

# Power Ready System

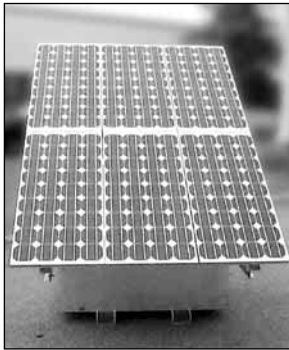


## SunWize Technologies, Inc.

SunWize™ Power Ready Systems are complete, fully integrated power supplies designed for site loads requiring 12, 24 or 48 volts DC. Each system provides safe and reliable power generation without the need and expense of installing utility power. The sealed, maintenance free batteries are designed for deep cycle operation and extended life in solar applications.

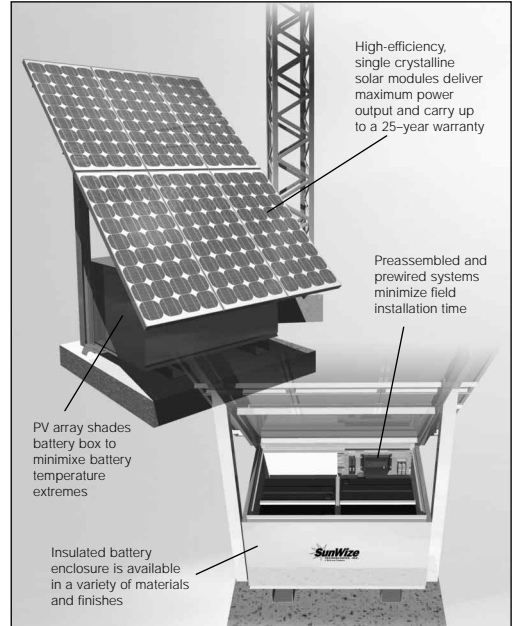
The aluminum array support structures and battery enclosures are strong yet lightweight and corrosion resistant for harsh marine or severe weather locations.

Because Power Ready Systems are designed to withstand rugged transportation to remote sites, single-lift integral lifting lugs and/or forklift



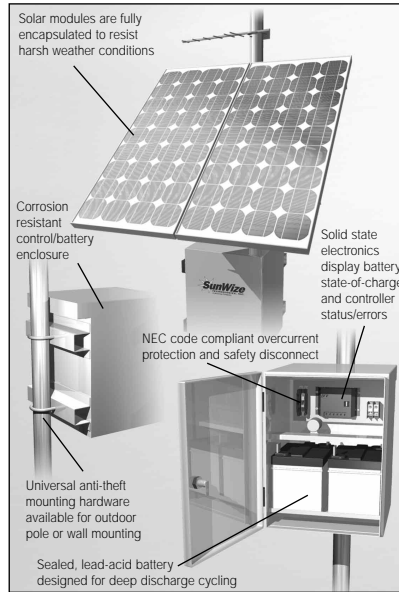
SunWize™ PR-45

slots are provided. Optional helicopter handling features are also available. The system is fully assembled for factory testing before shipment. The prewired systems are typically shipped fully assembled with a protective cover over the array and are bolted to a skid. The solar array for larger



### Industrial Prepackaged Solar Power Systems for:

- Telecommunications
- RTU/SCADA Applications
- Data Collection
- Instrumentation
- Security Lighting & Surveillance
- Navigational Aids
- Flow Monitoring
- UHF/VHF Radio
- Seismic Monitoring
- Tank Gauging
- Radio Telephones
- Railroad Signaling
- Area/Sign Lighting
- Cellular Extenders
- Microwave Repeaters
- Wireless Data
- Cathodic Protection
- Irrigation Control



a lifetime exceeding 25 years with battery replacements every five to ten years.

systems is shipped in a separate plywood crate and the battery enclosure is mounted on a skid. In some cases, batteries are shipped separately. Power Ready Systems carry a one-year system warranty for materials and workmanship. A three-year SunWize performance warranty is available on pre-packaged systems. The solar modules have up to a 25-year warranty, the longest in the industry. Careful component selection results in a system with

