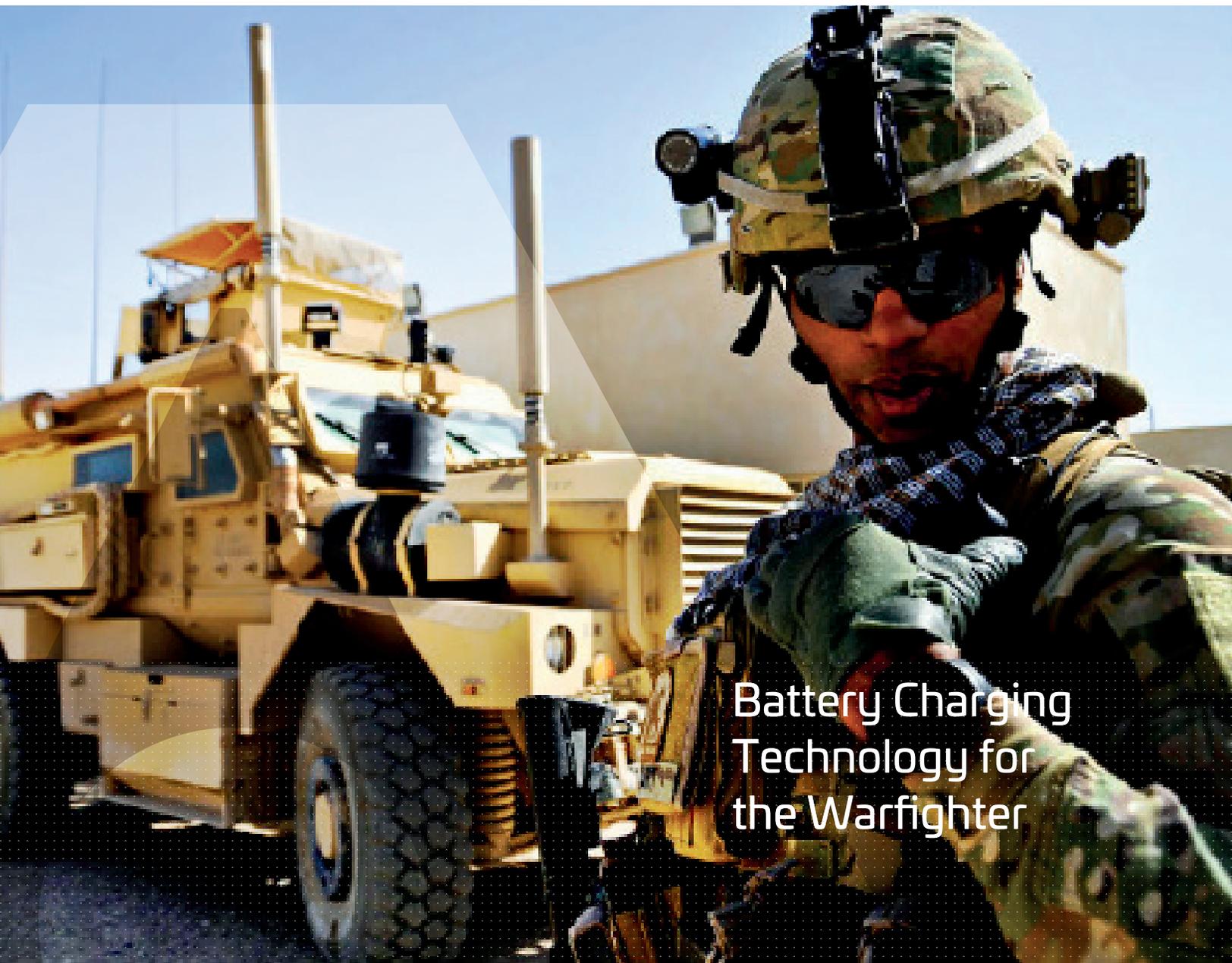


Universal Battery Charger (UBC) GEN 4 **Scalable Charging System**



Battery Charging
Technology for
the Warfighter

Universal Battery Charger (UBC) GEN 4

The UBC GEN 4 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 GEN 4 charging system 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 six 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.



Technical Specifications

Key Features

- Approved US Army's Program of Record Charger
- Simultaneous Charging of Multiple Warfighter Battery Types: Thales' Family of Tactical Handheld Radios, (AN/PRC-148 family of batteries and AN/PRC-170), AN/PRC-163, BB-2590, and BB-2525 Conformal Wearable Battery (CWB)
- Fast Charging: Charges six BB-2525 from 0 to 95% in 2.5 hours
- 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

Performance/Benefits

Built-in Battery Test/Analyzer: Performs battery health check automatically and identifies batteries that have less than 80% health.

Charges Multiple Batteries: Standard configuration allows charging of multiple standard DoD battery types.

Built-in power scavenging from a BB-2590.

Operational MIL-STD-810G: The UBC allows charging in inclement weather and austere environments.

High Efficiency: Approximately 95% efficient when operating from DC sources.

Vehicle Mounting: Provides a small and light footprint for vehicle installations.

Fast Charging: Typical charge time for eight AN/PRC-148/163 and BB-2525 batteries in about 3 hours.

Scalable: Multiple chargers can be connected to power from a single power source.

Technical Specifications

Simultaneous Charging 8 batteries and 4 USB devices

Maximum Charge Power (per bay) 70 watt

Maximum INPUT Power 420 watt

Input DC Voltage Range 10-50.0 VDC

Input DC Robustness MIL-STD-1275D

Electrostatic Discharge IEC-61000-4-2 Level 4

Electromagnetic compliance MIL-STD-461F

Smart Charging Protocols Smart Battery Bus (SMBus), DQ

Power Modes SOLAR and maximum power

Display Multi-color LED display

Physical Parameters

Physical (Basic Unit)

- Height: 5 inches (12.70 cm)
- Length: 8.0 inches (20.32 cm)
- Width: 8.7 inches (22.10 cm)
- Weight: Approximately 6 pounds (453.6 g)

Environmental Specifications (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

| Battery | Device(s) | Number of Batteries | Charging Adapter(s) |
|----------------------------------|------------------------------------|---------------------|--|
| AN/PRC-148 Radio Battery | IMBITR Radios and AN/PRC-161 Radio | 8 | PRC Combo Adapters or Spear Adapters |
| AN/PRC-148E Radio Battery | AN/PRC-148E Radio (Spear) | 8 | PRC Combo (4102962-501) or Spear Adapter |
| AN/PRC-163 Radio Battery | AN/PRC-163 Radio | 8 | PRC Combo Adapters or Spear Adapters |
| AN/PRC-170 Radio Battery | AN/PRC-170 Radio (Javelin) | 8 | Universal Adapter |
| BB-2590 | Various | 2 | N/A (Standard with UBC) |
| Conformal Wearable Battery (CWB) | Various | 6 | CWB Adapter |

Note: Two charging adapters needed to charge the number of batteries shown

UBC Illustrations



4102962-501
Standard PRC Combo Adapter



4103081-501
PRC Combo Adapter
for Mounted Application



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



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



4103154-501
Spear Cup



1100849-501
UBC GEN 4
(With no adapter installed)

Accessory Product Illustrations



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



85568-003
Universal DC Cable
NSN 6150-01-664-8187



85587-002
NATO Slave Vehicle Cable



85589-002
DC Cable with Alligator clips
NSN 6150-01-643-6789

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



1600829-2S
UBC Low Profile Hard Cover
(used with standard PRC
combo adapters)



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



4600171-1
UBC Vehicle Shock Tray



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

Specifications are subject to change without notice.

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