

# LITHIONICS BATTERY®

LITHIUM ION IRON PHOSPHATE BATTERY SYSTEMS



MODEL NUMBER:  
GTR12V300A-5DR-CTRL400

INTERNAL BMS  
VERSION

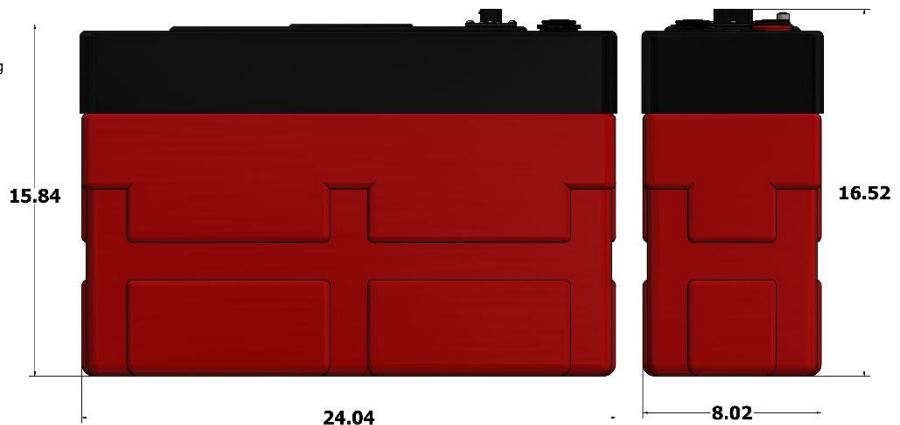


| Item  | Description  |                                |
|---|--|--------------------------------|
| Model   | GTR12V300A-5DR-CTRL400   |                                |
| Nominal Voltage                                   | 12.8   |                                |
| Nominal Capacity                                  | 300  |                                |
| Nominal Watt Hours                                | 3840   |                                |
| Internal Resistance                               | <300 milliohms   |                                |
| <b>Charge</b>                                     |  |                                |
| Charging temperature range                        | 32F/0C to 113F/45C   |                                |
| Charge voltage                                    | 14.6   |                                |
| Recommended float charge voltage(for standby use) | 13.4   |                                |
| Recommended charge current*                       | 150  |                                |
| Allowed max charge current*                       | 300  |                                |
| <b>Discharge</b>                                  |  |                                |
| Discharging temperature range                     | -4F/-20C to 131F/55C   |                                |
| Operating Voltage Range                           | 11.6 to 13.4   |                                |
| Recommended discharge current*                    | 300  |                                |
| Max discharge current*                            | 400  |                                |
| Pulse discharge current                           | 3000   |                                |
| Discharge cut-off voltage                         | NeverDie® Power Reserve @ 12.00<br>Low-Voltage Cut-Off @11.60  |                                |
| <b>Mechanical</b>                                 |  |                                |
| Dimensions  | Length 24.0"   |                                |
|   | Width 8.0"   |                                |
|   | Height 15.84"  |                                |
| Weight  | Approx. 87lbs (39.5kg)   |                                |
| <b>Storage</b>                                    |  |                                |
| Storage Temperature & Humidity Range              | < 1 Month  | -4~95°F (-20~35°C), 45~75%RH   |
|   | < 3 Months   | 14~86°F (-10~30°C), 45~75%RH   |
|   | Recommended storage  | 59~95°F (15~35°C), 45%RH~75%RH |
| Long Term Storage                                 | If the battery needs to be stored for > 3 months the voltage should be 13.2V (50%SOC), and stored at the recommended storage specifications shown above. Additionally, the battery needs at least one charge & discharge cycle every six months. |                                |
| Self-discharge rate                               | Residual capacity  | ≤3% per month; ≤15% per year   |
|   | Reversible capacity  | ≤1.5%per month; ≤8% per year   |

\* Maximum charging and discharging rates apply depending upon the ambient temperature and duty cycle of the system.  
UL1973 tests of maximum charge and discharge current were performed at 25°C/77°F

## INTERNAL NEVERDIE® FEATURES

- miniBMS® Cell/Module Sensors and Microprocessors with Automatic Cell Balancing
- NeverDie® Power Reserve (Spare Fuel) for Hotel Loads and Worry-Free Power for Engine Cranking
- 100% Pure Copper Power Transmission (No Restrictive Nickel, Aluminum, or MOSFETS)
- UL Approved Temperature Protection System
- UL Approved Fully Redundant Protective Safety Circuits
- Over-Charge, Over-Discharge and Short-Circuit Protection (LVC, HVC, SCC)
- Military Grade/Military Approved Hermetically-Sealed UL508 Approved Gas-Filled Pure Silver-Alloy Contactor with Aux-Contact Monitoring Circuit and Internal Arc-Suppression.
- Available NeverDie® Internal Heating Kit: Permits Charging Operations at -20C/-4F Continuous (Most Models....Please Confirm with Factory)
- Pushbutton Storage Operation



ENERGY

300 AMP HOURS

PULSE AMPS: 3000 (1 SEC)

3840 WATT-HOURS

### WARNING

- LITHIUM BATTERIES ARE NOT DESIGNED FOR CHARGING IN SUB-FREEZING TEMPERATURES. CONTACT LITHIONICS BATTERY® FOR DETAILS ON OUR COLD WEATHER PACKAGE.
- INSTALLATION: IT IS RECOMMENDED THAT BATTERIES BE INSTALLED CABLE OR TERMINAL SIDE UP.

NOTE: CONTACT LITHIONICS BATTERY® FOR A USER INSTALLATION GUIDE & STORAGE PROCEDURES. FOLLOW THE GUIDE TO ENSURE FITNESS OF USE & WARRANTY.

12V  
GTR  
SERIES