

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 Stud and 1/4" - 20 Threaded Hole	12.1 (307)	6.6 (168)	8.7 (221)	30 (13.6)	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 32°F (0°C) Charging Current Reduced	-40°F to 140°F (-40°C to 60°C)

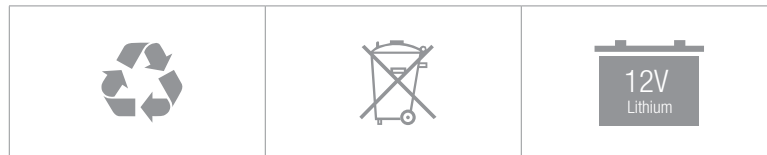
CHARGING INSTRUCTIONS

Charger Settings	
Recommended Charging Voltage	14.4 - 14.8V
Recommended Float Voltage	13.8V
Maximum Charging Current @ Temperature	
> 32°F (0°C)	110A
14° to 32°F (-10° to 0°C)	15A
-4° to 14°F (-20° to -10°C)	6A

OTHER SPECIFICATIONS

Electrical Features	
Continuous Discharge Current	300 Amps
Pulse Discharge Current @ 77°F (25°C)	400 Amps for 30 Seconds
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	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

RECYCLE RESPONSIBLY

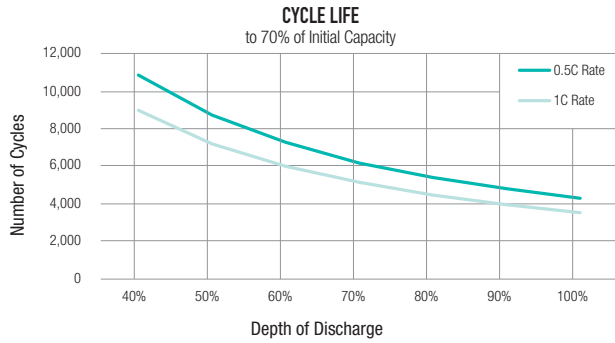


Do not mix with Lead Acid Batteries when Recycling.

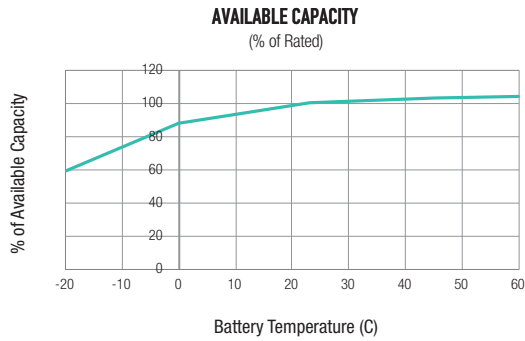
*To 70% of Initial Capacity.

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

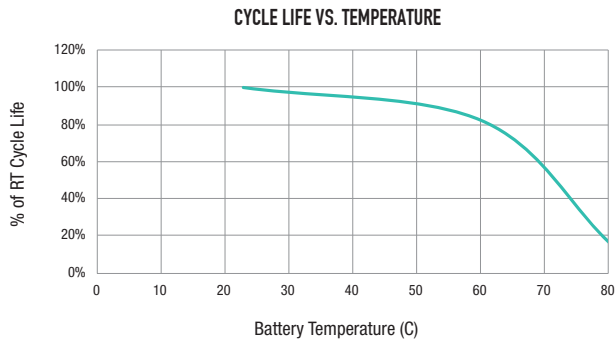
CYCLE LIFE



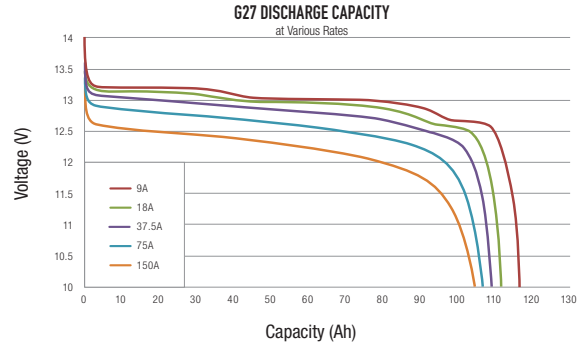
AVAILABLE CAPACITY



CYCLE LIFE VS. TEMPERATURE

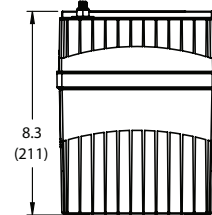
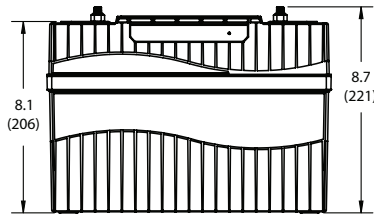
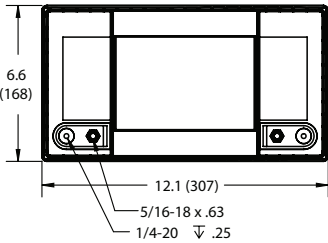


G27 DISCHARGE CAPACITY



BATTERY DIMENSIONS

Dimensions Inches (mm) - shown with M8 and Stud



TERMINAL CONFIGURATIONS^B

Stud



Bolt:
1/4 - 20 x 0.23" 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 2271 (Q1 2019)*
TUV*	UL 1642 (Cells)

*Pending



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.