



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



# 12V

#### **PRODUCT + PHYSICAL SPECIFICATIONS**

| Model Terminal Type <sup>D</sup> Dimensions <sup>B</sup> Inches (mm) |       | Weight Lbs. <sup>F</sup> (kg) | Handles    | Installation Orientation |         |                |                 |
|--|-------|-------------------------------|------------|--------------------------|---------|----------------|-----------------|
|  |       | Length                        | Width      | Height <sup>C</sup>      | 67 (30) | Molded Plastic | Horizontal      |
| SAGM 12 105  | M8/LT | 12.80 (325)                   | 6.81 (173) | 9.34 (237)               |         |                | and<br>Vertical |

#### **ELECTRICAL SPECIFICATIONS**

| Voltage | Capacity <sup>A</sup> Amp-Hours (Ah) |       |       | Energy kWh | Internal Resistance (mΩ) | Short Circuit Current (A) |      |      |
|---------|--------------------------------------|-------|-------|------------|--------------------------|---------------------------|------|------|
| 121/    | 10-Hr                                | 20-Hr | 48-Hr | 72-Hr      | 100-Hr                   | 20-Hr                     | 4.80 | 2555 |
| 12V     | 94                                   | 105   | 109   | 111        | 113                      | 1.26                      | 4.00 | 2555 |

#### **CHARGING** INSTRUCTIONS

|                                  | ngs (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<br>0.0028 volt per cell for every 1°F below 77°F | 0.005 volt per cell for every 1°C above 25°C<br>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)<br>At temperatures below 32°F (0°C)<br>maintain a state of charge greater than 60% | Less than 3% per month depending on storage temperature conditions |

#### TRUE LONG TROJAN ÷ **SINCE 1925** QUALITY IEC 61427

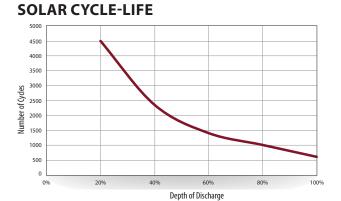
#### **STATE OF CHARGE** MEASURE OF OPEN-CIRCUIT VOLTAGE

| 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   |

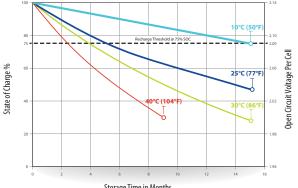




Designed in compliance with applicable BCI, DIN, BS and IEC standards. Tested in compliance to BCI and IEC standards.

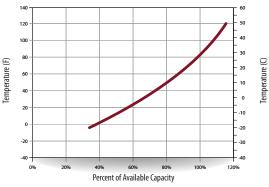


## **SELF DISCHARGE VS. TIME**

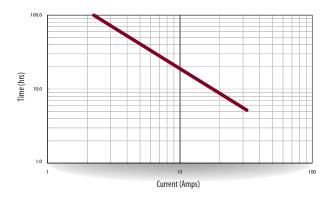


Storage Time in Months

#### **CAPACITY VS. OPERATING TEMPERATURE**

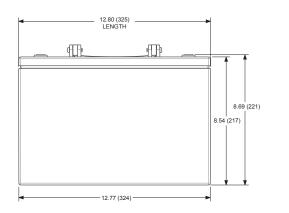


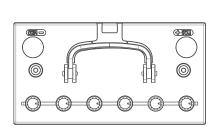
#### **TROJAN SAGM 12 105 PERFORMANCE**

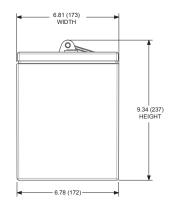


#### **BATTERY** DIMENSIONS

Dimensions Inches (mm) - shown with M8, height is 10.19 (259) with LT







# **TERMINAL** CONFIGURATIONS



M8

A.

В minimum

Battery Height with Terminal in Inches (mm) 8.69 (221)

Torque Values: in-lb (Nm) Bolt: 85 – 90 (10 – 11)

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

#### M8 with LT Adapter (adapter provided but not installed)



Battery Height with Terminal in Inches (mm) 10.19 (259)

Solar\_12\_105\_AGM\_DS\_060118

Torque Values: in-lb (Nm) Connection to M8: 85 - 90 (10-11) Connection to LT: 65 – 75 (7.5 – 8.5) **Bolt Size** 

M8 x 1.25

- C. Height taken from bottom of the battery to the highest point on the battery. Heights may vary depending on type of terminal.
  - Terminal images are representative only. A boost charge should be performed every 6 months when batteries are in storage

D. E. F. Weight may vary.



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