TROJAN'S INTELLIGENT LITHIUM ION BATTERY DELIVERS MORE RUNTIME, LIFETIME, AND PEACE OF MIND.

TROJAN BATTERY COMPANY

TRILLIUM
TROJAN INTELLIGENT LITHIUM
MORE RUNTIME, LIFETIME, AND PEACE OF MIND.

Designed and engineered in the USA, Trillium®, Trojan’s Intelligent Lithium battery, can be used in a variety of stationary and motive power applications. From its superior cell and battery design to its intelligent, built-in diagnostics, Trillium offers a range of advanced safety, environmental and electronic features not found in competitive products. With life expectancy well over 5,000 cycles, Trillium will deliver outstanding return on investment over time, plus the legendary quality Trojan Battery is known for.

COMMON APPLICATIONS
- Deep-Cycle Lead-Acid Replacement
- Golf Cars & LSEV
- Marine and RV
- Utility Vehicles
- Aerial Work Platforms
- Solar & Storage
- Floor Machine
- AND MORE...

TRILLIUM CYCLE LIFE CHART
This chart illustrates the expected cycle life as a function of DOD to 70% of initial capacity.

INTELLIGENCE FEATURES
- Microprocessor
- CAN Communications
- SOC Gauge
- Cell Balancing
- Amp-Hour Life Tracking
- Battery Management System

TR 12.8-92 Li-ION
>5,000 CYCLES @ 80% DOD
12.8V NOMINAL VOLTAGE
92Ah CAPACITY

TR 12.8-110 Li-ION
>5,000 CYCLES @ 80% DOD
12.8V NOMINAL VOLTAGE
110Ah CAPACITY

INTELLIGENCE FEATURES
- Microprocessor
- SOC Gauge
- Amp-Hour Life Tracking
- Battery Management System
- Cell Balancing
WHY TROJAN INTELLIGENT LITHIUM ION?

SUPERIOR CELL SELECTION

Trillium features a Trojan-specific cell, which undergoes a 128-point quality control check and is 100 percent X-ray inspected to ensure the highest quality. It’s cobalt-free and nickel-free, and it features the industry’s safest chemistry.

Most importantly, Trillium features extraordinary life—greater than 5,000 cycles—and this power is packed into a battery footprint that’s 20 percent smaller than competitive offerings.

SUPERIOR BATTERY DESIGN

Trillium has automotive-grade components for durability, safety, and a current sensor, fuse, and temperature sensor. It’s waterproof and dust proof, with an IP67 environmental rating—the highest in its class by far.

Trillium is designed to be a true replacement for deep-cycle lead-acid batteries and can be used with existing lead-acid chargers with AGM/GEL settings (I-E profile).

SUPERIOR ELECTRONICS

Trillium offers unique, advanced electronic features such as a visual SOC (state of charge) gauge on the top of the battery.* A microprocessor* ensures the battery is completely self-protected, and if a problem is detected, will turn itself off. When a problem goes away, it turns back on, automatically self-healing.

Integrated Controller Area Network (CAN)** communications share battery data—state of charge, state of health, and fault status—with other devices.

Trillium also has the built-in ability to track lifetime amp-hours throughput and historical fault data is stored.*

SUPERIOR PERFORMANCE

Trillium gives you more runtime and a longer life than competitors’ batteries in its class and delivers consistent power across the state of charge range. It can be charged in less than two hours. It features a simple system that is scalable up to 48 volt applications.

SUPERIOR OPPORTUNITY

Trillium is designed and engineered in the USA by Trojan, the world’s leading supplier of deep-cycle batteries for nearly 100 years. You can be confident Trillium is the highest quality product on the market—backed by Trojan’s extraordinary customer support.

THE TROJAN ADVANTAGE

◆ World’s leading manufacturer of advanced deep-cycle battery technology
◆ Worldwide reputation for best return on investment, durability, performance, and quality components
◆ Outstanding technical and customer service
◆ Industry leader in health and safety compliance as well as environmental stewardship

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INTELLIGENCE FEATURES

Cell Balancing

TR 25.6-25 Li-ION

>5,000 CYCLES @ 80% DOD
25.6V CHARGE VOLTAGE
25Ah CAPACITY

INTELLIGENCE FEATURES

Cell Balancing

*TR 12.8-92 Li-Ion and TR 12.8-110 Li-Ion
**TR 12.8-92
**TRILLIUM PRODUCT, PHYSICAL, AND ELECTRICAL SPECIFICATION GUIDE**

