

# UBBL09-01

## Technical Datasheet



### Features

- Flexible dual mode output voltage
- SmartCircuit Technology - communication with host and charge equipment
- 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

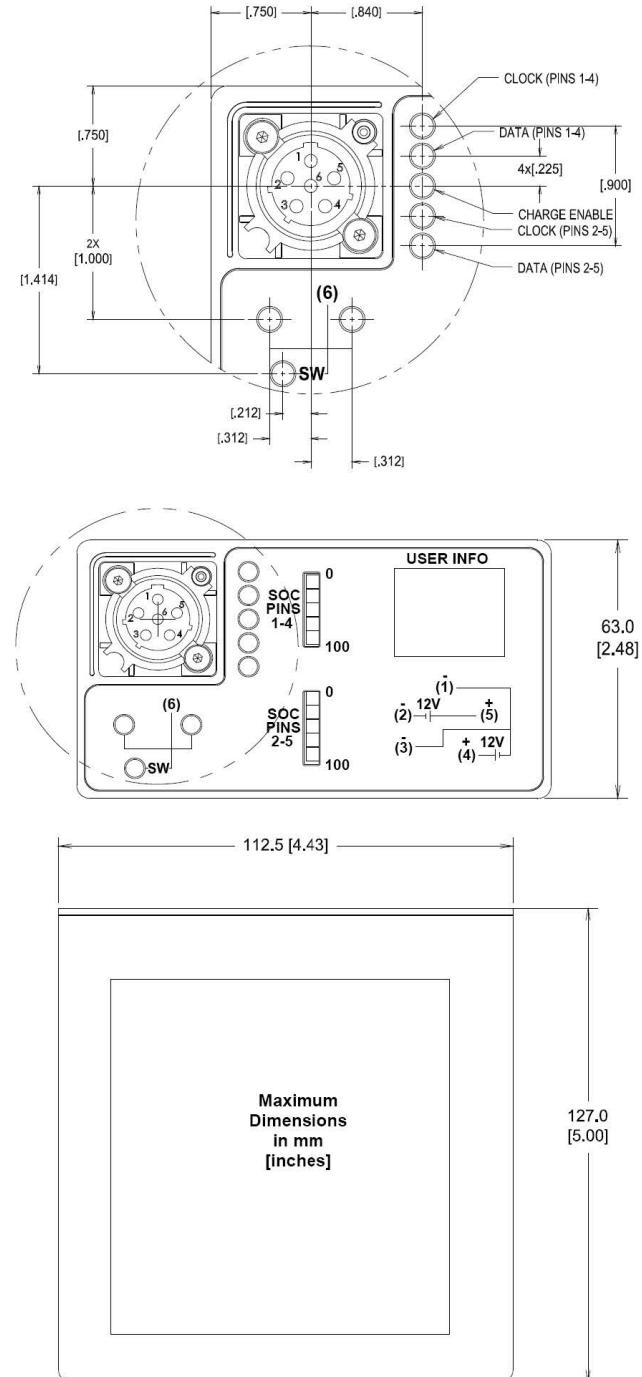
### Optional Accessories

- CA0003: Vehicle Adapter
- CA0006: 15/30V, 2 Conductor Cable
- CA0007: 15/30V 2 Conductor Cable
- CA0008: 15/30V, 4 Conductor Cable
- UCA0039: Shielded Smart Cable
- UCA0114: Low Profile Smart Cable
- CH0014: COTS Desktop Charger
- UCH0057: Smart Charger
- UCH0057-01: Smart Charger (can set battery to 30% state-of-charge for shipment by air)

### Technical Specifications

<b>Part No.</b>	UBBL09-01		
<b>Voltage Range</b>	24V Mode:	15.0 to 25.2V	
	12V Mode:	7.5 to 12.6V	
<b>Nominal Voltage</b>	24V Mode:	21.6V	
	12V Mode:	10.8V	
<b>Capacity</b>	Nominal <sup>1</sup>	24V mode: 11.6Ah 12V mode: 23.2Ah	
	Minimum <sup>1</sup> :	24V mode: 11.0Ah 12V mode: 22.0Ah	
<b>Max. Continuous Discharge</b>	24V Mode:	10.0A 12V Mode:	20.0A
<b>Max. Pulse Discharge<sup>2</sup></b>	24V Mode:	18.0A 12V Mode:	36.0A
<b>Energy<sup>1</sup></b>	250Wh		
<b>Energy Density</b>	185Wh/kg, 278Wh/l		
<b>Weight</b>	1350g, 3.0lbs		
<b>Cycle Life<sup>3</sup></b>	> 300 cycles		
<b>Operating Temperature</b>	-32°C to +60°C discharging, -20°C to +50°C charging		
<b>Storage Temperature</b>	-20°C to +50°C		
<b>Self-Discharge @ +23°C</b>	<10% per month		
<b>Exterior/Housing</b>	Hard plastic (Noryl N190X-701)		
<b>Color</b>	Black		
<b>Terminals/Connector</b>	Connector SC-C-179495		
<b>Communications</b>	Physical layer:	SMBus v1.1	
	Protocol:	SBD v1.1 compliant	
<b>State of Charge Indicator</b>	5-segment LCD display		
<b>Harmonized Tariff Schedule</b>	8507.60.0020		
<b>Protection</b>	Over Voltage:	4.30V (per cell)	
	Under Voltage:	2.40V (per cell)	
	Transient Currents:	23.0A > 15ms 30.0A > 305us	
	Short Circuit		
	Overcharge Protection:	Up to 40V	
	Thermal Cutoff Device:	Activates 70±5°C Resets 50±5°C	
	Thermal Fuse:	Activates 93±5°C	
<b>Charging</b>	Connect each side of the battery to a DC power source using correct polarity and apply a maximum voltage of 12.6V. Limit the current to the recommended rate of 3.0A and hold to 12.6V until the current declines to 300mA. Maximum charge rate is 4.8A.		
<b>Safety</b>	Material Safety Datasheet - MSDS041 Refer also to Safety Guide UBM-5112		
<b>Certifications</b>	Designed to meet MIL-PRF-32383 IEC 62133-2:2017 IEC 62133-2:2017/AMD1:2021 CB Scheme: BE-49693		
<b>Transportation</b>	UN 3480 Dangerous Goods Class 9, Total Energy >100Wh, <300Wh. If packed in or with equipment (UN 3481) contact Ultralife for guidance or other questions. UN Testing Summary - UNTS-0271		
<b>Harmonized Tariff Schedule</b>	8507.60.0000		
<b>Notes</b>	<ol style="list-style-type: none"> <li>1. Using a C/5 discharge rate at +25°C.</li> <li>2. Load has a pulse width of 5 seconds with a total period of 30 seconds.</li> <li>3. Number of consecutive 2A rate discharges while in 24V mode and recommended charges at 25°±5°C until the battery reaches 80% of initial capacity.</li> </ol>		

## Dimensions



## Performance Graphs

