

MODEL **TR 12.8-92 Li-ion**  
 VOLTAGE **12.8V**  
 NOMINAL CAPACITY **92Ah (1,180Wh)**  
 CASE **PC/PBT Resin Blend, IP67 Enclosure, UL94 V-0**  
 BATTERY **Deep-Cycle Lithium Iron Phosphate**  
 COLOR **Maroon**  
 CYCLE LIFE **>5,000 Cycles @ 80% DOD\***  
 INTELLIGENCE **Integrated Microprocessor, State of Charge Gauge, Integrated Contactor, Current Sensor, Fuse**



## 12.8 VOLT

### PHYSICAL SPECIFICATIONS

BCI	Model	Terminal Type	Dimensions Inches (mm)			Weight Lbs. <sup>A</sup> (kg)	Handles	Installation Orientation
Group 24	TR 12.8 - 92	M8 - 1.25 Threaded Hole	Length	Width	Height	27 (12.3)	Molded	Horizontal and Vertical
			10.2 (259)	6.6 (168)	8.5 (216)			

### ELECTRICAL SPECIFICATIONS

Voltage	Capacity Amp-Hours (Ah)			Energy (kWh)	Short Circuit Current (A)
	12.8V	5-Hr (18A)	10-Hr (9A)	20-Hr (4.6A)	
	92	92	92.5	1.18	Fused at 400 Amps

### OPERATIONAL DATA

Operating Temperature Range	Storage Temperature Range
-4°F to 140°F (-20°C to 60°C) At Temperatures Below 32°F (0°C) Charging Current Reduced	-40°F to 140°F (-40°C to 60°C)

### CHARGING INSTRUCTIONS

Charger Settings	
Recommended Charging Voltage	14.4 - 14.8V
Recommended Float Voltage	13.8V
Maximum Charging Current @ Temperature	
> 32°F (0°C)	92A
14° to 32°F (-10° to 0°C)	12.5A
-4° to 14°F (-20° to -10°C)	5A

### RECYCLE RESPONSIBLY



**Do not mix with Lead Acid Batteries when Recycling.**

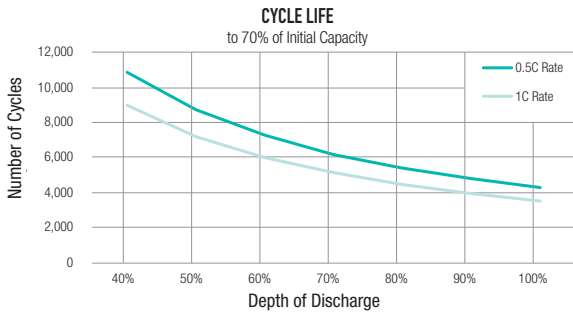
\*To 70% of Initial Capacity.

### OTHER SPECIFICATIONS

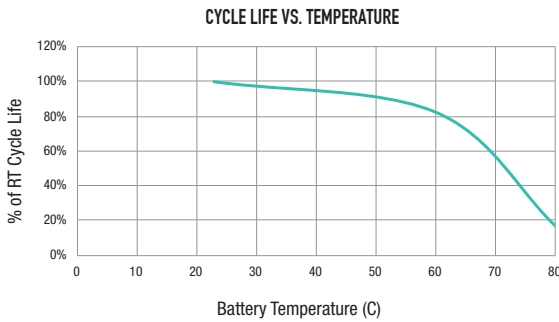
Electrical Features	
Continuous Discharge Current	250 Amps
Pulse Discharge Current @ 77°F (25°C)	350 Amps for 30 Seconds
Communication	CAN-Open
Reserve Capacity @ 25 Amps	220 Min
BMS Protections	Cell-Level Voltage, Temperature, Over Voltage, Under Voltage, Over-current
BMS Functions	Cell Balancing, State of Charge
Safety Systems	Contactor, Fuse, BMS
Series Connections	Up to 4S (51.2V)
Parallel Connections	Up to 20P
Discharge Voltage Cutoff	9.5V ± 5%
Charge Voltage Cutoff	15.2V ± 5% for 5 Seconds
Data Logging	Total Lifetime Amp Hours, Recent Faults
Other Features	
Environmental Protection	IP67
Shipping Classification	UN3480, Class 9, UN38.3 Certified
Case Flame Rating	Non-Flammable UL94 V-0

