

MODEL **SAGM 12 105**  
 VOLTAGE **12**  
 CAPACITY **105Ah @ 20Hr**  
 MATERIAL **Polypropylene**  
 BATTERY **VRLA AGM / Non-Spillable / Maintenance-Free**  
 COLOR **Maroon**  
 WATERING **No Watering Required**  
 IEC 61427 **8+ Years Life**



## 12 VOLT

### PHYSICAL SPECIFICATIONS

MODEL NAME	TERMINAL TYPE <sup>D</sup>	DIMENSIONS <sup>B</sup> INCHES (mm)			WEIGHT <sup>F</sup> LBS. (kg)	HANDLES	INSTALLATION ORIENTATION
		LENGTH	WIDTH	HEIGHT <sup>C</sup>			
SAGM 12 105	M8/LT	12.80 (325)	6.81 (173)	9.34 (237)	67 (30)	Molded Plastic	Horizontal and Vertical

### ELECTRICAL SPECIFICATIONS

VOLTAGE	CAPACITY <sup>A</sup> AMP-HOURS (Ah)					ENERGY (kWh)	INTERNAL RESISTANCE (mΩ)	SHORT CIRCUIT CURRENT (amps)
12	10-Hr	20-Hr	48-Hr	72-Hr	100-Hr	20-Hr	4.80	2555
	94	105	109	111	113	1.26		

### CHARGING INSTRUCTIONS

CHARGER VOLTAGE SETTINGS (AT 77°F/25°C)				
SYSTEM VOLTAGE	12V	24V	36V	48V
Maximum Charge Current (A)	20% of C <sub>20</sub>			
Absorption Voltage (2.40 V/cell)	14.40	28.80	43.20	57.60
Float Voltage (2.25 V/cell)	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.				

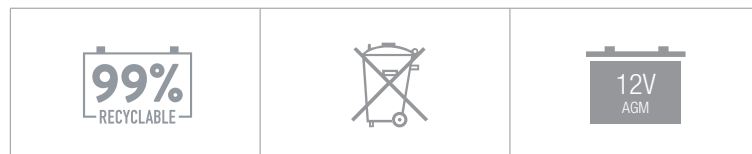
### CHARGING TEMPERATURE COMPENSATION

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 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.

