**SOLAR SSIG 06 405**

**MODEL**  SSIG 06 405  
**VOLTAGE**  6  
**CAPACITY**  405Ah @ 100Hr  
**MATERIAL**  Polypropylene  
**BATTERY**  Deep-Cycle Flooded/Advanced Lead Acid Battery  
**COLOR**  Maroon  
**WATERING**  Single-Point Watering Kit (Optional)

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### PHYSICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>TERMINAL TYPE</th>
<th>DIMENSIONS 6 INCHES (mm)</th>
<th>WEIGHT 6 LBS. (kg)</th>
<th>HYDROLINK OR SPWK</th>
<th>HANDLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSIG 06 405*</td>
<td>6</td>
<td>11.66 (296)</td>
<td>6.94 (176)</td>
<td>14.37 (365)</td>
<td>SPWK</td>
</tr>
</tbody>
</table>

### ELECTRICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>VOLTAGE</th>
<th>10-Hr</th>
<th>20-Hr</th>
<th>48-Hr</th>
<th>72-Hr</th>
<th>100-Hr</th>
<th>100-Hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>337</td>
<td>366</td>
<td>376</td>
<td>392</td>
<td>405</td>
<td>2.43</td>
</tr>
</tbody>
</table>

### CHARGING INSTRUCTIONS

**CHARGER VOLTAGE SETTINGS (AT 77°F/25°C)**

<table>
<thead>
<tr>
<th>SYSTEM VOLTAGE</th>
<th>6V</th>
<th>12V</th>
<th>24V</th>
<th>48V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Charge Current (% of C20 Rate)*</td>
<td>13%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Absorption Phase Time (hours)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absorption Voltage **</td>
<td>7.35</td>
<td>14.70</td>
<td>29.40</td>
<td>58.80</td>
</tr>
<tr>
<td>Float Voltage</td>
<td>6.75</td>
<td>13.50</td>
<td>27.00</td>
<td>54.00</td>
</tr>
<tr>
<td>Equalization Voltage</td>
<td>8.10</td>
<td>16.20</td>
<td>32.40</td>
<td>64.80</td>
</tr>
</tbody>
</table>

Do not install or charge batteries in a sealed or non-ventilated compartment. Constant under or overcharging will damage the battery and shorten its life as with any battery.  
*If charging time is limited contact Trojan Technical Support for assistance.**

In cases where controller has a bulk voltage setting, use absorption voltage setting above.

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### CHARGING TEMPERATURE COMPENSATION

**ADD**  
0.005 volt per cell for every 1°C below 25°C  
0.0028 volt per cell for every 1°F below 77°F  
0.005 volt per cell for every 1°C above 25°C  
0.0028 volt per cell for every 1°F above 77°F

**SUBTRACT**

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### OPERATIONAL DATA

**OPERATING TEMPERATURE**

-4°F to 113°F (-20°C to +45°C). At temperatures below 32°F (0°C) maintain a state of charge greater than 60%.  
5 – 15% per month depending on storage temperature conditions.  

**SELF DISCHARGE**

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### STATE OF CHARGE MEASURE OF OPEN-CIRCUIT VOLTAGE

<table>
<thead>
<tr>
<th>PERCENTAGE CHARGE</th>
<th>SPECIFIC GRAVITY</th>
<th>CELL</th>
<th>6 VOLT</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>1.277</td>
<td>2.122</td>
<td>6.37</td>
</tr>
<tr>
<td>90</td>
<td>1.258</td>
<td>2.103</td>
<td>6.31</td>
</tr>
<tr>
<td>80</td>
<td>1.238</td>
<td>2.083</td>
<td>6.25</td>
</tr>
<tr>
<td>70</td>
<td>1.217</td>
<td>2.062</td>
<td>6.19</td>
</tr>
<tr>
<td>60</td>
<td>1.195</td>
<td>2.040</td>
<td>6.12</td>
</tr>
<tr>
<td>50</td>
<td>1.172</td>
<td>2.017</td>
<td>6.05</td>
</tr>
<tr>
<td>40</td>
<td>1.148</td>
<td>1.993</td>
<td>5.98</td>
</tr>
<tr>
<td>30</td>
<td>1.124</td>
<td>1.969</td>
<td>5.91</td>
</tr>
<tr>
<td>20</td>
<td>1.098</td>
<td>1.943</td>
<td>5.83</td>
</tr>
<tr>
<td>10</td>
<td>1.073</td>
<td>1.918</td>
<td>5.75</td>
</tr>
</tbody>
</table>

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**RECYCLE RESPONSIBLY**

99% Recyclable  
6V Flooded
**SELF DISCHARGE VS. TIME**

- **Storage Time in Weeks**
- **Self Discharge vs. Time**

**Expected Life vs. Temperature**

Chemical reactions internal to the battery are driven by voltage and temperature. The higher the battery temperature, the faster chemical reactions will occur. While higher temperatures can provide improved discharge performance the increased rate of chemical reactions will result in a corresponding loss of battery life. As a rule of thumb, for every 10°C increase in temperature the reaction rate doubles. Thus, a month of operation at 35°C is equivalent in battery life to two months at 25°C. Heat is an enemy of all lead acid batteries, FLA, AGM and gel alike and even small increases in temperature will have a major influence on battery life.

**PERIODIC CHARGE**

Provide a periodic freshening charge to maintain a SOC greater than the threshold of 70%.
**BATTERY DIMENSIONS** (shown with DT)

- **Terminal Configurations**
  - **6**
  - **DT**
  - **Automotive Post & Stud Terminal**

  **Terminal Height Inches (mm)**
  - 0.79 (20)

  **Torque Values: in-lb (Nm)**
  - Stud: 95 –105 (11 – 12) / AP: 50 – 70 (6 – 8)

  **Bolt Size**
  - 5/16" – 18

**NOTES: UNLESS OTHERWISE SPECIFIED**

1. **Dimensions are nominal**
2. **Weight may vary.**
3. **Terminal images are representative only.**
4. **Height taken from bottom of the battery to the highest point on the battery. Heights may vary depending on type of terminal.**
5. **Terminal images are representative only.**
6. **Weight may vary.**

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**Images**

- A battery with dimensions labeled: 11.66 (296) LENGTH, 14.37 (365) HEIGHT, 3.89 (99.3) WIDTH.
- A diagram showing the terminal configurations with dimensions.

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**Design Information**

- Designed in compliance with applicable BCI, DIN, BS and IEC standards.
- Tested in compliance to BCI and IEC standards.