

MODEL	TR 12.8-110 Li-ion
VOLTAGE	12.8V
NOMINAL CAPACITY	110Ah (1,400Wh)
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. ^A (kg)	Handles	Installation Orientation
			Length	Width	Height			
Group 27	TR 12.8 - 110	5/16"-18 x 0.625" Threaded Stud and 1/4"-20 x 0.23" Threaded Hole	12.07 (307)	6.57 (167)	8.63 (219)	30 (14)	Molded	Horizontal and Vertical

ELECTRICAL SPECIFICATIONS

Voltage	Capacity Amp-Hours (Ah)			Energy (kWh)	Short Circuit Current (A)
	5-Hr (22A)	10-Hr (11A)	20-Hr (5.5A)	20-Hr	
12.8V	110	110	111	1.4	Fused at 500 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)	110A
41° to 73°F (5° to 23°C)	56A
32° to 41°F (0° to 5°C)	15A
14° to 32°F (-10° to 0°C)	6A
-4° to 14°F (-20° to -10°C)	DISCHARGE ONLY

OTHER SPECIFICATIONS

Electrical Features	
Maximum Continuous Discharge Current @ 77°F (25°C)	110A
Maximum Pulse Discharge Current @ 77°F (25°C)	250A for 30 seconds
Maximum Instantaneous Discharge Current	500A
Communication	N/A
Reserve Capacity @ 25 Amps	265 Min
BMS Protections	Cell-Level Voltage, Temperature, Over Voltage, Under Voltage, Over-current
BMS Functions	Cell Balancing, State of Charge
Safety Systems	Contact, Fuse, BMS
Series Connections	Up to 4S (51.2V)
Parallel Connections	Up to 20P
Discharge Voltage Cutoff	8.0V ± 5%
Charge Voltage Cutoff	15.2V ± 5%
Other Features	
Environmental Protection	IP67
Shipping Classification	UN3480, Class 9, UN38.3 Certified
Case Flame Rating	Non-Flammable UL94 V-0

RECYCLE RESPONSIBLY



Do not mix with Lead Acid Batteries when Recycling.

*To 70% of Initial Capacity.

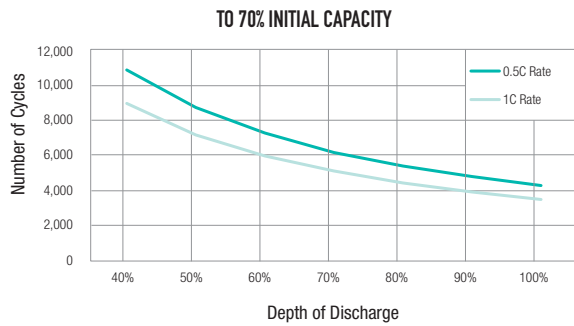


System Considerations

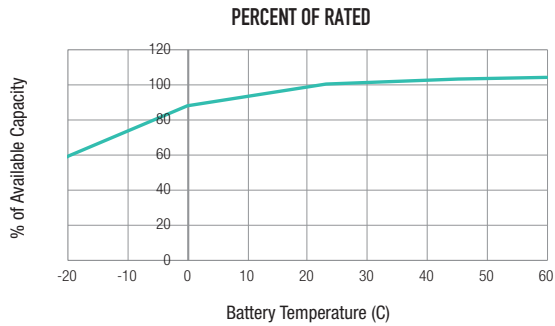
As outlined in the User's Guide, Trillium batteries will automatically shut down under excessive use conditions in order to prevent damage to the battery and connected equipment. This will generally result in total loss of power to equipment. Systems must be implemented to ensure that sudden loss of power does not result in hazardous system behavior.

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

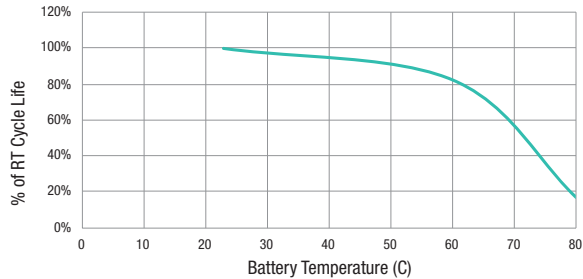
CYCLE LIFE



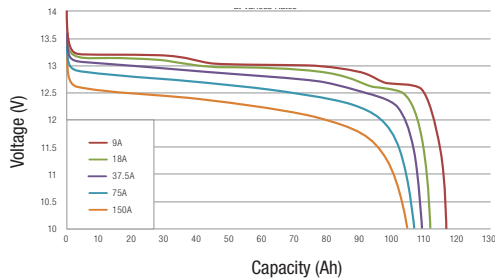
AVAILABLE CAPACITY



CYCLE LIFE VS. TEMPERATURE

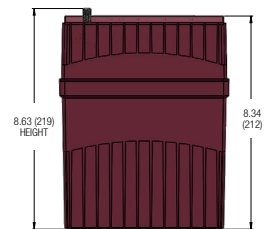
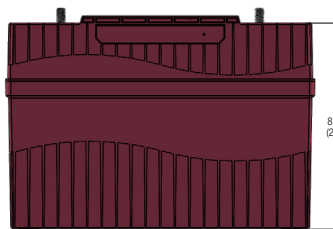
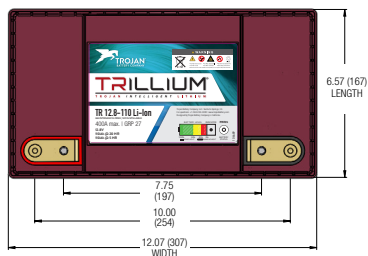


G27 DISCHARGE CAPACITY



BATTERY DIMENSIONS

Dimensions Inches (mm) - shown with M8 and Stud



TERMINAL CONFIGURATIONS^B

Stud



Bolt:
1/4" - 20 x 0.24" Threaded Hole &
5/16" - 18 x 0.625" Threaded Stud

SAFETY/AGENCY INFORMATION

Certified to the Following

UN/DoT 38.3	IEC 62133
ROHS Compliant	UL 1642 (Cells)

UN38.3 PASSED
TRANSPORTATION
SAFETY
CERTIFIED



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

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.

A. Weight may vary.

B. Terminal images are representative only.



800.423.6569 / +1.562.236.3000 / trojanbattery.com

TRJN_Trillium_12.8-110_101419

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