

SOLAR SAES 12 135

MODEL **SAES 12 135**

VOLTAGE 12

CAPACITY 301Ah @ 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	DIMENSIONS ^B INCHES (mm)			WEIGHT F LBS. (kg)	HANDLES	INSTALLATION ORIENTATION
0.50 / 0.50		LENGTH	WIDTH	HEIGHT C			Horizontal
SAES 12 135	M8/LT	12.96 (329)	7.06 (179)	10.96 (278)	101 (45)	Embedded	and Vertical

ELECTRICAL SPECIFICATIONS

VOLTAGE	CAPACITY A AMP-HOURS (Ah)				ENERGY (kWh)	INTERNAL RESISTANCE (mΩ)	SHORT CIRCUIT CURRENT (amps)	
10	10-Hr	20-Hr	48-Hr	72-Hr	100-Hr	20-Hr	4.2	2920
12	279	301	310	313	316	1.60	4.3	

CHARGING INSTRUCTIONS

CHARGER VOLTAGE SETTINGS (AT 77°F/25°C)				
SYSTEM VOLTAGE	12V 24V		36V	48V
Maximum Charge Current (A)	50% of C ₂₀			
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
-40°F to 140°F (-40°C to $+60$ °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



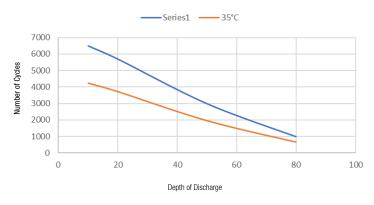




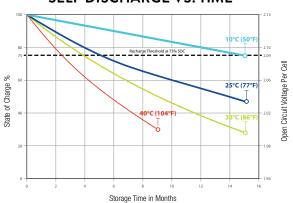
STATE OF CHARGE MEASURE OF OPEN-CIRCUIT VOLTAGE

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

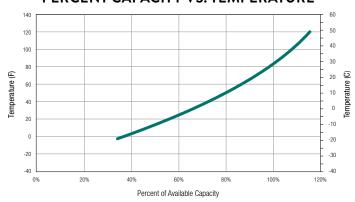
SOLAR CYCLE VS DEPTH OF DISCHARGE



SELF DISCHARGE VS. TIME



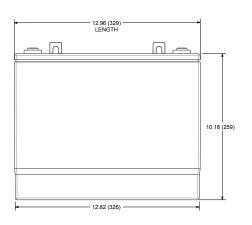
PERCENT CAPACITY VS. TEMPERATURE

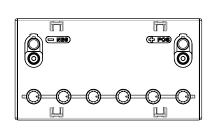


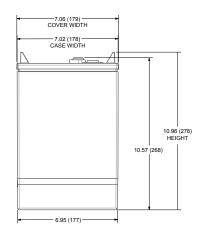
TROJAN SAES 12 135 PERFORMANCE



BATTERY DIMENSIONS (shown with M8, height is 12.07 (307) with LT)







TERMINAL TYPE

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

- 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
- meramination and approximately an authorized part of the maintain a voltage above 1.75 Wcell. 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.

- M8 WITH LT ADAPTER (ADAPTER PROVIDED BUT NOT INSTALLED) **Battery Height with Terminal in Inches (mm)** 12.07 (307) 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
- 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.

 Batteries in storage should be charged when they decline to 75% State of Charge (SOC).

 Weight may vary.











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

