

PREMIUM LINE FLOODED

L16RE-B

1600 CYCLES @ 50 % DOD

TRULY DEEP CYCLE – MAXGUARD T2

• BCI Group 903, 6V

Reserve Capacity [Ah@20hr rate]: 370Reserve Capacity [Ah@100hr rate]: 410

• Energy [kWh]: 2.46

Weight: 118 lbs.

• Length: 11.67 in (296 mm)

• Width: 6.95 in (177 mm)

• Height: 17.56 in (446 mm)

LT

• BAYONET / SINGLE POINT







Premium Line Flooded

The Premium Line features:

Alpha Plus® Paste with T2 Technology™ which optimizes porosity development in the active material enabling the active material to be used more effectively. This results in sustained battery performance over a longer period of time.

DuraGrid™ Design provides a thick grid structure that resists corrosion, and when combined with the Alpha Plus Paste with T2 technology, increases overall battery life.

Maxguard® XL Separator is exclusively available in Trojan's Premium and Industrial lines. It features a wide-channel design which increases acid flow for optimum battery performance, and provides even greater resistance to stratification, a typical mode of failure in batteries used in renewable energy systems.

The Polyon™ container is Trojan's ultra-rugged case design which protects against damage caused by harsh environmental conditions, such as moisture and dirt buildup, and safeguards against potential acid leaks.





DATA SHEET

MODEL L16RE-B

VOLTAGE 6V

CAPACITY 370Ah @ 20Hr

MATERIAL Polypropylene

BATTERY TYPE Deep Cycle Flooded / Wet Lead Acid Battery





*Polyon™ Case

PRODUCT + PHYSICAL SPECIFICATIONS

BCI Group Size	Туре	Voltage	Cell(s)	Terminal Type ⁶	Din	nensions ^c Inches (mm)	Weight Lbs. (kg)
903	L16RE-B*	6	3	5	Length	Width	Height ^F	118 (52)
					11.67 (296)	6.95 (177)	17.56 (446)	

ELECTRICAL SPECIFICATIONS

Cranking Pe	erformance	Capacity	^A Minutes	Capacity ^B Amp-Hours (AH)			Energy (kWh)	Internal Resistance $(m\Omega)$	Short Circuit Current (amps)				
C.C.A. ^D @ 0°F (- 18°C)	C.A. ^E @ 32°F (0°C)	@ 25 Amps	@ 75 Amps	2-Hr	5-Hr	10-Hr	20-Hr	48-Hr	72-Hr	100-Hr	100-Hr	_	_
_	_	766	180	241	303	340	370	394	403	410	2.46		

CHARGING INSTRUCTIONS

Charger Voltage Settings (at 77°F/25°C)					
System Voltage	6V	12V	24V	36V	48V
Bulk Charge	7.41	14.82	29.64	44.46	59.28
Float Charge	6.75	13.50	27.00	40.50	54.00
Equalize Charge	8.10	16.20	32.40	48.60	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.

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 Sel	f Discharge
-4°Fto 122°F(-20°Cto 50°C) At temperatures below 32°F(0°C)	Less than 3% per month depending on storage temperature conditions
maintain a state of charge greater than 60%	









70 1.217 60 1.195 50 1.172

40 1.148 30 1.124 20 1.098 10 1.073



Percentage Charge

100

90

80





STATE OF CHARGE MEASURE OF OPEN-CIRCUIT VOLTAGE

Cell

2.122

2.103

2.083

2.062

2.040

2.017

1.993

1.969

1.943

Specific Gravity

1.277

1.258

1.238



6Volt

6.37

6.31

6.25

6.19

6.12

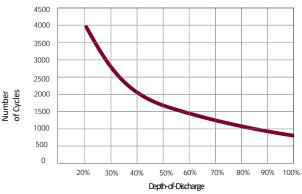
6.05

5.98

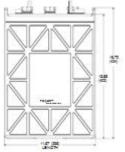
5.91

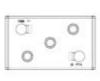
5.83

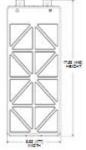
TYPICAL CYCLE LIFE IN A STATIONARY APPLICATION



BATTERY DIMENSIONS







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.

PERCENT CAPACITY VS. TEMPERATURE

Percent of Available Capacity

Terminal Height Inches (mm)

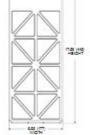
Torque Values in-lb (Nm) 95 - 105 (11 - 12)

L-Terminal

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 Industrial and Premium flooded battery lines.

in temperature will have a major influence on battery life.

EXPECTED LIFE VS. TEMPERATURE



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

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

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

140

120 100

80 **Temperatur**

60

6E/E)

20

0 -20

-40

0%

TERMINAL CONFIGURATION

20%

1.70 (43)

Bolt 3/8"

- Terminal images are representative only.

 A boost charge should be performed every 6 months when batteries are in storage





120%

100%