Trojan BATTERY COMPANY
Clean energy for life™

PREMIUM LINE BATTERIES

for Renewable Energy / Hybrid System / Backup Power Applications

PRODUCT LINE SHEET

BATTERY: Flooded/wet lead-acid battery
DIMENSIONS: inches (mm)
COLOR: Maroon (case/cover)
MATERIAL: Polypropylene

SMART CARBON™

Renewable energy applications operate under challenging conditions such as fluctuating or extreme temperatures, remote locations and the intermittent nature of solar and wind power generation. Designed with a 10-year battery life, Trojan Battery's Premium Line of flooded deep-cycle batteries is specifically engineered to withstand the rigorous conditions of renewable energy applications. The Premium Line incorporates advanced battery features such as Trojan's DuraGrid™, MaxGuard® XL separator and Alpha Plus® Paste technologies that provide superior performance, rugged durability and exceptional long life. In addition, Trojan has addressed the issue of partial state of charge (PSOC) by including our proprietary technology, Smart Carbon™, to our Premium Line of deep-cycle batteries. Trojan's product strategy is focused on one simple objective – manufacture the highest quality battery available in the industry, which is why Trojan's Premium Line is tested to IEC standards.

PRODUCT SPECIFICATION

BCI GROUP SIZE	TYPE	VOLTAGE	CAPACITY [A] Amp-Hours (AH)				ENERGY (kWH)	Default TERMINAL	DIMENSIONS [B] Inches (mm)			WEIGHT lbs. (Kg)
			5-Hr Rate	10-Hr Rate	20-Hr Rate	100-Hr Rate	100-Hr Rate		Length	Width	Height [C]	
PREMIUM LINE - DEEP-CYCLE FLOODED BATTERIES - DESIGNED FOR 1600 CYCLES AT 50% DOD												
GC2H	**T-105 RE**	6 VOLT	185	207	225	250	1.50	5	10.30 (262)	7.11 (181)	11.67 (296)	67 (30)
903	**L16RE-A***	6 VOLT	267	299	325	360	2.16	5	11.67 (296)	6.95 (177)	17.56 (446)	115 (52)
903	**L16RE-B***	6 VOLT	303	340	370	410	2.46	5	11.67 (296)	6.95 (177)	17.56 (446)	118 (54)
903	**L16RE-2V***	2 VOLT	909	1021	1110	1235	2.47	5	11.67 (296)	6.95 (177)	17.56 (446)	119 (54)

A. The amount of amp-hours (AH) a battery can deliver when discharged at a constant rate at 80°F (27°C) and maintain a voltage above 1.75 V/cell. Capacities are based on peak performance.
B. Dimensions are based on nominal size. Dimensions may vary depending on type of handle or terminal.
C. Dimensions taken from bottom of the battery to the highest point on the battery. Heights may vary depending on type of terminal.

* Polyon™ Case

Trojan's Premium Line is tested to BCI and IEC 61427 standards.

CHARGING INSTRUCTIONS

CHARGER VOLTAGE SETTINGS (AT 77°F/25°C)	
	Voltage per cell
Absorption charge	2.35-2.45
Float charge	2.20
Equalize charge	2.58

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.

OPERATIONAL DATA

OPERATING TEMPERATURE	SPECIFIC GRAVITY
-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%.	The specific gravity at 100% state-of-charge is 1.280

Premium Line batteries manufactured prior to March 2012 have 1.260 SG value.

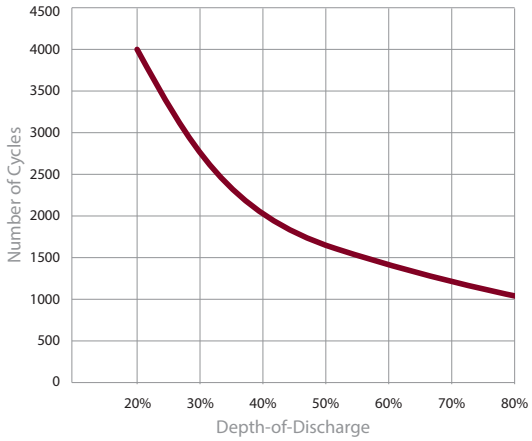
CHARGING TEMPERATURE COMPENSATION

To the Voltage Reading -- Subtract 0.005 volt per cell (VPC) for every 1°C above 25°C or add 0.005 volt per cell for every 1°C below 25°C.

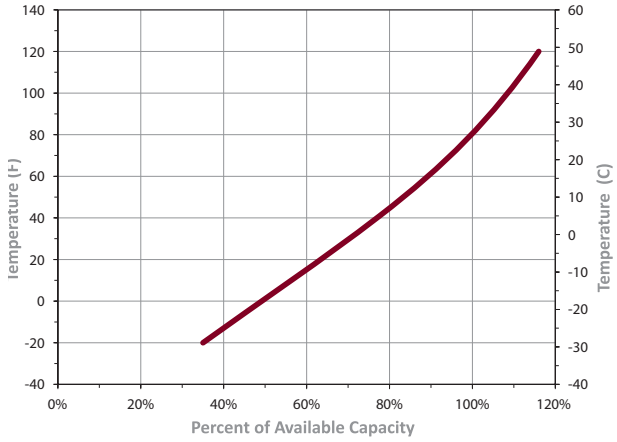
EXPECTED LIFE VS. TEMPERATURE

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.

TYPICAL CYCLE LIFE IN A STATIONARY APPLICATION



CAPACITY VS. TEMPERATURE



TERMINAL CONFIGURATIONS

5	LT	L-Terminal

Terminal Height Inches (mm)
1.70 (43)
Torque Values in-lb (Nm)
100 – 120 (11 – 14)
Bolt Size
5/16"

VENT CAP

Bayonet

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 www.trojanbattery.com

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