



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

The Signature Line of deep-cycle flooded batteries is the flagship of Trojan’s product portfolio. Engineered to provide rugged durability and outstanding performance, Trojan’s Signature Line is perfectly suited for use in renewable energy systems where lowest life-cycle cost is the key consideration. An all-around power house, the Signature Line features Trojan’s historically-proven engineering with T2 Technology, an advanced battery technology for maximum sustained performance, longer life and increased total energy. The combination of the Signature Line’s unique grid design and technology, advanced Maxguard T2 separator and Trojan’s proprietary Alpha Plus Paste increases both the batteries sustained capacity and total overall ampere-hours resulting in more operating power.

PRODUCT SPECIFICATION

BCI GROUP SIZE	TYPE	CAPACITY ^A Amp-Hours (AH)							ENERGY (kWh)	VOLTAGE	TERMINAL Type**	DIMENSIONS ^B Inches (mm)			WEIGHT lbs. (kg)
		2-Hr Rate	5-Hr Rate	10-Hr Rate	20-Hr Rate	48-Hr Rate	72-Hr Rate	100-Hr Rate				100-Hr Rate	Length	Width	
SIGNATURE LINE - DEEP-CYCLE FLOODED BATTERIES															
24	24TMX	55	70	78	85	91	93	94	1.13	12 VOLT	5	11-1/4 (286)	6-3/4 (171)	9-3/4 (248)	47 (21)
27	27TMX	68	85	97	105	112	114	117	1.40	12 VOLT	5	12-3/4 (324)	6-3/4 (171)	9-3/4 (248)	55 (25)
27	27TMH	75	95	106	115	122	125	128	1.54	12 VOLT	5	12-3/4 (324)	6-3/4 (171)	9-3/4 (248)	61 (28)
30H	30XHS	85	105	120	130	138	142	144	1.73	12 VOLT	5	13-15/16 (355)	6-3/4 (171)	10-1/16 (256)	66 (30)
N/A	J150	104	120	134	150	159	163	166	1.99	12 VOLT	2	13-13/16 (351)	7-1/8 (181)	11-1/8 (283)	84 (38)
921	J185P-AC*	133	168	189	205	218	223	226	2.71	12 VOLT	6	15 (381)	7 (178)	14-5/8 (371)	114 (52)
921	J185H-AC*	146	185	207	225	240	245	249	2.99	12 VOLT	6	15 (381)	7 (178)	14-5/8 (371)	128 (58)
GC2	T-105	146	185	207	225	240	245	250	1.50	6 VOLT	5	10-3/8 (264)	7-1/8 (181)	10-7/8 (276)	62 (28)
GC2	T-125	156	195	221	240	256	262	266	1.60	6 VOLT	2, 4	10-3/8 (264)	7-1/8 (181)	10-7/8 (276)	66 (30)
GC2H	T-145	169	215	239	260	277	283	287	1.72	6 VOLT	2, 4	10-3/8 (264)	7-1/8 (181)	11-5/8 (295)	72 (33)
902	J305P-AC*	215	271	304	330	351	360	367	2.20	6 VOLT	6	11-5/8 (295)	7 (178)	14-3/8 (365)	96 (44)
902	J305H-AC*	234	295	331	360	383	392	400	2.40	6 VOLT	6	11-5/8 (295)	7 (178)	14-3/8 (365)	98 (45)
903	L16P	273	344	386	420	447	458	467	2.80	6 VOLT	5	11-5/8 (295)	7 (178)	16-3/4 (424)	114 (52)
903	L16H	283	357	400	435	463	474	483	2.89	6 VOLT	5	11-5/8 (295)	7 (178)	16-3/4 (424)	125 (57)

A. The amount of amp-hours (AH) a battery can deliver when discharged at a constant rate at 77°F (25°C) and maintain a voltage above 1.75 V/cell. Capacities are based on nominal performance.

* Polyon™ Case

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.

** Additional terminals available

Trojan’s battery testing procedures adhere to both BCI and IEC test 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	SELF DISCHARGE	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%.	Up to 4% per week	The specific gravity at 100% state-of-charge is 1.280

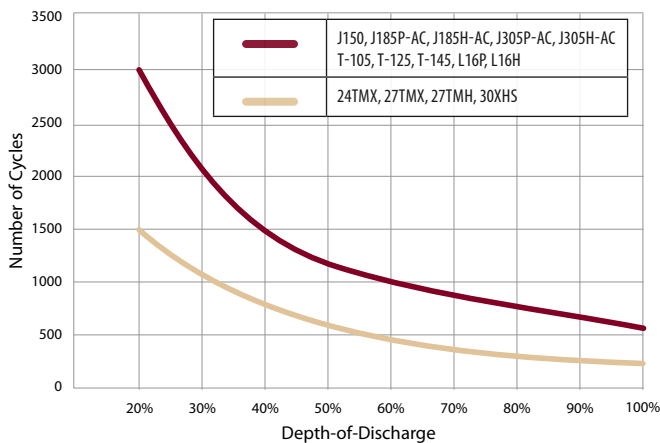
CHARGING TEMPERATURE COMPENSATION

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.

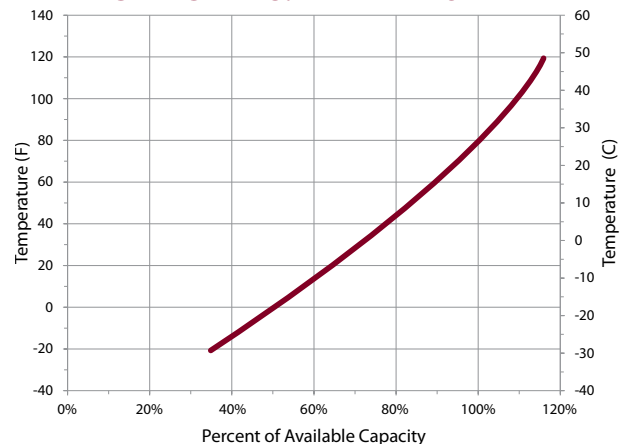
EXPECTED LIFE VS. TEMPERATURE

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

2 EHPT Embedded High Profile Terminal  <i>Terminal Height Inches (mm)</i> 1-1/2 (38) <i>Torque Values in-lb (Nm)</i> 95 – 105 (11 – 12) <i>Bolt Size</i> 5/16 – 18	4 EUT Embedded Universal Terminal  <i>Terminal Height Inches (mm)</i> 1-1/8 (28) <i>Torque Values in-lb (Nm)</i> 95 – 105 (11 – 12) <i>Through-hole Diameter (mm)</i> 5/8 (9.5)	5 LT L-Terminal  <i>Terminal Height Inches (mm)</i> 1-3/4 (43) <i>Torque Values in-lb (Nm)</i> 100 – 120 (11 – 14) <i>Through-hole Diameter (mm)</i> 3/8 (10)
6 DT Automotive Post & Stud Terminal  <i>Terminal Height Inches (mm)</i> 29/32 (20) <i>Torque Values in-lb (Nm)</i> AP: 50 – 70 (6 – 8) ST: 120 – 180 (14 – 20) <i>Bolt Size</i> 5/16 – 18		

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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.trojanbatteryRE.com

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