### SYSTEM SELECTION TABLE (Figures below are daily load in Amp-hrs/day. Refer to the map on the inside back cover)

12 Volt SYSTEMS	PEAK SUN HOURS											24 Volt SYSTEMS
	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	
PR 5-12-19	.24	.36	.48	.60	.72	.84	.96	1.0	1.2	1.3	1.4	PR 10-24-38
PR 10-12-19	.48	.72	.96	1.2	1.4	1.6	1.9	2.1	2.4	2.6	2.8	PR 20-24-38
PR 20-12-38	.96	1.4	1.9	2.4	2.8	3.3	3.8	4.3	4.8	5.2	5.7	PR 40-24-38
PR 36-12-70	1.6	2.5	3.3	4.2	5.0	5.8	6.7	7.5	8.4	9.2	10.0	PR 72-24-70
PR 50-12-115	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12.0	13.2	14.4	PR 100-24-115
PR 75-12-130	3.6	5.4	7.2	9.0	10.8	12.6	14.4	16.2	18.0	19.8	21.6	PR 150-24-130
PR 100-12-230	4.8	7.2	9.6	12.0	14.4	16.8	19.2	21.6	24.0	26.4	28.8	PR 200-24-230
PR 150-12-260	7.2	10.8	14.4	18.0	21.6	25.2	28.8	32.4	36.0	39.6	43.2	PR 300-24-260
PR 200-12-390	9.6	14.4	19.2	24.0	28.8	33.6	38.4	43.2	48.0	52.8	57.6	PR 400-24-390
PR 240-12-460	11.5	17.2	23.0	28.7	34.5	40.2	46.0	51.7	57.5	63.2	69.0	PR 480-24-530
PR 300-12-600	14.4	21.6	28.8	36.0	43.2	50.4	57.6	64.8	72.0	79.2	86.4	PR 600-24-600
PR 350-12-690	16.8	25.2	33.6	42.0	50.4	58.8	67.2	75.6	84.0	92.4	100.8	PR 700-24-795
PR 400-12-795	19.2	28.8	38.4	48.0	57.6	67.2	76.8	86.4	96.0	105.6	108.0	PR 800-24-795
PR 450-12-900	21.6	32.4	43.2	54.0	64.8	75.6	86.4	97.2	108.0	118.8	129.6	PR 900-24-900
PR 500-12-1060	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	PR 1000-24-900

Contact SunWize for 48 Volt system selections.

# Power Ready System



Standard Features and Benefits
Solar modules are fully encapsulated to resist harsh weather conditions
Low voltage load disconnect
Sealed, lead-acid battery designed for deep discharge cycling
NEC code compliant overcurrent protection and safety disconnect
Temperature compensated battery charging
Corrosion resistant control/battery enclosure
Installation, operation & maintenance documentation
Solid state electronics for improved efficiency and reliability
Preassembled, prewired systems minimize field installation time & eliminate wiring errors
Low maintenance and operating costs
Complete systems reduce specifying and buying time
Quality components assure long system life
Full system and performance warranty available on prepackaged systems
System Options (choose ANY & enter into SunWize Part Number)
a. DC to DC converter
b. DC to AC inverter
c. Data logging / Remote monitoring
d. Cathodic protection controller
e. Electronic load compartment
f. Theft deterrent solar module hardware
g. Helicopter lifting lugs
h. Bird deterrents
Controller Options (choose ONE & enter into SunWize Part Number)
i. SunWize LCD - displays battery voltage, SOC, charging & load current, controller status/errors
j. SunWize LVA - low battery SOC/load disconnect contact closure

Module Wattage
System Voltage
12 volts
24 volts
48 volts
Battery Amp-hr Rating
Enclosure Type
F - Front opening hinged door, pole mounted
T - Top opening hinged door, ground/pad mounted
C - Front opening door (screw-type), pole mounted
E - Economy
Module Mount Type
I - Integral with enclosure
P - Pole mount, separate from enclosure
G - Ground mount, separate from enclosure
Enclosure Finish
A - Milled aluminum (standard)
W - Powder coated white aluminum
S - Galvanized steel
F - Fiberglass reinforced polyester
Mount Finish
A - Milled aluminum
P - Painted steel
S - Galvanized steel
Wire Protection
0 - PV and battery wired directly to controller, fused battery line
1 - DC-rated circuit breakers for PV and battery (standard - NEC compliance)
Lightning Protection
0 - Standard MOV surge protection
1 - Silicon-oxide varistor (SOV)
Load Distribution and Control
0 - None, load wired directly to controller
1 - Four terminal load distribution block (standard)
2 - DC-rated circuit breaker
3 - Multi-cycle timer

## HOW TO SELECT YOUR SYSTEM

The chart below specifies a system designed to meet the daily load of your equipment.

- 1) Use the map on the inside back cover to select the insolation zone that corresponds to the equipment site location.
- 2) Determine your daily equipment load requirement in Amp-hrs/day at the specified voltage.
- 3) In the Selection Table, under your zone column, find the value of Amp-hours/day that is greater than or equal to your load. Based on your system voltage, select your SunWize part number.

