

# UBI-2590 / HC SMBus

## Technical Datasheet



### Features

- Rugged, military tough case construction
- SmartCircuit® Technology - Implements SMBus v1.1 smart battery technology
- Flexible output voltage
- State-of-Charge display
- High energy density
- High capacity version of UBI-2590 SMBus (UBBL10)

### Applications

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

### Optional Accessories

- UCH0056: Smart Desktop Charger
- CH0002: COTS Desktop Charger
- CH0003 or MRC-86: 6-bay Charger
- CH0004 or MRC-85: 2-bay Charger
- MRC-88: 5-bay Charger
- MRC135A: Single Unit Solar Charger
- MRC-143A: 3-Unit Solar Charger
- UKT0011: Portable Battery System
- CA0002: 4 Conductor Cable
- CA0003: Vehicle Adapter
- CA0006: 24V, 2 Conductor Cable
- CA0007: 12V, 2 Conductor Cable
- CA0008: 12/24V, 4 Conductor Cable
- UCA0039: Shielded Smart Cable

### Technical Specifications

<b>Part No.</b>	UBBL13
<b>NSN</b>	6140-01-611-0192
<b>Voltage Range</b>	30V Mode: 24.0 to 33.6V 15V Mode: 12.0 to 16.8V
<b>Average Voltage</b>	30V Mode: 28.8V 15V Mode: 14.4V
<b>Capacity</b>	30V Mode: 8.7Ah @ 0.5A @ 23°C 15V Mode: 17.4Ah @ 1.0A @ 23°C
<b>Max. Discharge</b>	30V Mode: 6.0A continuous 15V Mode: 12.0A continuous
<b>Max. Pulse Discharge</b>	30V Mode: 18A for 5 seconds 15V Mode: 36A for 5 seconds
<b>Energy</b>	250Wh
<b>Energy Density</b>	186Wh/kg, 278Wh/l
<b>Weight</b>	1340g
<b>Cycle Life</b>	> 300 cycles @ C/5 to 80% of initial capacity @ 100% depth of discharge
<b>Memory</b>	No Memory Effect
<b>Operating Temperature</b>	-32°C to 60°C
<b>Storage Temperature</b>	-32°C to 60°C
<b>Self-Discharge</b>	< 5% per month
<b>Exterior/Housing</b>	Hard plastic, black (Noryl N190X-701)
<b>Terminals/Connector</b>	Connector SC-C-179495
<b>Communications</b>	SMBus v1.1 communication protocol SBD v1.0 data set support
<b>State of Charge Indicator</b>	LCD Displays, one for each section - absolute capacity based on design capacity
<b>Safety</b>	Material Safety Datasheet - MSDS041 Refer also to Safety Guide UBM-5112
<b>Transportation</b>	Class 9 International and within U.S. unless shipped by motorcar or rail within U.S. (see note)
<b>Harmonized Tariff Code</b>	8507.80.0000
<b>Protection</b>	Over Voltage Limit: 4.30V (per cell) Under Voltage Limit: 2.40V (per cell) Over Current Protection: 19.0A Re-settable Fuse: Activates @ 70°±5°C Re-sets @ 55°±5°C One-Time Thermal Fuse: Activates @ 91°±4°C
<b>Charging</b>	Recommended charge rate is 1.6A to max voltage of 16.8V in a temperature range of 0°C to 45°C. Hold at 16.8V until current declines to 300mA. Max charge rate is 3.0A.
<b>Note</b>	A complete description of transportation regulations, lithium weights and transportation classifications is available on the Ultralife website.



# Performance Graphs

