

SOLAR INDUSTRIAL LINE BATTERIES

for Renewable Energy / Hybrid System / Backup Power Applications

PRODUCT LINE SHEET



BATTERY Flooded/wet lead-acid battery

COLOR Maroon (case/cover)

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

WATERING Single-Point Watering Kit (Optional)

PRODUCT HIGHLIGHTS Smart Carbon™ for Improved Performance

17 Years Battery Life Based on IEC 61427



Trojan's Solar Industrial Line of deep-cycle batteries is the newest addition to Trojan's lineage of high-quality flooded batteries. The Solar Industrial Line is engineered specifically to support renewable energy systems with large daily loads where the batteries are cycled regularly. These high amp-hour capacity batteries are ideal for use in large off-grid photovoltaic (PV) systems, off-grid hybrid PV systems, grid-tied PV systems with battery backup, smart grid peak shifting systems and a variety of other applications. In addition, Trojan has addressed the issue of partial state of charge (PSOC) by introducing our proprietary new technology, Smart Carbon™, to our Solar Industrial Line of deep-cycle batteries. Tested to meet industry standards, the Solar Industrial Line features advanced battery technologies that deliver reliable power and is housed in a dual container construction for enhanced battery protection. Trojan's Solar Industrial Line is the perfect combination of performance and function.

PRODUCT SPECIFICATION

BCI GROUP	ТҮРЕ	VOLTAGE	CAPACITY A Amp-Hours (Ah)				ENERGY (kWh)	Default	DIMENSIONS ^B Inches (mm)			WEIGHT E	HydroLink	
SIZE			10-Hr Rate	20-Hr Rate	48-Hr Rate	72-Hr Rate	100-Hr Rate	100-Hr Rate	TERMINAL	Length	Width	Height ^c	lbs. (kg)	or SPWK
	SOL	AR INDU	ISTRIAL L	INE - DEE	P-CYCLE I	FLOODED	BATTERI	ES - DESIG	NED FOR 3	600, CYCL	ES AT 50%	DOD		
N/A	SIND 06 610	6	421	472	540	578	610	3.66	14	15.33 (389)	10.22 (260)	24.01 (610)	220 (100)	SPWK
N/A	SIND 06 920	6	627	708	813	870	920	5.52	14	22.34 (567)	10.30 (262)	24.01 (610)	315 (143)	SPWK
N/A	SIND 06 1225	6	835	942	1083	1159	1225	7.35	14	27.13 (689)	10.44 (265)	24.01 (610)	415 (188)	SPWK
N/A	SIND 04 1685	4	1149	1293	1489	1594	1685	6.74	14	22.34 (567)	10.30 (262)	24.01 (610)	367 (167)	SPWK
N/A	SIND 04 2145	4	1474	1647	1896	2030	2145	8.58	14	27.22 (691)	10.44 (265)	24.01 (610)	465 (211)	SPWK
N/A	SIND 02 1990	2	1393	1547	1771	1889	1990	3.98	14	15.33 (389)	10.22 (260)	24.01 (610)	235 (107)	SPWK
N/A	SIND 02 2450	2	1712	1882	2166	2318	2450	4.90	14	17.33 (440)	10.22 (260)	24.01 (610)	278 (125)	SPWK

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 Wcell. 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. Weight may vary

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.

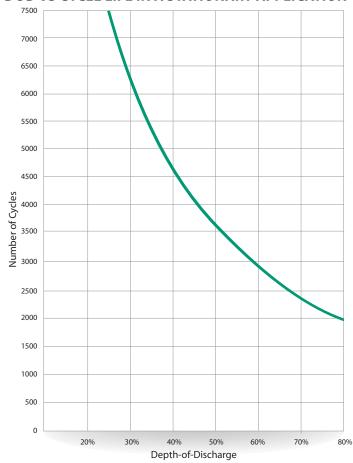
SMART CARBON™

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.

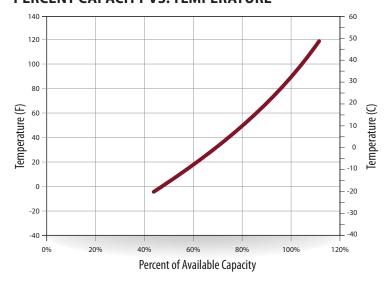
OPERATIONAL DATA

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%.	5 – 15% per month depending on storage temperature conditions.

DOD VS CYCLE LIFE IN A STATIONARY APPLICATION



PERCENT CAPACITY VS. TEMPERATURE



TERMINAL CONFIGURATIONS

14	IND	IND Terminal		
		Terminal Height Inches (mm) 1.50 (38)		
(O ,		Torque Values: in-lb (Nm) 100 - 120 (11 - 14)		
		Bolt: 5/16" - 18		

VENT CAP OPTIONS





Trojan batteries are available worldwide.

We offer outstanding technical support, provided by full-time application engineers.

call 800.423.6569 or + 1.562.236.3000 or visit trojanbattery.com/GoSolar

12380 Clark Street, Santa Fe Springs, CA 90670 • USA or email re@trojanbattery.com