

DATA SHEET



MODEL SIND 06 920

VOLTAGE 6V

CAPACITY 920Ah @ 100Hr

MATERIAL Polypropylene (internal cell container) Polyethylene (outer container)

DIMENSIONS Inches (mm)

BATTERY Deep-Cycle Flooded/Advanced Lead Acid Battery

COLOR Maroon

WATERING Single-Point Watering Kit (Optional)

PRODUCT HIGHLIGHTS Smart Carbon™ for Improved Performance

17 Years Battery Life Based on IEC 61427



6V

PRODUCT + PHYSICAL SPECIFICATIONS

Model	Terminal Type ^D	Dimensions ^B Inches (mm)		Weight ^E Lbs. (kg)	HydroLink or SPWK	Handles	
		Length	Width	Height ^C			
SIND 06 920	14	22.34 (567)	10.30 (262)	24.01 (610)	315 (143)	SPWK	Molded

ELECTRICAL SPECIFICATIONS

Voltage	Capacity ^A Amp-Hours (Ah)			Energy (kWh)		
CV.	10-Hr	20-Hr	48-Hr	72-Hr	100-Hr	100-Hr
6V	627	708	813	870	920	5.52

CHARGING INSTRUCTIONS

Charger Voltage Settings (at 77°F/25°C)					
System Voltage	6V	12V	24V	48V	
Maximum Charge Current (% of C ₂₀ Rate)*	13%				
Maximum Absorption Phase Time (hours)	4				
Absorption Voltage **	7.20	14.40	28.80	57.60	
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.

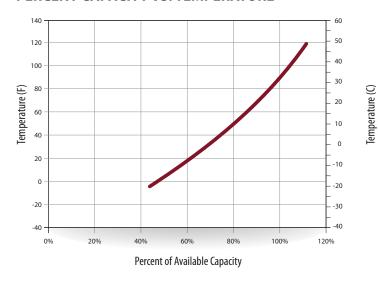
CHARGING TEMPERATURE COMPENSATION

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

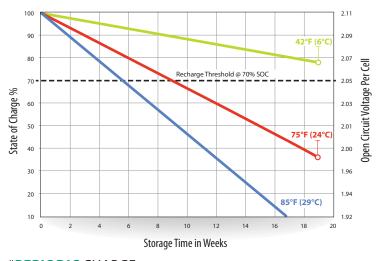
OPERATIONAL DATA

Operating Temperature	Self Discharge
-4°F to 122°F (-20°C to +50°C). At temperatures below 32°F (0°C) mainta state of charge greater than 60%.	5 – 15% per month depending on storage temperature conditions.

PERCENT CAPACITY VS. TEMPERATURE



SELF DISCHARGE VS. TIME*



*PERIODIC CHARGE

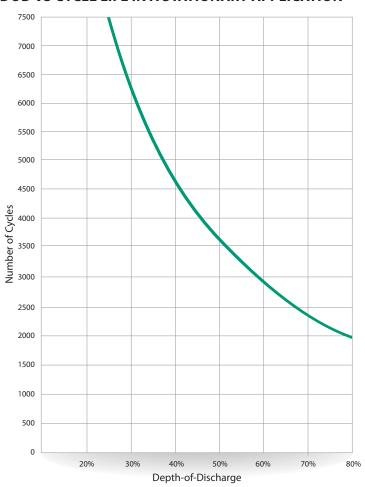
FREQUENCY

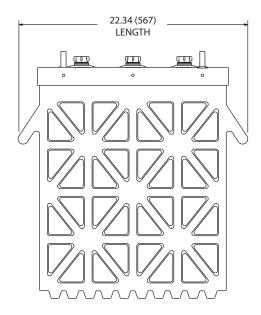
Provide a periodic freshening charge to maintain a SOC greater than the threshold of 70%.

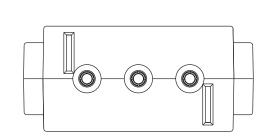
STATE OF CHARGE MEASURE OF OPEN-CIRCUIT VOLTAGE

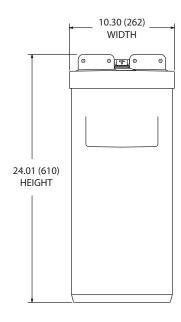
Percentage Charge	Specific Gravity	Cell	6-Volt
100	1.260	2.110	6.33
90	1.246	2.090	6.27
80	1.227	2.070	6.21
70	1.207	2.050	6.15
60	1.187	2.030	6.09
50	1.165	2.010	6.03
40	1.142	1.990	5.97
30	1.119	1.960	5.88
20	1.096	1.940	5.82
10	1.072	1.920	5.76

DOD VS CYCLE LIFE IN A STATIONARY APPLICATION









TERMINAL CONFIGURATIONS



VENT CAP OPTIONS

Flip Top	Bayonet

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.



A. The amount of amp-hours (Ah) a battery can deliver when discharged at a constant rate at 86°F (30°C) 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.

 $^{{\}sf C. Height\, taken\, from\, bottom\, of\, the\, battery\, to\, the\, highest\, point\, on\, the\, battery. Heights\, may\, vary\, depending\, on\, type\, of\, terminal.}$

D. Terminal images are representative only.

E. Weight may vary