SunWize Power Online Systems provide continuous DC power with battery backup from an AC source. These fully integrated, weatherproof units convert AC primary power to charge a 12, 24 or 48 Vdc sealed battery bank while powering a DC load or an AC load with integral inverter option. Solar and generator inputs can be added when extended backup times are needed.

**Reliability:** SunWize systems allow your equipment to operate where power quality and reliability are a concern or where utility power does not exist in the most rugged environments.

**Cost-effective:** SunWize systems are cost-effective solutions providing continuous power to critical loads. SunWize systems minimize set up and installation time for rapid deployment.

**Installation flexibility:** SunWize systems can be mounted to pole sides, rooftops and the ground. They can also be adapted to towers and other structures. OEM equipment can be housed in weatherproof enclosures in remote locations.

**Shipping and handling:** SunWize Systems are designed to withstand rugged transportation to remote sites. Each subsystem is fully assembled and factory tested before shipment.

### Key Features and Benefits:

- Meets your equipment electrical power requirements
- System load verified for voltage tolerances and duty cycle of operation
- System design verified for performance criteria, reliability and function
- Geographic location analysis provided
- Standard product line flexibility allows customization
- Cost-effective design maximizes space efficiency
- Solid state electronics
- UL, FM and CSA listed components; C I, Div2 available
- Full system warranty for one year
- Pre-assembled for easy installation
- No environmental impact
- Low operating and maintenance costs
- Complete systems reduce specifying and buying time
Power Online System Technical Specifications

**Environmental Specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient Temperature</td>
<td>-30º C to 50º C</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>100% condensing</td>
</tr>
<tr>
<td>Altitude</td>
<td>3000m max</td>
</tr>
</tbody>
</table>

**Electrical Specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating voltage range</td>
<td>From 12V to 48VDC nominal</td>
</tr>
<tr>
<td>Charger current</td>
<td>From 5A up to 160A</td>
</tr>
<tr>
<td>Load current</td>
<td>From 5A to 100A</td>
</tr>
<tr>
<td>Temperature compensation</td>
<td>Standard on all models</td>
</tr>
<tr>
<td>Charger wattage</td>
<td>From 45 to 2000 watts</td>
</tr>
<tr>
<td>Battery capacity</td>
<td>From 5 to 1060Ah</td>
</tr>
</tbody>
</table>

**The System**

- System is designed to provide un-interrupted power to the load with a power reliability of 100% worst case based on weather data, specific to the design site.
- System battery is designed for 8 to 120 hours of autonomy based on average low temperature for that site. Custom back up times available.

**The Chargers**

- All chargers are industrial quality with wide operating temperature range and durability.
- All systems are temperature compensated for voltage set point.
- All chargers work over wide voltage input range (either 85 – 264VAC universal input or 120/240V switch select). Other voltages available.

**The Batteries**

- Batteries used are intended for deep-cycle operation.
- Battery life is rated for greater than 500 cycles to 80% DOD. Total battery life varies with application temperature and load characteristics.
- Batteries are maintenance free and require no watering or equalizing charge.

**The Low Voltage Disconnect**

- Standard systems include Low voltage disconnect, with system factory set for the battery type and system voltage used.
- Standard disconnect up to 20A are sealed, Class I, Div II rated. Optional 15A 48VDC available.

**Protection and Safety**

- NEC compliant circuit protection.
- Finger safe terminal blocks and covers on all switches and breakers.
- All wiring is routed in liquid tight conduit for protection from damage and the elements.
**Standard Configurations**

**Charger Power** (Watts) 45, 60, 100, 120, 150, 240, 300, 600, 1000 and 2000

**System Voltage:** 12 Volts / 24 Volts / 48 Volts

**Enclosure Mounting Style**
- Front opening hinged door, pole mounted
- Top opening hinged door battery enclosure, ground mounted with pole mounted controls

**Enclosure Finish**
- Powder-coated white aluminum
- 304 stainless steel
- Fiberglass reinforced polyester

**Charger Feature Options:**
- Class I Div II rated charger 90-264VAC 50/60Hz, w/integral alarm
- Standard charger 90-264VAC 50/60Hz, no integral alarms
- Industrial charger 120/240VAC 60HZ, integral alarms and LCD Display
- Mil-Spec sealed charger, 90-264VAC 50/60Hz, no integral alarms

**System Custom Options**
- DC-to-DC converter for additional 12, 24 or 48V output
- DC-to-AC inverter for 120VAC/60HZ or 230VAC/50HZ
- Customer equipment integration
- LOC, load output cable
- BD, bird deterrent spikes on top of enclosure
- LVA, low battery voltage relay
- Remote monitoring via Ethernet, RS-485, or RS-232
- Surge protector for RF/coax protection
- DIN-rail kit on side/top plate
- PoE single port injector
- Door alarm relay
- AC Utility fault alarm relay
- Custom option

**Other Features:**
- NEC code compliant overcurrent protection and safety disconnect
- Solid state electronics provide utility power to charge the battery
- Solid state low voltage disconnect protects battery from over discharge
- Corrosion resistant control/battery enclosure. Premium enclosures are powder coated white aluminum for durability
- Sealed, lead-acid battery designed for deep discharge cycling
- Cooling airflow
- Air ventilation outlet
- Universal anti-theft mounting hardware available for outdoor pole or wall mounting
- Rainproof bottom-to-top passive airflow cooling with filtered vents
- Air ventilation inlet