

# UBBL72: Rechargeable Conformal Battery

## Preliminary Technical Datasheet

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| Technical Specifications   |                                                                                                                                                                                                                  |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part No                    | UBBL72                                                                                                                                                                                                           |
| Model No                   | BB-2525                                                                                                                                                                                                          |
| Voltage Range              | 10.0 to 16.8V                                                                                                                                                                                                    |
| Nominal Voltage            | 14.8V                                                                                                                                                                                                            |
| Nominal Capacity           | 10.75Ah                                                                                                                                                                                                          |
| Max. Continuous Discharge  | 7.0A @ +23°C                                                                                                                                                                                                     |
| Max. Pulse Discharge       | 7.6A for 6 seconds                                                                                                                                                                                               |
| Energy                     | 159Wh                                                                                                                                                                                                            |
| Weight                     | 1.18kg (2.6lbs)                                                                                                                                                                                                  |
| Dimensions                 | 7.63in (Length) x 8.61in (Width) x 0.68in (Thickness)                                                                                                                                                            |
| Cycle Life                 | >300 cycles                                                                                                                                                                                                      |
| Memory                     | No Memory Effect                                                                                                                                                                                                 |
| Operating Temperature      | -30°C to +70°C discharge, -20°C to +50°C charge                                                                                                                                                                  |
| Storage Temperature        | -32°C to +71°C                                                                                                                                                                                                   |
| Self-Discharge Rate        | <2.5% of full capacity per month                                                                                                                                                                                 |
| Battery Storage Life       | >3 years when fully charged                                                                                                                                                                                      |
| Exterior/Housing           | Thermal Plastic Urethane - TEXIN 260D-L2878                                                                                                                                                                      |
| Color                      | Tan 686A                                                                                                                                                                                                         |
| Terminals/Connector        | ITT Cannon Net Warrior<br>PN: MKJ4C2-155900-126<br>USB-A - Discharge only                                                                                                                                        |
| Communications             | Physical Layer: SMBus v1.1<br>Protocol: SBD v1.1 compliant                                                                                                                                                       |
| State-of-Charge Indicator  | Push Button Activated Digital Display                                                                                                                                                                            |
| Protection                 | Over Charge: 17.2V for 2s<br>Over Current: 7.6A for 6s, 8.5A for 3s, 10A for 71ms<br>Short Circuit: 13.3A for 427us<br>Over Voltage: 60V<br>Under Voltage: 10V for 2s<br>Thermal Cutoff: 70C for 2s; -35C for 2s |
| Charging                   | Recommended charge rate is 7A to 16.8V in a temperature range of 0°C to +45°C. Hold at 16.8V until current declines to 180mA. Maximum charge rate is 7.5A @ 23±2°C.                                              |
| Safety                     |                                                                                                                                                                                                                  |
| Certifications             | Designed to meet MIL-PERF-32383/4X<br>UN 3480 Dangerous Goods Class 9,<br>Total Energy >100Wh, <300Wh                                                                                                            |
| Transportation             | If packed in or with equipment (UN 3481), contact Ultralife for guidance or other questions.<br>UN Testing Summary - UNTS-0272                                                                                   |
| Harmonized Tariff Schedule |                                                                                                                                                                                                                  |

## Features

- Wearable and form-fitting
- High energy density
- Lightweight, rugged, and thin
- Easily concealed
- Integrated digital display
- Robust internal protection circuitry
- Designed to meet EMI compliance per MIL-STD-461E
- Designed to meet MIL-STD-810
- USB-A connector for charging devices
- Designed for IP67 rating

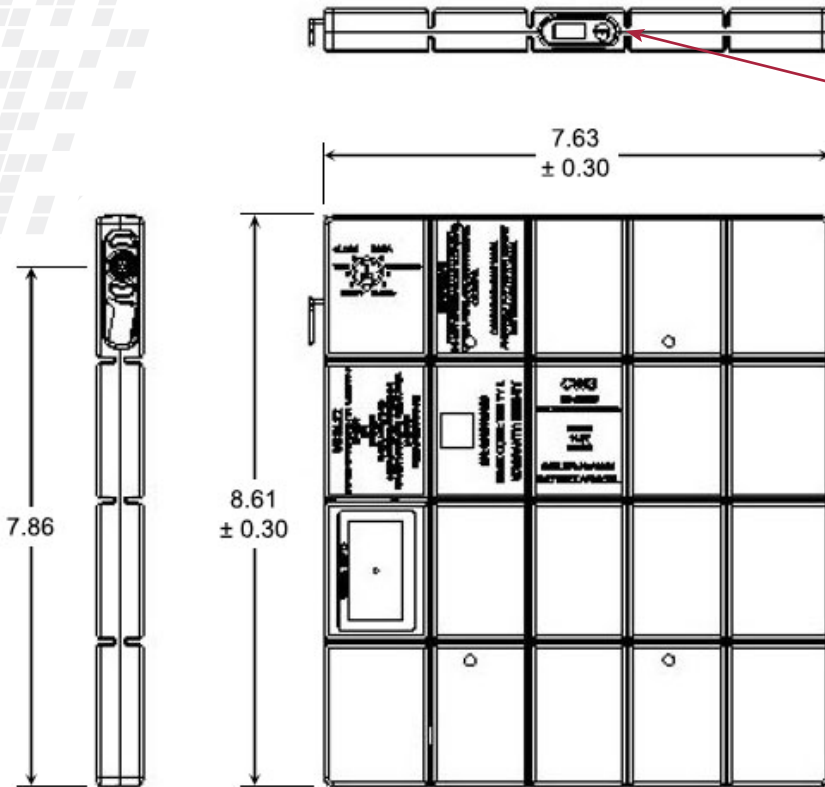
## Applications

- Rugged, portable electronics where mobility is critical
- Man-wearable communications devices

## Optional Accessories

- CH0015: Commercial desktop charger
- CH0008: Soldier-based charger kit
- CA0009: Flying lead cable, non-shielded
- CA0022: Flying lead cable, shielded

## Dimensions



## Digital Display

- When actuator is pressed screen will display
  - SOC (State of Charge)
- Subsequent pressing of actuator will display
  - SOH (State of Health)
  - RTTE (Run Time Till Empty)
  - CTTF (Charge Time To Full)
  - BCC (Battery Cycle Count)
- The display will remain illuminated for 3 seconds
- Hold actuator for 5 to 7 seconds to flip orientation of display
- Hold actuator for 10 seconds to enter blackout mode
  - Hold for 10 seconds again to exit blackout mode
- If battery has a fault, upon pressing actuator a fault code will display for 3 seconds before going to normal operational mode.

Unit: inches [in]

## Pinouts:

