

DATA SHEET



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*

Integrated Microprocessor, State of Charge Gauge, INTELLIGENCE

Integrated Contactor, Current Sensor, Fuse





12.8 VOLT

PHYSICAL SPECIFICATIONS

BCI	Model	Terminal Type	Di	mensions Inches (m	m)	Weight Lbs. A (kg)	Handles	Installation Orientation
Group 2	4 TR 12.8 - 92	M8-1.25 x 9mm	Length	Width	Height	27 (12)	Molded	Horizontal and Vertical
Group 2	4 IN 12.0 - 92	Threaded Hole	10.16 (258)	6.61 (168)	8.50 (216)	21 (12)	iviolaea	HUHZUHILAH AHU VEHILGAI

ELECTRICAL SPECIFICATIONS

Voltage	Capac	ity Amp-Hoເ	ırs (Ah)	Energy (kWh)	Short Circuit Current (A)	
12.8V	5-Hr (18A)	10-Hr (9A)	20-Hr (4.6A)	20-Hr	Fused at 400 Amps	
12.00	92	92	92.5	1.18	ruseu at 400 Amps	

OPERATIONAL DATA

Operating Temperature Range	Storage Temperature Range
-4°F to 140°F (-20°C to 60°C) At Temperatures Below 73°F (23°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		
>73°F (>23°C)	92A	
41° to 73°F (5° to 23°C)	46A	
32° to 41°F (0° to 5°C)	13A	
14° to 32°F (-10° to 0°C)	5A	
-4° to 14°F (-20° to -10°C)	DISCHARGE ONLY	

RECYCLE	RESPO	NSIBLY







Do not mix with Lead Acid Batteries when Recycling.

*To 70% of Initial Capacity.



OTHER SPECIFICATIONS

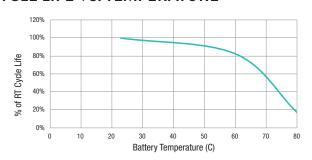
Electrical Features			
Maximum Continuous Discharge Current @ 77°F (25°C)	92A		
Maximum Pulse Discharge Current @ 77°F (25°C)	250A for 30 seconds		
Maximum Instantaneous Discharge Current	400A		
Communication	CAN-Open		
Reserve Capacity @ 25 Amps	220 Min		
BMS Protections	Cell-Level Voltage, Temperature, 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	10.0V ± 5%		
Charge Voltage Cutoff	15.6V ± 5%		
Other Features			
Environmental Protection	IP67		
Shipping Classification	UN3480, Class 9, UN38.3 Certified		
Case Flame Rating	Non-Flammable UL94 V-0		

NOTE: Please refer to the User's Guide, available at www.trojanbattery.com, for important safety-related information.

CYCLE LIFE

TO 70% INITIAL CAPACITY 12.000 0.5C Rate 10,000 Number of Cycles 1C Rate 8,000 6,000 4,000 2,000 40% 50% 80% 90% 100% Depth of Discharge

CYCLE LIFE VS. TEMPERATURE



G24 DISCHARGE CAPACITY

AVAILABLE CAPACITY

% of Available Capacity

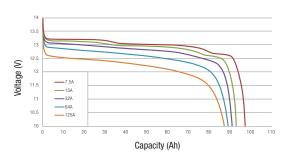
120

100

60

-10

-20

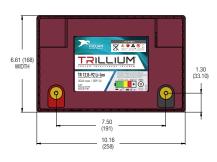


PERCENT OF RATED

Battery Temperature (C)

BATTERY DIMENSIONS

Dimensions Inches (mm) - shown with M8







50

60

TERMINAL CONFIGURATIONS⁸



SAFETY/AGENCY INFORMATION

Certified to the Following	
UN/DoT 38.3	IEC 62133
ROHS Compliant	UL 1642 (Cells)







- Weight may vary.
 Terminal images are representative only.

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	SOUD LIGHT BUNKING LIGHT
Solid Yellow	35% - 50% Capacity Remaining	RATTERY LEVEL INDICATOR
Blinking Yellow	20% - 35% Capacity Remaining	PRESS
Solid Red	10% - 20% Capacity Remaining	100% 50% 20% 0% STATUS
Blinking Red	0% - 10% Capacity Remaining	100% 50% 20% 0% STATUS
Blinking Green and Red	Battery is shut off	

NOTE: Consult Trillium User's Guide for more information at 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