**NOTE:** See Trillium User's Guide for Proper Operation.

## CYCLE LIFE

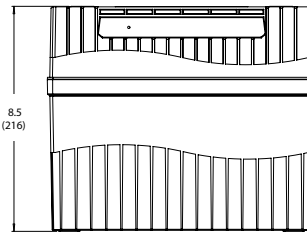
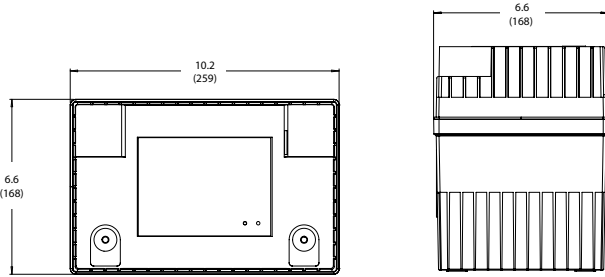


## CYCLE LIFE VS. TEMPERATURE



## BATTERY DIMENSIONS

Dimensions Inches (mm) - shown with M8



Ask your Trojan Representative for an accessory to match the height of the Trojan T-105 Battery. Note: Available in 2019

## TERMINAL CONFIGURATIONS<sup>B</sup>

M8



M8 - 1.25 x 9 mm Threaded Hole

## SAFETY/AGENCY INFORMATION

### Certified to the Following

UN/DoT 38.3	IEC 62133
ROHS Compliant	UL 2271 (Q1 2019)*
TUV*	UL 1642 (Cells)

\*Pending

UN38.3 PASSED  
TRANSPORTATION  
SAFETY  
CERTIFIED

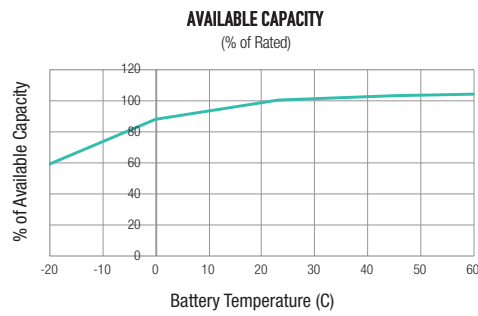


TROJAN BATTERY  
COMPANY WITH  
QUALITY SYSTEM  
CERTIFIED BY DNV  
= ISO 9001:2015 =

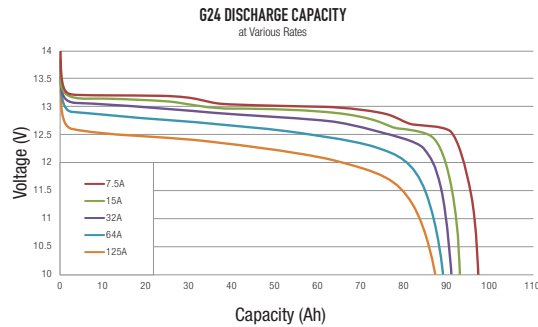
A. Weight may vary.

B. Terminal images are representative only.

## AVAILABLE CAPACITY



## G24 DISCHARGE CAPACITY



## STATE OF CHARGE INDICATOR (GAUGE)

Trillium Group 24 and Group 27's built-in smart battery features include a battery status push button and indicator light on the top of the case. After the button is pressed, the indicator light will show one of the following color patterns for five seconds:

Light Color Pattern	Battery Condition	Gauge
Solid Green	90% - 100% Capacity Remaining	
Blinking Green	50% - 90% Capacity Remaining	
Solid Yellow	35% - 50% Capacity Remaining	
Blinking Yellow	20% - 35% Capacity Remaining	
Solid Red	10% - 20% Capacity Remaining	
Blinking Red	0% - 10% Capacity Remaining	
Blinking Green and Red	Battery is shut off	

**NOTE:** Consult Trillium User's Guide for more information at [trojanbattery.com](http://trojanbattery.com).

## COMMUNICATIONS CONNECTOR

Battery Side	User Side
Deutsch DTM04-3P	Deutsch DTM06-3S
Pin 1: GND/B-	Pin 1: GND/B-
Pin 2: CAN H	Pin 2: CAN H
Pin 3: CAN L	Pin 3: CAN L



800.423.6569 / +1.562.236.3000 / [trojanbattery.com](http://trojanbattery.com)

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