



PART NUMBER:
430864

NATO STOCK NUMBER:
AWAITING CODIFICATION

CHEMISTRY:
NICKEL BASED ELECTRODE

APPLICATIONS:
COMMUNICATIONS, ROBOTICS, SENSORS,
AIRBORNE SYSTEMS & MARINE SYSTEMS
(INCLUDING UAV & UUV)

BB-2590 LITHIUM-ION BATTERY PACK

Keeps your army on the move

The Denchi BB2590 is a world leading battery, specifically designed and manufactured for demanding military use. This battery format has a rugged connector interface (SC-C-179495 compliant) that ensures the battery can be re-charged from any Level 3 Smart Charger. Offering a cost effective rechargeable solution for battlefield operations, which is simple and reliable to use.

The battery is compatible with a wide range of communication and surveillance devices and other portable electronic equipment used in military and security applications. This battery offers increased capacity compared to other equivalent products, providing extended operational run-time.

Denchi's manufacturing process means that all cells are tested and matched prior to battery assembly, ensuring high performance, safety and reliability.

FEATURES & BENEFITS

- Rugged waterproof tactical battery pack
- Internal design provides dual voltage of 14.4V or 28.8V
- High energy & high power density
- SMBus communication and state of charge indicator
- Low energy consumption during storage
- Easy system integration for compact and light solutions
- Meets civil and military standards

ASSOCIATED EQUIPMENT

- BB2590 Output cable with flying leads (490087)
- SPC Soldier Portable Charger, single channel (231017)
- RSC Rugged Smart Charger, 4 channel (210725)
- Connection cable – SPC to BB2590 (490071)
- Connection cable – Crocodile clip to Cigar socket (490011)
- Connection cable – AC adaptor to SPC input (490089)
- Connection cable – Cigar plug to SPC input (490075)
- Benchtop AC mains charger (210510)

TECHNICAL DATA

Length	111.5 mm
Width	62.0 mm
Height	126.7 mm
Weight	1.325 Kg
Voltage range	10.0–16.8v (12v mode) 20.0–33.6v (24v mode)
Nominal Voltage	14.4v (12v mode) 28.8v (24v mode)
End voltage	10v (12v mode) 20v (24v mode)
Capacity	21 Ah typical (12v mode) 10.5 Ah typical (24v mode)
Power (Energy)	302.4 Wh
Energy Density	228 Wh/kg
Max. discharge current	20A continuous (12v mode) 10A continuous (24v mode)
Charge method	CC/CV
Max. charging current	10A continuous
Operating (discharge) temp	-40°C to +60°C
Charge temp	0°C to +60°C
Storage temp	-40°C to +60°C

PHYSICAL & CONNECTIVITY

Housing material	Toughened plastic. UL94V-0 rated
Connector type	Generic 6-pin floating type SC-C-179495
State of Charge indicator	5 segment LCD
Communication Protocol	SMBus compatible.
Cycle life (to 80% capacity)	>500 cycles to 80% capacity
Self-discharge rate	Less than 5% per month at ambient temperature
Shelf-life (maintenance free storage)	More than 12 months, from 100% SOC observing Denchi maintenance routine

SAFETY & APPROVALS

Cell over-voltage protection	Yes
Cell under-voltage protection	Yes
Over-charge current protection	Yes
Over-discharge current protection	Yes
Over-Temperature protection	Yes
Cell balancing protection	Yes
Memory effect	No Memory Effect
Quality System Adherence	ISO9001 / ISO14001
RoHS Compliant	Yes
ITAR	Not ITAR controlled
EAR	Not EAR controlled
Transportation:	UN 38.3 Dangerous Goods, Class 9, Transport at 30% state of charge
Harmonised Tariff Code	8507.60.0020
CE / UKCA	CE/ UKCA
Waterproof rating	IP66
Other standards	Cell approved to IEC62133. UL1642

DefStan:

This battery meets the requirements of MIL-PRF-32052 and MIL-PRF-32383

Battery voltage, cycle life, immersion, mechanical and thermal shock, vibration, insulation resistance, high rate discharge, low temperature discharge, full capacity discharge, retention of charge, transportation drop and extreme transportation drop.

