

# SOLAR SSIG 06 475

MODEL **SSIG 06 475** 

VOLTAGE 6

CAPACITY 475Ah @ 100Hr MATERIAL Polypropylene

BATTERY Deep-Cycle Flooded/Advanced Lead Acid Battery

COLOR Maroon

WATERING Single-Point Watering Kit (Optional)







\*Polyon™ Case



### 6 VOLT

#### **PHYSICAL SPECIFICATIONS**

MODEL NAME	TERMINAL TYPE D	DIMENSIONS <sup>B</sup> INCHES (mm)			WEIGHT <sup>E</sup> LBS. (kg)	HYDROLINK OR SPWK	HANDLES
SSIG 06 475*	5	LENGTH	WIDTH	HEIGHT <sup>C</sup>	114 (52)	SPWK	Braided Rope
		11.66 (296)	6.94 (176)	17.55 (446)			

#### **ELECTRICAL SPECIFICATIONS**

VOLTAGE	CAPACITY AMP-HOURS (Ah)			ENERGY (kWh)		
6	10-Hr	20-Hr	48-Hr	72-Hr	100-Hr	100-Hr
0	393	428	441	459	475	2.85

#### **CHARGING INSTRUCTIONS**

CHARGER VOLTAGE SETTINGS (AT 77°F/25°C)					
SYSTEM VOLTAGE	6V 12V		24V	48V	
Maximum Charge Current (% of C <sub>20</sub> Rate)*	13%				
Maximum Absorption Phase Time (hours)	4				
Absorption Voltage **	7.35	14.70	29.40	58.80	
Float Voltage	6.75	13.50	27.00	54.00	
Equalization Voltage	8.10	16.20	32.40	64.80	

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.

#### **RECYCLE RESPONSIBLY**







#### **CHARGING TEMPERATURE COMPENSATION**

ADD	SUBTRACT
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

#### **OPERATIONAL DATA**

OPERATING TEMPERATURE	SELF DISCHARGE
-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.

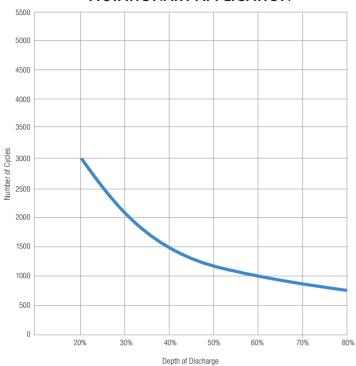
#### STATE OF CHARGE MEASURE OF OPEN-CIRCUIT VOLTAGE

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

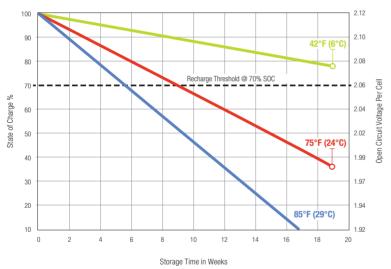
<sup>\*</sup>If charging time is limited contact Trojan Technical Support for assistance.

<sup>\*\*</sup>In cases where controller has a bulk voltage setting, use absorption voltage setting above.

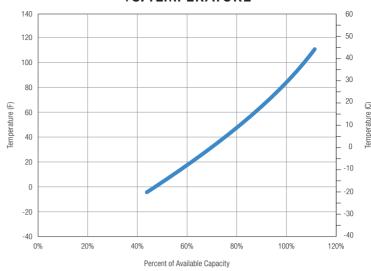
## DOD VS CYCLE LIFE IN A STATIONARY APPLICATION



#### **SELF DISCHARGE VS. TIME\***



## PERCENT CAPACITY VS. TEMPERATURE



#### **EXPECTED LIFE VS. TEMPERATURE**

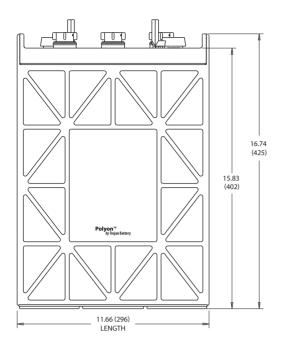
Chemical reactions internal to the battery are driven by voltage and temperature. The higher the battery temperature, the faster chemical reactions will occur. While higher temperatures can provide improved discharge performance the increased rate of chemical reactions will result in a corresponding 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.

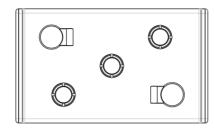
#### \*PERIODIC CHARGE

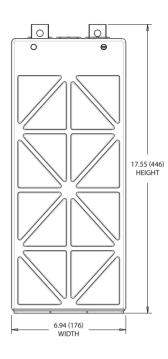
#### **FREQUENCY**

Provide a periodic freshening charge to maintain a SOC greater than the threshold of 70%.

#### **BATTERY** DIMENSIONS (shown with LT)







#### TERMINAL CONFIGURATIONS<sup>D</sup>

5 LT L-TERMINAL		L-TERMINAL
9		Terminal Height Inches (mm) 1.70 (43)  Torque Values: in-lb (Nm) 95 – 105 (11 – 12)  Bolt Size 5/16" – 18

- The amount of amp-hours (Ah) a battery can deliver when discharged at a constant rate at 86°F (30°C) for all rates and maintain a voltage above 1.75 V/cell. Capacities are based on peak performance. Dimensions may vary depending on type of handle or terminal. Batteries should be mounted with 0.5 inches (12.7 mm) spacing minimum.
- C. Height taken from bottom of the battery to the highest point on the battery. Heights may vary depending on type of terminal.
  D. Terminal images are representative only.
  E. Weight may vary.







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

