Denchi Power Batteries

6T Lithium-ion Battery

Productsheet Denchi Power 6T Lithium-ion

V1.2, 02-01-2017

Contact

In case of any questions, call us on +31 (0)416-387700 or sent an email to: sales@simacelectronics.nl.

We like to help you!



The Vehicle Battery that keeps you army on the move

The Denchi Power Lithium-ion 6T vehicle battery is an entirely new concept in battery design and incorporates the latest in Lithium-ion technology. It benefits from Denchi Power's strong heritage in building batteries for use in the most extreme conditions and also from their deep understanding of the modern Military need. This new battery incorporates high power cells, which when combined with an impressive energy density ensures the very best possible operation for Armoured vehicles of all sizes and capabilities. The battery is designed to be mechanically strong. The battery-housing is milled from one solid piece of strong metal. The battery has three separate compartments internally, to provide safety and isolation for several banks of cells. Each compartment has its own internal charger and can operate separately from the other cells for maximum reliability.

Features

- Integrated Battery Charger
- Communications via CAN Bus
- Comprehensive Battery Management System
 - Over & under voltage
 - o Over current
 - o Over Temperature
 - o Cell balancing
- Built-in test facility
- State-of Charge (SoC)/Health indicators
- Function protected by compartmentalization
- Compatible with:
 - MIL-PRF-32143B—physical characteristics
 - MIL-STD-1275E—charge voltage and surge
 - DEF-STAN-00-35—environmental testing
 - o DEF-STAN-59-411—EMC testing
 - o ST/SG/AC.10/11/Rev.5—UN transport
 - SAE J1939—CAN messaging format



Denchi Power Rechargeable Lithium-ion battery for military applications

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6T Lithium-ion Battery

Specifications

Technology Nominal Capacity Nominal Voltage Discharge Voltage Range Charging Voltage Range Integrated Charger Charging Voltage Range Bypass mode Operating Temperature* Storage Temperature* Cold Cranking (CCA) Max Continuous Discharge Current Max Charge Rate Integrated Charger** Max Charge Rate Integrated Charger** Max Charge Rate Bypass mode Max Pulse Charge Rate LengthxWidthxHeight Weight SoC/SoH Indicator	Lithium-ion 80Ah (2,1kWh) 25.2V 21,0V to 28,7V 21,0V to 29,5V 21,0V to 28,7V $-40^{\circ}C to +60^{\circ}C$ $-46^{\circ}C to +71^{\circ}C$ 1100A 350A 45A 270A 500A 5s 269x256x230mm (NATO 6T) 25 kg 5 bar LED/1 bar LED 100% DoD 3500 cycles. 70% DoD >4000 cycles
0	5
Cycle Life	100% DoD 3500 cycles, 70% DoD >4000 cycles
Application	Silent Watch, Engine Start
*reduced battery life for operating or storage at high temperatures for long duration	

**charge rate adjusted by battery automatically to ensure safe charging at high or low temperatures. Built in heaters operate automatically at low temperature.

Benefits over Lead Acid

- Low total lifetime cost of ownership (TCO) .
- Key information displayed giving the Commander immediate operational status •
- Increased silent watch periods increasing the Commander's flexibility •
- Full capacity accessible for high rate and deep discharge cycles •
- Built-in heater for operation down to -40°C, without a 'Cold Start Kit' •
- No maintenance required, therefore replacement only at overhaul •
- Batteries no longer part of immediate Logistic Chain •



Reduced weight increases vehicle pay load capability •

The battery has been designed to provide an outstanding level of Silent Watch and Engine Start capability. The 6T provides unparalleled power ensuring a Main Battle Tank Engine Start, even under the most extreme conditions. Its long life, light weight and flexible operating characteristics provide the optimum in vehicle mounted power. This new concept of high powered battery is one of a long line of successful Denchi Power products that continues to deliver powerful energetic solutions to the military operating in active theatres.

More information

Check www.simacelectronics.com or call us on +31 (0) 416 387 700. We like to help you! Depth-of-Discharge (%)



10 times more

cycles

www.simac.com