

SOLAR SIND 06 1225

MODEL	SIND 06 1225			
VOLTAGE	6			
CAPACITY	1225Ah @ 100Hr			
MATERIAL	Polypropylene (internal cell container) Polyethylene (outer container)			
BATTERY	Deep-Cycle Flooded/Advanced Lead Acid Battery			
COLOR	Maroon			
WATERING	Single-Point Watering Kit (Optional)			
	Smart Carbon™ for Improved Performance 17 Years Battery Life Based on IEC 61427			





6 VOLT

PHYSICAL SPECIFICATIONS

MODEL NAME	TERMINAL TYPE D	DIMENSIONS ^B INCHES (mm)		WEIGHT ^E LBS. (kg)	HYDROLINK OR SPWK	HANDLES
SIND 06 1225 14	LENGTH	WIDTH	HEIGHT ^c			
	27.13 (689)	10.44 (265)	24.01 (610)	415 (188)	SPWK	Molded

ELECTRICAL SPECIFICATIONS

VOLTAGE	CAPACITY ^ AMP-HOURS (Ah)				ENERGY (kWh)	
6	10-Hr	20-Hr	48-Hr	72-Hr	100-Hr	100-Hr
	835	942	1083	1159	1225	7.35

CHARGING INSTRUCTIONS

CHARGER VOLTAGE SETTINGS (AT 77°F/25°C)				
SYSTEM VOLTAGE	6V	12V	24V	48V
Maximum Charge Current (% of $\rm C_{\rm 20}$ Rate)*	13%			
Maximum Absorption Phase Time (hours)	4			
Absorption Voltage **	7.35	14.70	29.40	58.80
Float Voltage	6.75	13.50	27.00	54.00
Equalization Voltage	8.10	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	6 VOLT
100	1.260	2.110	6.33
90	1.246	2.090	6.27
80	1.227	2.070	6.21
70	1.207	2.050	6.15
60	1.187	2.030	6.09
50	1.165	2.010	6.03
40	1.142	1.990	5.97
30	1.119	1.960	5.88
20	1.096	1.940	5.82
10	1.072	1.920	5.76

DOD VS CYCLE LIFE IN A STATIONARY APPLICATION 7500 7000 6500 6000 5500 5000 4500 Number of Cycles 4000 3500 3000 2500 2000 1500 1000 500 0 20% 30% 40% 50% 60% 70% 80% Depth of Discharge

2.12 100 2.10 90 42°F (6°C) 2.08 80 Recharge Threshold @ 70% SOC 70 2.06 Ce Circuit Voltage Per State of Charge % 60 2.04 50 2.02 75°F (24°C) Den 1.99 40 1.97 30 20 1.94 85°F (29°C) 10 1.92 0 2 6 8 10 12 14 16 18 20 Storage Time in Weeks

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 40% 100% 0% 20% 60% 80% 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.

SMART CARBON™

Deep-cycle batteries used in off-grid and unstable grid applications are heavily cycled at partial state of charge (PSOC). Operating at PSOC on a regular basis can quickly diminish the overall life of a battery, which results in frequent and costly battery replacements. To address the impact of PSOC on deep-cycle batteries in renewable energy (RE), inverter backup and telecom applications, Trojan Battery has now included Smart Carbon™ as a standard feature in its Solar Industrial and Solar Premium flooded battery lines.

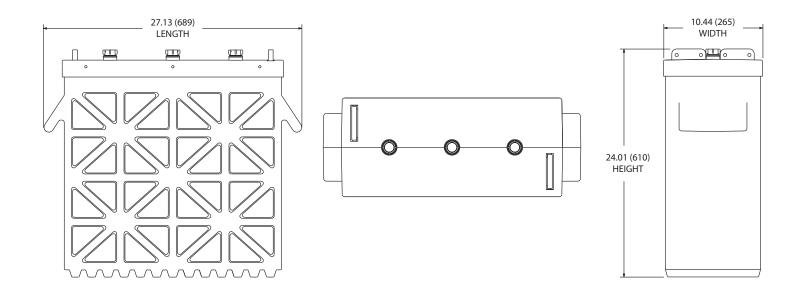
*PERIODIC CHARGE

FREQUENCY

Provide a periodic freshening charge to maintain a SOC greater than the threshold of 70%.

SELF DISCHARGE VS. TIME*

BATTERY DIMENSIONS (shown with IND)



TERMINAL CONFIGURATIONS^D

14 IND	IND TERMINAL	FLIP TOP	BAYONET
	Terminal Height Inches (mm) 1.50 (38) Torque Values: in-Ib (Nm) 100 – 120 (11 – 14) Bolt Size 5/16'' – 18		

VENT CAP OPTIONS

D. Terminal images are representative only.
E. Weight may vary.

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. Height taken from bottom of the battery to the highest point on the battery. Heights may vary depending on type of terminal. Α.

B. C.



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



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