



**SOLAR**  
TRUE DEEP-CYCLE AGM

**SAGM 06 220**



**BEST VALUE IN SOLAR & STORAGE APPLICATION**

• **MAINTENANCE FREE – AGM VALVE REGULATED**

- BCI Group N/A, 6V
- Reserve Capacity [Ah@20hr rate]: 220
- Reserve Capacity [Ah@100hr rate]: 235
- Energy [kWh]: 1.32
- Weight: 68 lbs.
- Length: 10.30 in (262 mm)
- Width: 7.06 in (179 mm)
- Height: 10.73 in (273 mm)
- M8/LT terminal



Maintenance free



IEC61427



## Deep-Cycle Solar AGM

Engineered for best value and worry-free storage, **Trojan Solar AGM** maintenance-free batteries can be counted on day in and day out as a reliable power source for a wide range of off-grid and unreliable grid applications, including:

- Remote micro-grids
- Solar street signs/lights
- Off-grid cabins/tiny house
- Oil & gas
- Solar home systems
- Residential & commercial backup
- Telecom

## Designed for Best Value in Solar + Storage Applications



### DEEP-CYCLE SOLAR

*Daily use in off-grid or poor-grid applications*

- Remote micro-grids
- Solar street signs/lights
- Off-grid cabins/tiny house
- Oil & gas
- Solar home systems
- Residential & commercial backup
- Telecom



### RUGGED CONSTRUCTION

*Proven Trojan engineering excellence*

- Ruggedized polypropylene case
- Optimized paste formulation for deep-cycle operation
- Reinforced cell compression
- Flame arrestors
- Manufacturing excellence
- Abuse tolerant and safe

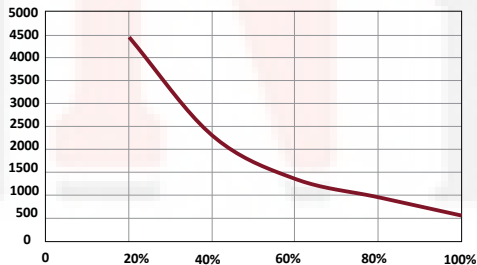


### MAINTENANCE FREE

*Ultimate in long-life maintenance-free*

- Premium absorbed glass mat separator
- Horizontal and vertical installations
- Top-facing or front-facing terminals for ease of installation

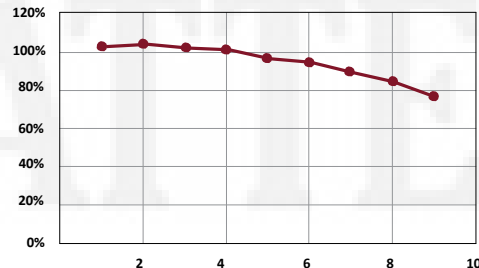
Trojan Solar Cycle Life vs. Depth of Discharge



#### Long Life in Solar Applications

- High cycle life
- Partial SOC operation
- Deep discharge capability

Sustained Capacity over IEC Life Test



#### Sustained Capacity

- Maintains high capacity throughout life, unlike typical VRLA batteries
- Ensures reliability and functionality for life



#### Most Usable Energy

- Highest Ah and kWh throughput
- Lowest cost of energy over lifetime
- Best overall battery value

MODEL SAGM 06 220  
 VOLTAGE 6V  
 CAPACITY 220Ah @ 20Hr  
 MATERIAL Polypropylene  
 BATTERY COLOR VRLA AGM / Non-Spillable / Maintenance-Free  
 WATERING Maroon  
 IEC 61427 No Watering Required 8+ Years Life



**PRODUCT + PHYSICAL SPECIFICATIONS**

Model	Terminal Type <sup>2</sup>	Dimensions <sup>2</sup> Inches (mm)			Weight Lbs. <sup>1</sup> (kg)	Handles	Installation Orientation
		Length	Width	Height			
SAGM 06 220	M8/LT	10.30 (262)	7.06 (179)	10.73 (273)	68 (31)	Embedded	Horizontal and Vertical

**ELECTRICAL SPECIFICATIONS**

Voltage	Capacity <sup>A</sup> Amp-Hours (Ah)					Energy kWh	Internal Resistance (mΩ)	Short Circuit Current (A)
	10-Hr	20-Hr	48-Hr	72-Hr	100-Hr			
6V	190	220	228	231	235	20-Hr 1.32	1.9	3250

**CHARGING INSTRUCTIONS**

System Voltage	Charger Voltage Settings (at 77°F/25°C)					
	6V	8V	12V	24V	36V	48V
<b>Bulk</b>	20% of C20					
<b>Absorption Charge (2.40VPC)</b>	7.20	9.60	14.40	28.80	43.20	57.60
<b>Float Charge (2.25 VPC)</b>	6.75	9.00	13.50	27.00	40.50	54.00

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.