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>VOLTAGE</th>
<th>NOMINAL CAPACITY</th>
<th>CAPACITY AMP-HOURS (Ah)</th>
<th>ENERGY (kWh)</th>
<th>SHORT CIRCUIT CURRENT (A)</th>
<th>BCI</th>
<th>TERMINAL TYPE</th>
<th>DIMENSIONS INCHES (mm)</th>
<th>WEIGHT LBS. (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR 12.8-92 Li-Ion</td>
<td>12.8V</td>
<td>92Ah (1,177Wh)</td>
<td>92 92 92.5</td>
<td>1.18</td>
<td>Fused @ 400 Amps</td>
<td>Group 24</td>
<td>M8-1.25 Threaded Hole</td>
<td>10.16 (258) 6.61 (168) 8.50 (216)</td>
<td>27 (12)</td>
</tr>
<tr>
<td>TR 12.8-110 Li-Ion</td>
<td>12.8V</td>
<td>110Ah (1,408Wh)</td>
<td>110 110 111</td>
<td>1.42</td>
<td>Fused @ 500 Amps</td>
<td>Group 27</td>
<td>5/16&quot;-18 Stud and 1/4&quot;-20 Threaded Hole</td>
<td>12.07 (307) 6.57 (167) 8.63 (219)</td>
<td>30 (14)</td>
</tr>
<tr>
<td>TR 25.6-25 Li-Ion</td>
<td>25.6V</td>
<td>25Ah (640Wh)</td>
<td>25 25 25.5</td>
<td>0.65</td>
<td>Fused @ 125 Amps</td>
<td>Group U1</td>
<td>M6-1.0 Threaded Hole</td>
<td>7.76 (197) 5.20 (132) 6.74 (171)</td>
<td>12 (5)</td>
</tr>
</tbody>
</table>

**TRILLIUM OPERATIONAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>CONTINUOUS DISCHARGE CURRENT</th>
<th>PULSE DISCHARGE CURRENT 67°F (20°C)</th>
<th>COMM.</th>
<th>RESERVE CAPACITY 025 AMPS</th>
<th>BMS PROTECTION</th>
<th>BMS FUNCTIONS</th>
<th>SAFETY SYSTEMS</th>
<th>SERIES CONN.</th>
<th>PARALLEL CONN.</th>
<th>DISCHARGE VOLTAGE CUTOFF</th>
<th>CHARGE VOLTAGE CUTOFF</th>
<th>OPERATING TEMP. RANGE</th>
<th>STORAGE TEMP. RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR 12.8-92 Li-Ion</td>
<td>92 Amps</td>
<td>250 Amps for 30 secs</td>
<td>CAN-Open</td>
<td>220 min</td>
<td>Cell Balancing, State of Charge</td>
<td>Contractor, Fuse, BMS</td>
<td>Up to 4S (51.2V)</td>
<td>Up to 2P</td>
<td></td>
<td>10.0V ± 5% for 5 sec</td>
<td>15.6V ± 5% for 5 sec</td>
<td>-4°F-140°F (-20°C-60°C)</td>
<td>-4°F-140°F (-20°C-60°C)</td>
</tr>
<tr>
<td>TR 12.8-110 Li-Ion</td>
<td>110 Amps</td>
<td>250 Amps for 30 secs</td>
<td>N/A</td>
<td>265 min</td>
<td>Cell Balancing, State of Charge</td>
<td>Contractor, Fuse, BMS</td>
<td>Up to 4S (51.2V)</td>
<td>Up to 2P</td>
<td></td>
<td>9.2V ± 5% for 5 sec</td>
<td>15.2V ± 5% for 5 sec</td>
<td>-4°F-140°F (-20°C-60°C)</td>
<td>-4°F-140°F (-20°C-60°C)</td>
</tr>
<tr>
<td>TR 25.6-25 Li-Ion</td>
<td>25 Amps</td>
<td>70 Amps instantaneous</td>
<td>N/A</td>
<td>60 min</td>
<td>Cell Balancing, Voltage, Temp, Current</td>
<td>MOSFETs, Fuse, BMS</td>
<td>Up to 2S (51.2V)</td>
<td>Up to 2P</td>
<td></td>
<td>16.0V ± 5% for 5 sec</td>
<td>30.4V ± 5% for 5 sec</td>
<td>-4°F-140°F (-20°C-60°C)</td>
<td>-4°F-140°F (-20°C-60°C)</td>
</tr>
</tbody>
</table>

*Below 32°F (0°C), charging current is reduced.*

**CELL SELECTION**
- Proven safest chemistry
- Longest life in its class
- Highest capacity in its class
- US-based cell development
- 100% X-ray quality check
- Trojan-specific cell
- UN38.3; UL 1642; IEC 62133

**BATTERY DESIGN**
- Easy replacement for lead-acid
- Robust case, IP67 rating
- Automotive-grade safety protection
- Current sensor, fuse, temp. sensor
- Validated charger compatibility

**ELECTRONICS**
- Visual SOC gauge*
- Coated for dust/moisture protection
- Microprocessor-based controls*
- CAN-communications (TR 12.8-92 Li-Ion only)
- Lifetime Amp-hour tracking*
- Historical fault data storage*
- US-based development

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Please check the Trojan Battery website (www.trojanbattery.com) for the most up-to-date information.

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*TR 12.8-92 Li-Ion and TR 12.8-110 Li-Ion
**TR 12.8-92