

- Approved US Army's Program of Record Charger
- Simultaneous Charging of Multiple Warfighter Battery Types:  
AN/PRC-148, AN/PRC-152, BB-2590, BB-390, and Conformal Batteries
- Fast Charging: Up to 8 Batteries Simultaneously
- User Configurable Battery Adapters, no Tools Required
- Man Portable and Vehicle Mount
- Battery State of Charge and State of Health Indicators
- Standard USB Ports for Charging Phones and Tablets
- Built-in Solar Mode with Solar Power Meter



## Universal Battery Charger (UBC)



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The Universal Battery Charger (UBC) solution is US Army approved program of record charger. The UBC is a scalable charging system that charges a wide range of military and commercial batteries, and provides for the addition of new batteries through software upgradability and an innovative modular design. The base unit weighs approximately 6 pounds, is small enough to be carried in a rucksack, and is rugged enough to be vehicle mounted. Multiple UBC charging systems can be cascaded and powered from a single power source without requiring any tools. The UBC allows charging under heavy rain, and in other harsh environmental conditions, without cover. The charger is optimized to provide the warfighter with the ability to harvest power from solar panels, and a variety of other power sources.

The UBC combines the functions and capabilities of multiple battery chargers into one small, scalable package. It provides battery-charging technology to the warfighter through a highly rugged, field-deployable, multi-battery modular solution for austere mission environments. The UBC has a built-in battery test/analyzer function that allows the user to display the "health" of batteries in a matter of seconds.

## PERFORMANCE/BENEFITS:

- Built-in Battery Test/Analyzer: Performs battery health check automatically and identifies batteries that have less than 80% capacity.
- Charges Multiple Batteries: Standard configuration allows charging of multiple standard DoD battery types.
- Modular Adapter Design: Allows user customization of charging adapters for unique and future batteries.
- Operational MIL-STD-810G: The UBC considers what most chargers call misuse, a normal mode of operation. For example, the UBC allows charging in inclement weather.
- High Efficiency: Approximately 90% efficient when operating from DC sources.
- Vehicle Mounting: Provides a small and light footprint for vehicle installations.
- Fast Charging: Typical charge time for six Conformal Wearable Batteries (CWB) is less than 4 hours.
- Scalable: Multiple chargers can be connected to power from a single power source.

## TECHNICAL SPECIFICATIONS

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>➤ AC Frequency 47-63 Hz</li> <li>➤ Simultaneous Charging 8 batteries and 4 USB devices</li> <li>➤ Expandability Multiple units can be connected from a single power source</li> <li>➤ Modularity User configurable adapters allow custom configurations (no tools required)</li> <li>➤ Maximum Charge Power (per bay) 40 W</li> <li>➤ Total INPUT Power 270 W Typical</li> <li>➤ Input DC Voltage Range 10 - 33.6 VDC</li> <li>➤ Input DC Robustness MIL-STD-1275D</li> </ul> | <ul style="list-style-type: none"> <li>➤ Input AC Voltage Range 90 - 265 VAC</li> <li>➤ Input AC Robustness MIL-STD-704F</li> <li>➤ Electrostatic Discharge IEC-61000-4-2</li> <li>➤ Electromagnetic compliance MIL-STD-461F</li> <li>➤ Chemistries Lithium-ion, NiCad, NiMH</li> <li>➤ Smart Charging Protocols Smart Battery Bus (SMBus), DQ</li> <li>➤ Power Modes SOLAR and maximum power</li> <li>➤ Display Multi-color LED display</li> <li>➤ Typical Charge Time 8 Rifleman batteries in &lt; 3 hours, and 6 CWB in 4 hours</li> </ul> |
|--|---|

### Physical (Basic Unit)

- Height: 4.5 inches (11.43 cm)
- Weight: Approximately 6 lb. (453.6 g)
- Length: 8.0 inches (20.32 cm)
- Width: 8.7 inches (22.10 cm)

### Environmental (Per MIL-STD-810G)

- Vibration (Composite wheeled vehicle)
- Shock and Drop
- Driven Rain
- Sand and Dust
- Humidity
- Salt Fog
- Operating Temperature: -32° to 51°C
- Storage Temperature: -33° to 71°C

