UBI-2590
Technical Datasheet

Technical Specifications

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<th>Part No.</th>
<th>UBBL02-01</th>
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<td>NSN</td>
<td>6140-01-553-3527</td>
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Voltage Range

- 30V Mode: 20.0 to 33.6V
- 15V Mode: 10.0 to 16.8V

Average Voltage

- 30V Mode: 28.8V
- 15V Mode: 14.4V

Capacity

- Nominal: 30V mode: 8.7Ah
  15V mode: 17.4Ah
- Minimal: 30V mode: 8.2Ah
  15V mode: 16.5Ah

Max. Continuous Discharge

- 30V Mode: 10.0A
- 15V Mode: 20.0A

Max. Pulse Discharge

- 30V Mode: 18.0A
- 15V Mode: 36.0A

Energy

- 250Wh

Energy Density

- 190Wh/kg, 296Wh/l

Weight

- 1340g, 2.95lbs

Cycle Life

- >300 cycles

Operating Temperature

- -32°C to 60°C discharging
- -20°C to 50°C charging

Storage Temperature

- -20°C to 50°C

Self-Discharge @ 23°C

- <10% per month

Exterior/Housing

- Hard plastic (Noryl N190X-701)
- Available in black by phone order only.

Color

- Standard color is Desert Tan.

Terminals/Connector

- Connector SC-C-179495

Communications

- None

State of Charge Indicator

- 5-segment LCD display (both sides)

Protection

- Over Voltage: 4.30V (per cell)
- Under Voltage: 2.40V (per cell)
- Transient Currents: 23.0A > 15ms
  30.0A > 305us
- Short Circuit: Up to 40V
- Overcharge Protection: Activates 70±5°C
  Resets 50±5°C
- Thermal Fuse: Activates 93±5°C

Charging

- Connect each side of the battery to a DC power source using correct polarity and apply a maximum voltage of 16.8V. Limit the current to the recommended rate of 3.0A and hold to 16.8V until the current declines to 300mA. Maximum charge rate is 4.8A.

Safety

- Material Safety Datasheet - MSDS041
- Refer also to Safety Guide UBM-5112

Certifications

- Designed to meet MIL-PRF-32383
- IEC 62133:2012

Transportation

- Class 9 International and within U.S.4 unless shipped by motorcar or rail within U.S.

Harmonized Tariff Schedule

- 8507.60.0000

Notes

1. Using a C/5 discharge rate at 25°C.
2. Load has a pulse width of 5 seconds with a total period of 30 seconds.
3. Number of consecutive 2A rate discharges while in 30V mode and recommended charges at 25±5°C until the battery reaches 80% of initial capacity.
4. Transportation regulations, classifications and lithium content are available on the Ultralife website.

Features

- Flexible dual mode output voltage
- Accurate state-of-charge display for each side of the battery
- Rugged, military tough case construction can handle severe environments
- High energy density solution in the Ultralife UBI-2590 family

Applications

- Rugged, portable electronics
- Robotics / AUVs / UUVs
- Military communication devices
- AN/PRC-117G, AN/PRC-117F, AN/PRC-119, AN/PSC-5D

Optional Accessories

- CA0003: Vehicle Adapter
- CA0006: 15/30V, 2 Conductor Cable
- CA0007: 15/30V 2 Conductor Cable
- CA0008: 15/30V, 4 Conductor Cable
- CH0002: COTS Desktop Charger
- MRC135A: Single Unit Solar Charger
- MRC-143A: 3-Unit Solar Charger
- UCA0039: Shielded Smart Cable
- UCA0114: Low Profile Smart Cable
- UCH0053: 6-bay Charger
- UCH0054: 2-bay Charger
- UCH0056: Smart Desktop Charger
- UKT0011: Portable Battery System
Dimensions

The diagram shows various dimensions in millimeters and inches. The maximum dimensions in millimeters and inches are indicated as follows:

- Maximum Dimensions in mm: 127.0 mm (5.00"
- Maximum Dimensions in inches: 4.43"

The diagram includes labels for different parts of the component, such as CLOCK (PINS 1-4), DATA (PINS 1-4), CHARGE ENABLE, CLOCK (PINS 2-5), and DATA (PINS 2-5).
Performance Graphs

Ultralife (UBBL13-01) - Series Mode Discharge
0.5A Discharge @ 22C

Ultralife (UBBL13-01) - Parallel Mode Discharge - 1.0A Discharge @ 22C