

|                         |                                                                                                        |
|-------------------------|--------------------------------------------------------------------------------------------------------|
| <b>MODEL</b>            | TR GC2-48-G                                                                                            |
| <b>VOLTAGE</b>          | 51.2V                                                                                                  |
| <b>NOMINAL CAPACITY</b> | 30Ah (1,536Wh)                                                                                         |
| <b>CASE</b>             | ABS/FR                                                                                                 |
| <b>BATTERY</b>          | Deep-Cycle Lithium Iron Phosphate                                                                      |
| <b>COLOR</b>            | Maroon                                                                                                 |
| <b>CYCLE LIFE</b>       | > 4,000 Cycles @ 70% DOD*                                                                              |
| <b>INTELLIGENCE</b>     | Multiple Microprocessors, State of Charge Gauge with Aging Compensation, Current Sensor, Fuse, CAN Bus |



### PHYSICAL SPECIFICATIONS

| BCI | MODEL       | TERMINAL TYPE*      | TERMINAL TORQUE IN-LBS (NM) | DIMENSIONS INCHES (MM) |           |            | WEIGHT <sup>†</sup> LBS. (KG) | HANDLES   | INSTALLATION ORIENTATION |
|-----|-------------|---------------------|-----------------------------|------------------------|-----------|------------|-------------------------------|-----------|--------------------------|
|     |             |                     |                             | LENGTH                 | WIDTH     | HEIGHT     |                               |           |                          |
| GC2 | TR GC2-48-G | M8-1.25 x 15mm Stud | 80-90 (9-10)                | 10.4 (264)             | 7.1 (180) | 10.9 (278) | 37 (16.8)                     | Removable | Vertical                 |
|     |             |                     |                             |                        |           |            |                               |           |                          |

### ELECTRICAL SPECIFICATIONS

| VOLTAGE | CAPACITY AMP-HOURS (AH) |            |              | ENERGY (KWH)   | SHORT CIRCUIT CURRENT |
|---------|-------------------------|------------|--------------|----------------|-----------------------|
|         | 5-Hr (18A)              | 10-Hr (9A) | 20-Hr (4.6A) |                |                       |
| 51.2V   | 30                      | 30         | 30           | 20-Hr<br>1.536 | Fused 150A            |
|         |                         |            |              |                |                       |

### OPERATIONAL SPECIFICATIONS

| OPERATING TEMPERATURE RANGE   | STORAGE TEMPERATURE RANGE      |
|-------------------------------|--------------------------------|
| -4°F to 140°F (-20°C to 60°C) | -40°F to 140°F (-40°C to 60°C) |

### CHARGER INSTRUCTIONS

| CHARGER SETTINGS                       |              |
|----------------------------------------|--------------|
| Recommended Charging Voltage           | 55.2 - 57.6V |
| Maximum Charging Current @ Temperature |              |
| < 32°F (< 0°C)                         | 0A           |
| 32°F to 50°F (0-10°C)                  | 10A          |
| 50°F to 68°F (10-20°C)                 | 17A          |
| 68°F to 113°F (20-45°C)                | 34A          |
| > 113°F (> 45°C)                       | 0A           |

### SAFETY/AGENCY INFORMATION

| CERTIFIED TO THE FOLLOWING |                                     |             |
|----------------------------|-------------------------------------|-------------|
| UN/DoT 38.3                | Cells: IEC 62133-2, UL 1642, UN38.3 | FCC Part 15 |
| ROHS Compliant             | UL 2271, UL 1998, UL 991: (Pending) | CE          |

### OTHER SPECIFICATIONS

| PERFORMANCE AND SYSTEM SPECIFICATIONS @ 77°F (25°C) |                                                                                       |
|-----------------------------------------------------|---------------------------------------------------------------------------------------|
| Maximum Continuous Discharge Current                | 40A                                                                                   |
| Maximum Pulse Discharge Current (30s)               | 150A                                                                                  |
| Maximum Instantaneous Discharge Current             | 155A                                                                                  |
| Reserve Capacity @ 25A                              | 72 Min                                                                                |
| Battery Internal Protection                         | Short Circuit Current<br>Temperature<br>Over Voltage<br>Under Voltage<br>Over-current |
| Battery Functions                                   | Cell Balancing, State of Charge, CAN                                                  |
| Safety Systems                                      | Fuse, hardware, BMS                                                                   |
| Discharge Voltage Cutoff                            | 40.5V ± 5%                                                                            |
| Charge Voltage Cutoff                               | 40.8V ± 5%                                                                            |
| Environmental Protection                            | IP67                                                                                  |
| Shipping Classification                             | UN3480, Class 9                                                                       |
| Case Flame Rating                                   | UL94 V-0                                                                              |

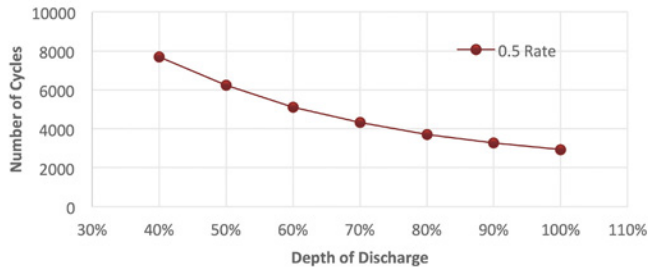


Do not mix with lead-acid batteries when recycling

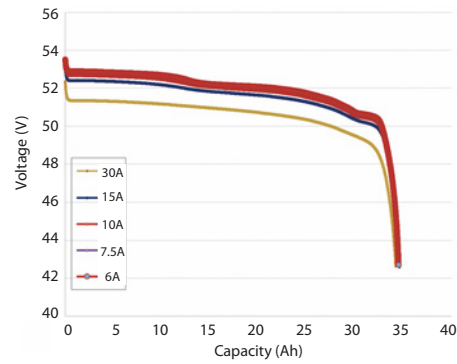
\*To 70% initial capacity

## CYCLE LIFE

### To 70% INITIAL CAPACITY



## DISCHARGE PROFILE



## STATE OF CHARGE INDICATOR GUIDE

| LED COLOR INDICATION | BATTERY CONDITION                             | INDICATOR VISUAL |
|----------------------|-----------------------------------------------|------------------|
| 4 Blue LEDs          | 76% - 100% Capacity Remaining                 |                  |
| 3 Blue LEDs          | 51% - 75% Capacity Remaining                  |                  |
| 2 Blue LEDs          | 26% - 50% Capacity Remaining                  |                  |
| 1 Blue LED           | 0% - 25% Capacity Remaining                   |                  |
| Red LED              | Active Alarm / Fault Condition in the Battery |                  |
| Green LED            | Normal Operation                              |                  |

The Trojan® GC2 48V Lithium-Ion features include a battery status push button and indicator light on the top of the case. A momentary press of the button displays the battery's State of Charge and operating status.

**NOTE:** Consult Trojan® GC2 48V Lithium-Ion User's Guide for more information at [trojanbattery.com](http://trojanbattery.com)

## BATTERY DIMENSIONS

Dimensions Inches (mm) - shown with M8



## TECHNICAL SUPPORT

Call Trojan Battery Technical Support:  
 United States and Canada: 800-423-6569, dial ext. 3045  
 International: +1-562-236-3045

Email: [technical@trojanbattery.com](mailto:technical@trojanbattery.com)

On the web: [trojanbattery.com/tech-support/](http://trojanbattery.com/tech-support/)

UN38.3 PASSED  
 TRANSPORTATION  
 SAFETY  
 CERTIFIED



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

A. Terminal images are representative only  
 B. Weight may vary