### Data Ports

- USB for firmware upgrade
- CANBus for unit to unit communication

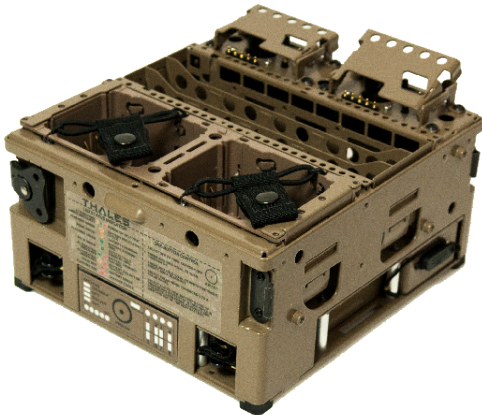
MULTI-PROTOCOL BATTERY COMPATIBILITY		
Battery	Device(s)	UBC
AN/PRC-154	Rifleman	8
AN/PRC-148	JEM/MBITR2	4**
AN/PRC-152	Harris	4**
Conformal Wearable Batteries	Various	6*
BB-2590 - SMBus Compliant	Various	2

\* with two CWB adapters installed

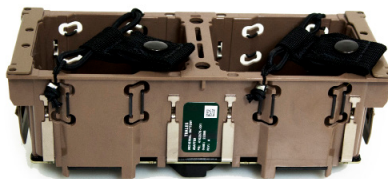
\*\*with two Universal adapters installed

UBC CONFIGURATION														
Part Number / NSN Number		UBC	Univ. Adapter	CWB Adapter	Soft Cover	Hard Cover Tactical	AC/DC Power Supply	120 Watt Solar Panel	Transit Case	AC Power Cord	Universal DC Cable	18' Solar Extension Cable	Nato Slave Vehicle Cable	DC Cable with Alligator clips
		4102871-502	4102870-501-SP / 6130-01-664-8268	4102869-501-SP / 6130-01-664-8300	1600829-8 / 6130-01-664-7904	1600829-2V / 6130-01-664-7897	1600787-1 / 6130-01-618-4110	1600813-3 / 6117-01-664-7860	1600829-23 / 8145-01-664-7882	855009-001 / 6150-01-664-8202	85568-002 / 6150-01-664-8187	85585-001 / 6150-01-664-8171	85587-001 /	85589-001 / 6150-01-643-6789
1100782-501 / 6130-01-659-7090		X	X	X	X	X	X	X	X	X	X	X	X	X
1100782-502	DC	X	X	X							X			X
1100782-503		X	X	X			X			X	X			X
1100782-504		X	X	X		X					X		X	
1100782-505		X	X	X	X		X			X	X			X
1100782-506		X	X	X	X		X		X	X	X			X
1100782-507		X	X	X	X		X	X	X	X	X	X		X

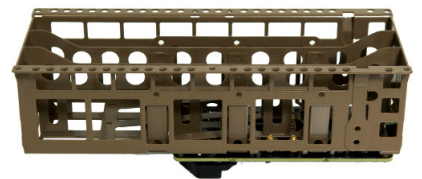
## UBC ILLUSTRATIONS



4102871-502 - UBC  
(with CWB and Universal adapters installed)



4102870-501-SP - UBC Universal Adapter  
NSN 6130-01-664-8268



4102869-501-SP - CWB Adapter  
NSN 6130-01-664-8268



## ACCESSORY PRODUCT ILLUSTRATIONS



1600813-3 - 120 Watt Foldable Solar Panel  
NSN 6117-01-664-7860



1600787-1 - AC/DC Power Supply  
NSN 6130-01-618-4110



1600829-2V - Hard Cover Tactical  
NSN 6130-01-664-7897



85587-001 - NATO Slave Vehicle Cable



1600829-8 - Soft Cover  
NSN 6130-01-664-7904



85589-001 - DC Cable with Alligator clips  
NSN 6150-01-643-6789



1600829-23 - Transit Case  
(shown with UBC and accessories)



85585-001 - 18" Solar Extension Cable  
NSN 6150-01-664-8171



85568-002 - Universal DC Cable  
NSN 6150-01-664-8187

➤ Specifications are subject to change without notice.