The ProStar solar charge controller has been the leading mid-range pulse width modulation (PWM) controller since 1995. With over 350,000 units installed in the harshest environments in over 100 countries, ProStar sets the standards in performance and reliability for the rest of the solar industry.

The Generation 3 ProStar shares the outstanding build quality and familiar form factor of its predecessors and adds data and lighting control capabilities, a graphical interface, and advanced protection features that meet the needs of today’s most demanding off-grid solar applications. ProStar provides both “the legend and the latest” in a single new product.

KEY FEATURES AND BENEFITS

- **High Reliability**
  Latest electronic and environmental protections, quality control, and design considerations comply with IEC 62109 and promote longevity in the harshest environments

- **High Temperature Operation**
  Full nameplate current rating, both solar and load up to 60°C continuous

- **Auto-Battery-Select**
  12V and 24V systems

- **Data Logging**
  Up to 256 days of solar charge and load consumption data

- **Self-diagnostics**
  Continuous monitoring and reporting of any errors or system faults through its status LED’s, optional display and communication port

- **Longer battery life through 4-stage charging and temperature compensation.** Constant voltage PWM series regulation. Voltage-sense terminals for more accurate battery monitoring

- **More information with three battery-level LED indicators.** Optional meter includes safety disconnect and displays amps, volts, temperature and self-test

- **Extensive electronic protection against reverse polarity, reverse current at night, short circuits, overcurrent and excessive temperature.** No mechanical fuses

- **Fanless design for long-term reliability**

- **Meter**
  High resolution LCD, multi-lingual backlit graphical display of system voltage, current, temperature, lighting settings, etc

- **Custom Programming**
  Dip switches, meter interface, or connection with a computer can be used to adjust charging, load communications, and lighting control

- **Low Noise Design**
  Meets US Federal Communications Commission Class B specifications

- **Automatic Solar-Based Lighting Control**
  Field adjustable, multi-event load control enables powerful options for solar lighting systems

- **MODBUS Communications**
  Open standard MODBUS communications protocol allows for control and remote data access

- **SNMP (Simple Network Management Protocol)**
  Provides more detailed monitoring of all system data with existing IT management and architecture
### Technical Specifications

<table>
<thead>
<tr>
<th>Versions</th>
<th>PS-15: 15 amps-no meter</th>
<th>PS-15M: 15 amps with meter</th>
<th>PS-30: 30 amps-no meter</th>
<th>PS-30M: 30 amps with meter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal Battery Voltage</td>
<td>12V or 24V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery Voltage Range</td>
<td>10-35V</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Voltage Accuracy</td>
<td>&lt;= 0.1% +/- 50mV</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Maximum Battery Current</td>
<td>15A or 30A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Solar Input Voltage</td>
<td>12V/24V bat: 60Voc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Load Current Rating</td>
<td>15A or 30A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Consumption</td>
<td>&lt;20mA*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LED Indications</td>
<td>(1) status, (3) Battery state of charge</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Transient Surge Protection</td>
<td>1500 Watts (solar, battery, load)</td>
<td></td>
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</tr>
<tr>
<td><strong>Environmental</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to + 60°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meter Operating Temperature</td>
<td>-20°C to + 60°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°C to + 80°C</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Humidity</td>
<td>100% non-condensing</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Tropicalization</td>
<td>conformal coating, marine-rated terminals</td>
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</tr>
</tbody>
</table>

#### Battery Charging
- **Battery Types:** 7 Standard Battery Settings + Custom
- **4-Stage Charging:** Bulk, Absorption, Float, Equalize
- **Temperature Compensation**
  - **Coefficient:** -5 mV / °C / cell (25°C ref)
  - **Range:** -30°C to + 60°C
  - **Set Points:** Absorption, Float, Equalize

#### Electronic Protections
- **Solar Input:** overload, short-circuit, high voltage, reverse polarity, high temperature, nighttime reverse current
- **Load Output:** overload, short-circuit, high temperature, reverse polarity
- **Battery:** reverse polarity

*35 mA for metered versions when meter is at 50% brightness; 50 mA when meter is at 100% brightness.

### Load & Lighting Control
- **Low Voltage Disconnect, Low Voltage Reconnect Settings:** 11.4 V / 12.6 V or Custom (x2 for 24 volt systems)
- **Lighting Settings:** Dusk to Dawn or Custom
- **LVD Current Compensation:** -20 mV per Amp @ 12 Volts / -40 mV per Amp @ 24 Volts
- **LVD Warning Timer:** 10 minutes
- **Lighting Test Timer:** 5 minutes

#### Certifications
- CE; RoHS; TUV Listed:
  - UL62109/CSA.107.1; IEC 62109;
  - FCC Part-15 class B compliant
- **Manufactured in a certified ISO 9001 facility**