**CHARGING TEMPERATURE**

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

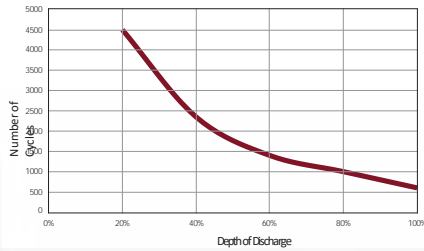
**STATE OF CHARGE MEASURE OF OPEN-CIRCUIT**

Percentage Charge	Cell	6Volt
100	2.14	6.42
75	2.09	6.27
50	2.04	6.12
25	1.99	5.97
0	1.94	5.82

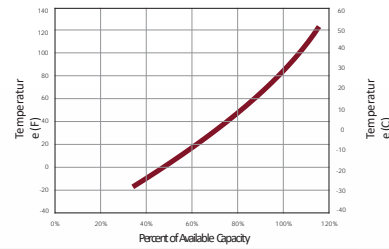
**OPERATIONAL DATA**

Operating Temperature	Self Discharge
-4°F to 122°F (-20°C to 50°C) At temperatures below 32°F (0°C) maintain a state of charge greater than 60%	Less than 3% per month depending on storage temperature conditions

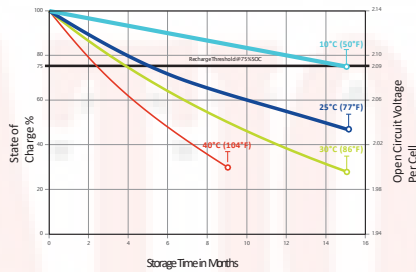
### SOLAR CYCLE-LIFE



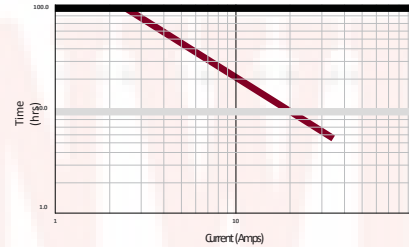
### CAPACITY VS. OPERATING TEMPERATURE



### SELF DISCHARGE VS. TIME<sup>E</sup>

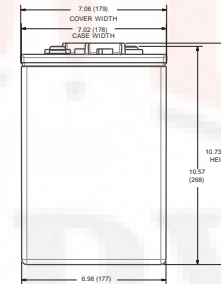
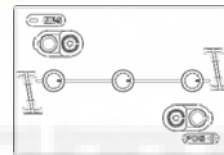
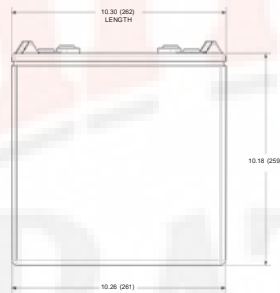


### TROJAN SAGM 06 220 PERFORMANCE





### BATTERY DIMENSIONS

Dimensions in inches (mm) - shown with M8 height is 12.07 with LT



### TERMINAL CONFIGURATIONS

M8		M8 with LT Adapter (adapter provided but not installed)	
	<b>Battery Height with Terminal in Inches (mm)</b> 10.57 (268)		<b>Battery Height with Terminal in Inches (mm)</b> 12.07 (307)
	<b>Torque Values: in-lb (Nm)</b> Bolt: 85 – 90 (10 – 11)		<b>Torque Values: in-lb (Nm)</b> Connection to M8: 85 – 90 (10-11) Connection to LT: 65 – 75 (7.5 – 8.5)
	<b>Bolt Size</b> M8 x 1.25		<b>Bolt Size</b> M8 x 1.25

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.  
 B. 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. A boost charge should be performed every 6 months when batteries are in storage.  
 F. Weight may vary.