

UBI-2590 / SMBus

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
- CH0002: COTS Desktop Charger
- MRC-135A: Single Unit Solar Charger
- MRC-143A: 3-Unit Solar Charger
- UCA0039: Shielded Smart Cable
- UCA0114: Low Profile Smart Cable
- UCH0056: Smart Desktop Charger
- UCH0053: 6-bay Charger
- UCH0054: 2-bay Charger
- UKT0011: Portable Battery System

Technical Specifications

Part No.	UBBL10-01	
NSN	6140-01-554-2347 (equivalent to 6140-01-490-4316)	
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 ¹	30V mode: 8.7Ah 15V mode: 17.4Ah
	Minimal ¹ :	30V mode: 8.2Ah 15V mode: 16.5Ah
Max. Continuous Discharge	30V Mode:	10.0A
	15V Mode:	20.0A
Max. Pulse Discharge²	30V Mode:	18.0A
	15V Mode:	36.0A
Energy¹	250Wh	
Energy Density	190Wh/kg, 296Wh/l	
Weight	1350g, 3.0lbs	
Cycle Life³	> 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)	
Color	Standard color is Desert Tan. Available in black by phone order only.	
Terminals/Connector	Connector SC-C-179495	
Communications	Physical layer:	SMBus v1.1
	Protocol:	SBD v1.1 compliant
State of Charge Indicator	5-segment LCD display	
Harmonized Tariff Schedule	8507.60.0020	
Protection	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
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.

UBBL10-01

Newark, New Jersey | +1 315-332-7100 | Fax: +1 315-331-7800

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Dimensions

