

# **SOLAR SSIG 12 255**

MODEL	SSIG 12 255
VOLTAGE	12
CAPACITY	255Ah @ 100Hr
MATERIAL	Polypropylene
BATTERY	Deep-Cycle Flooded/Advanced Lead Acid Battery
COLOR	Maroon
WATERING	Single-Point Watering Kit (Optional)



# **12 VOLT**

#### **PHYSICAL SPECIFICATIONS**

MODEL NAME	TERMINAL TYPE D	DIMENSIONS <sup>8</sup> INCHES (mm)			WEIGHT <sup>E</sup> LBS. (kg)	HYDROLINK OR SPWK	HANDLES
SSIG 12 255* 6	LENGTH	WIDTH	HEIGHT <sup>c</sup>				
	6 14.97 (380)	14.97 (380)	6.91 (176)	14.67 (373)	123 (56)	SPWK	Braided Rope

#### **ELECTRICAL** SPECIFICATIONS

VOLTAGE	CAPACITY A AMP-HOURS (Ah)				ENERGY (kWh)	
10	10-Hr	20-Hr	48-Hr	72-Hr	100-Hr	100-Hr
12	211	229	237	247	255	3.06

# **CHARGING** INSTRUCTIONS

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

\*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.

# **RECYCLE** RESPONSIBLY



# **CHARGING TEMPERATURE COMPENSATION**

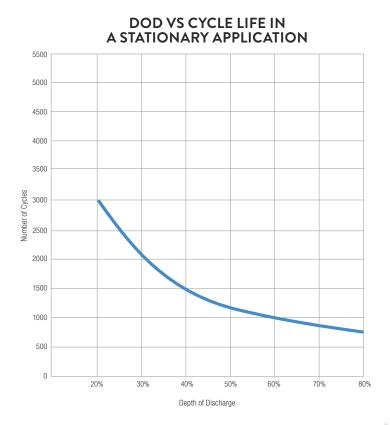
ADD	SUBTRACT
0.005 volt per cell for every 1°C below 25°C	0.005 volt per cell for every 1°C above 25°C
0.0028 volt per cell for every 1°F below 77°F	0.0028 volt per cell for every 1°F above 77°F

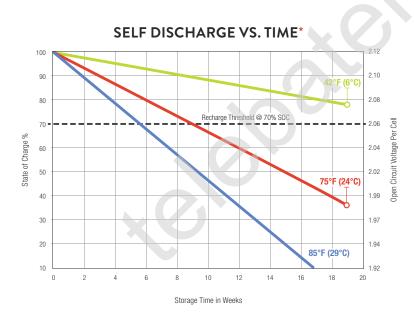
#### **OPERATIONAL** DATA

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	12 VOLT
100	1.277	2.122	12.73
90	1.258	2.103	12.62
80	1.238	2.083	12.50
70	1.217	2.062	12.37
60	1.195	2.040	12.24
50	1.172	2.017	12.10
40	1.148	1.993	11.96
30	1.124	1.969	11.81
20	1.098	1.943	11.66
10	1.073	1.918	11.51





#### PERCENT CAPACITY **VS. TEMPERATURE** 140 60 120 50 40 100 30 80 20 0 Temperature (F) 60 Temperature 10 40 0 20 -10 0 -20 -20 -30 -40 -40 0% 20% 40% 60% 80% 100% 120% Percent of Available Capacity

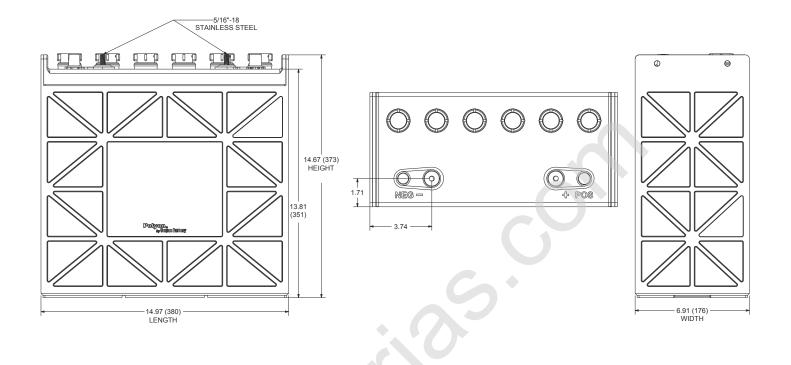
# **EXPECTED LIFE** VS. TEMPERATURE

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%.



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



**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

A.

- 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. R
- 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 BCI, DIN, BS and IEC standards. Tested in compliance to BCI and IEC standards.



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