1/2" or 5" round steel poles with c-clamps; to wood poles with band clamp and lag bolts
- Louvered door and enclosure for heat and gas dissipation, with mesh to prevent infestation
- Rolled door edges, poron or neoprene gasket seals the door from water, dust and pests
- Back or front plate with Din rail and 10 to15 Amp fuses/breakers
- 10 to 20 Amp Pulse Width Modulated or MPPT charge controller
- Low voltage disconnect protects battery
- Code compliant over-current protection
- Set for 24/7 output, other profiles and sensors available
- Can be configured for inclusion of auxillary equipment
- Optional DC cooling fan for high temperature zones
- One to four 6VDC and 12VDC sealed deep cycle batteries with 100 hour rate from 56 amp-hrs to 354 amp-hrs

### **Solar Modules, Mounts, Wiring Features**

- 10 to 190 watt High efficiency PV modules mounted with blocking diodes
- High wind load tolerant mounting systems available
- Comes with galvanized pole mount and hardware
- Side of pole mount attaches to 3 to 5 inch diameter poles; optional top of pole and ground mount kits are available
- Includes UV resistant stranded wire, conduit, junction<sup>™</sup>boxes and hardware
- Other options include inverters, timers, digital read-outs, temperature probes and more

### Proudly Made in America