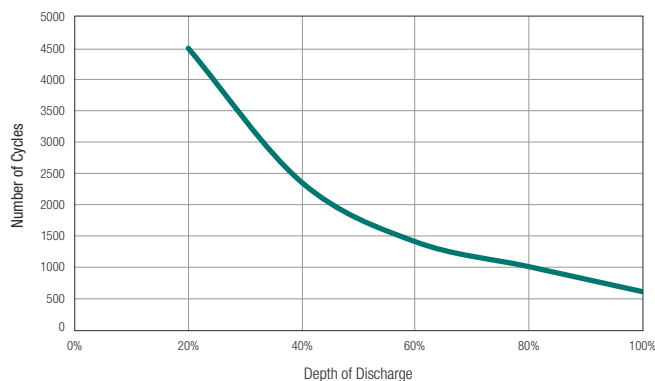
### RECYCLE RESPONSIBLY



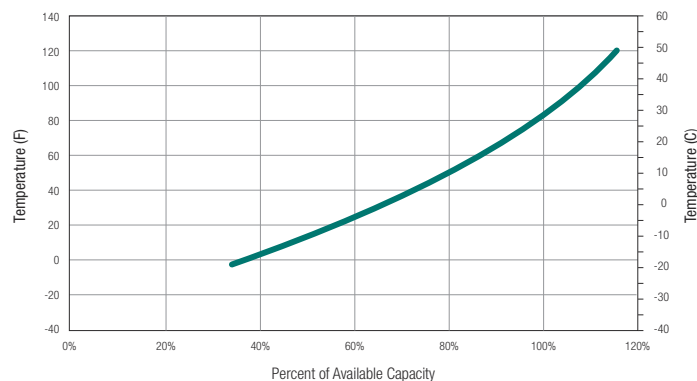
### STATE OF CHARGE MEASURE OF OPEN-CIRCUIT VOLTAGE

PERCENTAGE CHARGE	CELL	12 VOLT
100	2.14	12.84
75	2.09	12.54
50	2.04	12.24
25	1.99	11.94
0	1.94	11.64

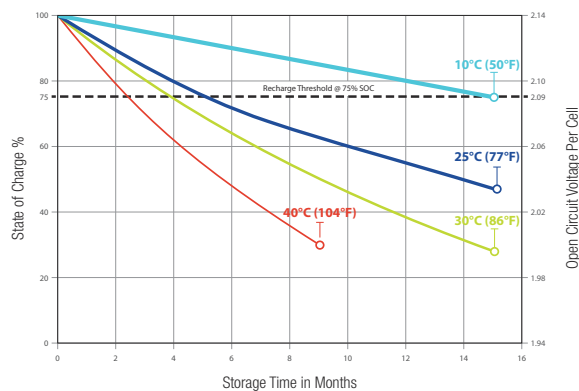
## SOLAR CYCLE-LIFE



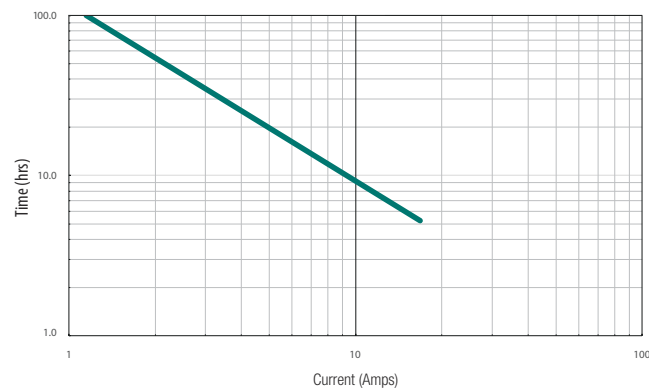
## PERCENT CAPACITY VS. TEMPERATURE



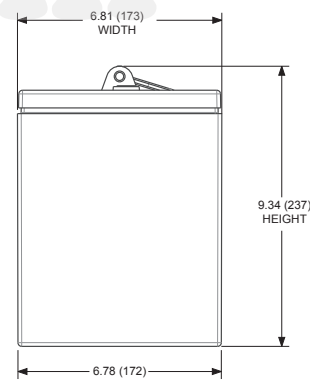
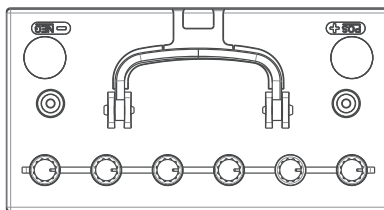
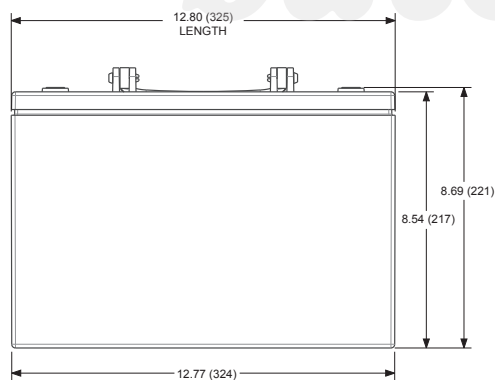
## SELF DISCHARGE VS. TIME<sup>E</sup>



## TROJAN SAGM 12 105 PERFORMANCE



## BATTERY DIMENSIONS (shown with M8, height is 10.19 (259) with LT)



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

15	M8	M8
	<b>Battery Height with Terminal in Inches (mm)</b> 10.57 (268)	
	<b>Torque Values in-lb (Nm)</b> Bolt: 85 – 90 (10 – 11)	

15	M8	M8 WITH LT ADAPTER (ADAPTER PROVIDED BUT NOT INSTALLED)
	<b>Battery Height with Terminal in Inches (mm)</b> 10.19 (259)	
	<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	

- 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.



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



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