

PRODUCT LINE SHEET



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	VOLTAGE	CAPACITY ^A Amp-Hours (AH)				ENERGY (kWH)		Default TERMINAL ^{**}	DIMENSIONS ^B Decimals (mm)			WEIGHT lbs. (kg)
			5-Hr Rate	10-Hr Rate	20-Hr Rate	100-Hr Rate	100-Hr Rate	Length		Width	Height ^C		
SIGNATURE LINE - DEEP-CYCLE FLOODED BATTERIES - 1,200 CYCLES @ 50% DOD													
N/A	J150	12 VOLT	120	134	150	166	1.99	2	13.70 (348)	7.13 (181)	11.13 (283)	84 (38)	
921	J185P-AC*	12 VOLT	168	189	205	226	2.71	6	14.97 (380)	6.91 (176)	14.71 (374)	114 (52)	
GC2	T-605	6 VOLT	175	193	210	232	1.39	1	10.30 (262)	7.11 (181)	11.07 (281)	58 (26)	
921	J185H-AC*	12 VOLT	185	207	225	249	2.99	6	14.97 (380)	6.91 (176)	14.71 (374)	128 (58)	
GC2	T-105	6 VOLT	185	207	225	250	1.50	1	10.30 (262)	7.11 (181)	11.07 (281)	62 (28)	
GC2	T-125	6 VOLT	195	221	240	266	1.60	1	10.30 (262)	7.11 (181)	11.07 (281)	66 (30)	
GC2H	T-145	6 VOLT	215	239	260	287	1.72	1	10.30 (262)	7.11 (181)	11.90 (302)	72 (33)	
902	J305P-AC*	6 VOLT	271	304	330	367	2.20	6	11.66 (296)	6.94 (176)	14.42 (366)	96 (44)	
902	J305H-AC*	6 VOLT	295	331	360	400	2.40	6	11.66 (296)	6.94 (176)	14.42 (366)	98 (45)	
903	L16P*	6 VOLT	344	386	420	467	2.80	5	11.66 (296)	6.94 (176)	16.74 (425)	114 (52)	
903	L16H*	6 VOLT	357	400	435	483	2.89	5	11.66 (296)	6.94 (176)	16.74 (425)	125 (57)	
SIGNATURE LINE - DEEP-CYCLE FLOODED BATTERIES - 600 CYCLES @ 50% DOD													
24	24TMX	12 VOLT	70	78	85	94	1.13	9	10.92 (277)	6.62 (168)	9.25 (235)	47 (21)	
27	27TMX	12 VOLT	85	97	105	117	1.40	9	12.72 (323)	6.60 (168)	9.24 (235)	55 (25)	
27	27TMH	12 VOLT	95	106	115	128	1.54	9	12.72 (323)	6.60 (168)	9.24 (235)	61 (28)	
30H	30XHS	12 VOLT	105	120	130	144	1.73	9	14.00 (355)	6.73 (171)	10.07 (256)	66 (30)	

A. The amount of amp-hours (AH) a battery can deliver when discharged at a constant rate at 80°F (27°C) and 86°F (30°C) for the 5-Hour rate and maintain a voltage above 1.75 V/cell. Capacities are based on peak 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	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

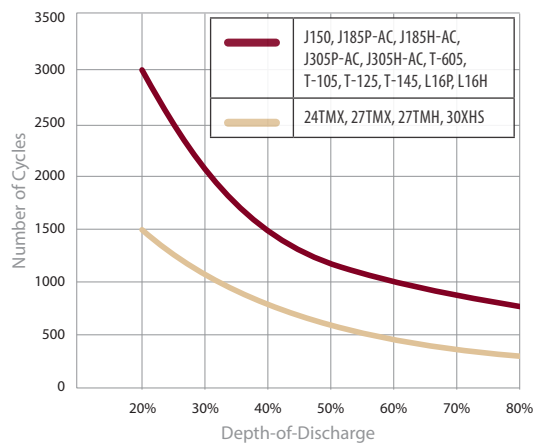
CHARGING TEMPERATURE COMPENSATION

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.

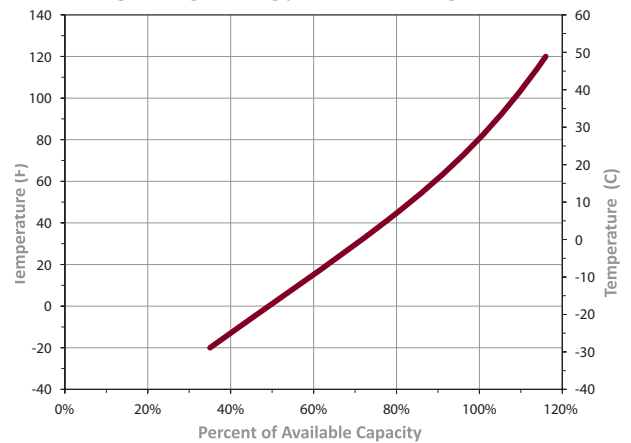
EXPECTED LIFE VS. TEMPERATURE

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

1 ELPT Embedded Low Profile Terminal  <i>Terminal Height Inches (mm)</i> 1.22 (31) <i>Torque Values in-lb (Nm)</i> 95 – 105 (11 – 12) <i>Bolt Size</i> 5/16"	2 EHPT Embedded High Profile Terminal  <i>Terminal Height Inches (mm)</i> 1.50 (38) <i>Torque Values in-lb (Nm)</i> 95 – 105 (11 – 12) <i>Bolt Size</i> 5/16"	4 EUT Embedded Universal Terminal  <i>Terminal Height Inches (mm)</i> 1.10 (28) <i>Torque Values in-lb (Nm)</i> 95 – 105 (11 – 12) <i>Bolt Size</i> 5/16"
5 LT L-Terminal  <i>Terminal Height Inches (mm)</i> 1.70 (43) <i>Torque Values in-lb (Nm)</i> 100 – 120 (11 – 14) <i>Bolt Size</i> 5/16"	6 DT Automotive Post & Stud Terminal  <i>Terminal Height Inches (mm)</i> .69 (18) <i>Torque Values in-lb (Nm)</i> AP: 50 – 70 (6 – 8) ST: 120 – 180 (14 – 20) <i>Bolt Size</i> 5/16"	7 UT Universal Terminal  <i>Terminal Height Inches (mm)</i> 1.10 (28) <i>Torque Values in-lb (Nm)</i> 95 – 105 (11 – 12) <i>Bolt Size</i> 5/16"

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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.trojanbattery.com

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