

ULTRALIFE®

**Providing Quality, Long Life, Reliable Power Solutions
and Communications Accessories
for Military, Homeland Security and Law Enforcement**

About Ultralife

Ultralife is a global provider of power solutions for diverse applications. The company develops, manufactures and markets a wide range of non-rechargeable and rechargeable batteries, charging systems and accessories for use in military, commercial and consumer portable electronic products. Through its range of standard products and engineered solutions, Ultralife is at the forefront of providing the next generation of power systems and accessories. Ultralife tailors its power solutions to meet the requirements of its target markets – military equipment, medical devices, automotive telematics systems, search and rescue equipment, safety and security products and electronic components where the company's technology adds value to the applications.



Ultralife Headquarters Newark, NY

Ultralife's **McDowell Research** brand of products are power solutions and accessories that support military communications systems including power supplies, RF amplifiers, battery chargers, amplified speakers, equipment mounts, case equipment and integrated communications systems.

Proven Power Solutions

Through the joining of two great brands and two industry leaders the combined experience, proven capabilities and knowledge base, of Ultralife and McDowell, allows us to provide standard and "custom engineered" total power solutions and communications accessories to meet the most demanding customer's requirements.

This is exemplified through Ultralife's involvement with the Land Warrior Stryker Interoperable Power System and McDowell's involvement with the Stryker TACP Close Air Support System upgrade program.



Land Warrior Power Solutions



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See McDowell Research products at: mcdowellresearch.com

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Lithium-Ion Rechargeable Batteries



UBBL01 (LWC-L)

Lithium-ion 8Ah, 15 V battery for simple, affordable power. Used in portable electronics and wearable diagnostics devices

UBBL04

Lithium-ion 8.4 V battery. used in rugged, portable electronics devices and in AN/PAS-13 thermal weapons sights

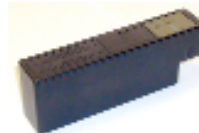


UBBL02 NSN 6140-01-553-3527 UBI-2590

A rechargeable version of the BA-5390/U primary battery. This Li-ion rechargeable battery is lighter in weight and does not suffer from memory effects like the BB-390 or BB-590

UBBL06 (LI-145) NSN 6140-01-542-4380

Land Warrior Program Lithium-ion battery. Also used with MicroLight™ hands-free netted radio system SMBus V1.1 smart battery



UBBL03 (Type LI-7)

Lithium-ion battery with SMBus V1.1 Smart Battery Communications. Used in military training systems, UAV's and rugged, portable electronics

UBBL09

This Li-ion battery is a lower voltage, higher capacity version of the 2590. 12V and 24V for those applications that prefer nickel-metal hydride type voltages with Li-ion capacities. 18.4Ah in 12V mode



UBBL12 (Type LI-7)

Lithium-ion battery with SMBus V1.1 Higher Rate Capabilities
Water resistant up to 1 meter

UBBL10 NSN 6140-01-554-2347 UBI-2590 Smart Battery

A UBI-2590 type battery with SMBus V1.1 Smart Battery Communications



For additional rechargeable batteries and info visit: www.ultralifebatteries.com

Battery Chargers



MRC-197
Tactical Solar Battery Charger
Allows individual warfighters the ability to recharge Harris handheld radio. Lithium-ion battery

CH0008
Soldier Based Charger
NSN 6130-01-545-1983
Charges UBBL06 (LI-145) battery safely & efficiently. EMI compliant (MIL-STD-461E). Safety approved for soldier use



PP-8525/U
MRC-85A/CH0003
NSN 6130-01-499-7305
Charges up to six batteries simultaneously.*
UBI-2590 Li-ion BB-390U NiMH
BB-590/U NiCd BB-2590/U Li-ion
UBBL09 Li-ion

CH0012
12 Position, 3 Level, Smart Charger
NSN 6130-01-545-1981
Charges 12 UBBL06 (LI-145) batteries simultaneously. Battery & charger communicate for optimum charging efficiency, battery life and safety. Ethernet connectivity available



PP-8526/U
MRC-86A/CH0004
NSN 6130-01-511-0352
Charges two batteries simultaneously.*
UBI-2590 Li-ion BB-390U NiMH
BB-590/U NiCd BB-2590/U Li-ion
UBBL09 Li-ion

MRC-88
NSN 6130-01-500-7774
Vehicle Battery Charger
Charges up to five batteries simultaneously.*
UBI-2590 Li-ion
BB-390U NiMH
BB-590/U NiCd
BB-2590/U Li-ion



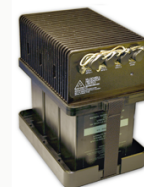
CH0006
3 Position, Smart Vehicle Charger
Charges 3 UBBL06 (LI-145) batteries simultaneously. Level 3, smart charger with LED display at each battery position. Ethernet connectivity available

MRC-135A
Single Unit Battery Charger
Charges:
UBI-2590 Li-ion
BB-390U NiMH
BB-2590/U Li-ion
DC input from vehicles, portable generators or solar panels



CH0007
9 Position, Rugged Smart Charger
Charges 9 UBBL03 (LI-7) and UBBL12 batteries simultaneously. Displays critical battery status/health information

MRC-143A
Universal Battery Charger
Self contained charger. Charges up to three UBI-2590, BB-390 and BB-590 batteries and charges up to six MBITR batteries with adapter simultaneously



*Simultaneously charges any combination of batteries listed.

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Lithium-Manganese Dioxide Non-Rechargeable Batteries



BA-5372/U
NSN 6135-01-214-6441
 Used as memory backup for SINGARS radios as well as many other electronic devices

BA-5390A/U
NSN 6135-01-517-6060
 A direct replacement for the BA-5590/U, with 50% more capacity and a State of Charge Indicator. Used in SINGARS radios as well as many other electronic devices.



BA-5368/U
NSN 6135-01-455-7947
 Used in the AN/PRC-90 survival radios

BA-5390/U
NSN 6135-01-501-0833
 A direct replacement for the BA-5590/U, with 50% more capacity. Used in SINGARS radios as well as many other electronic devices



BA-5367/U
NSN 6135-01-507-1135
 A direct replacement for the BA-5567/U, with 50% more capacity. Used in AN/PSG digital messaging devices as well as night vision devices

BA-5347/U
NSN 6135-01-455-7946
 Used in AN/PAS-13 Thermal Weapon Sight. Alternative for BA-5847/LiSO₂ battery, with 50% more capacity



1/2 AA
NSN 6135-01-340-7883
 Used in AN/AVS-9 Night Vision goggles

9 Volt
NSN 6135-01-369-9792
 Used in AN/CYZ-10 Data Transfer Devices, Miles Laser Systems, PLB8 EPIRB, REMBAS II sensors and many other devices



Type-5380
 Alternative to: BA-5800/U, NSN-6135-01-440-7774, and 6135-99-665-8958 with 50% more capacity. Used in AN/PSN-11 Precision Lightweight GPS Receiver (PLGR), Chemical Agent Monitors and others

Sophie Battery
US NSN 6135-01-539-0013
UK NSN 6135-99-834-4219
 Longest lasting battery for the Sophie Thermal Imager and Marabel Thermal Camera



For additional non rechargeable batteries and info visit: ultralifebatteries.com

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Power Adapters / Chargers and Battery Boxes



MRC-132
Power supply/charger with Nickel Metal Hydride battery UPS for:
AN/PRC-117F
AN/PRC-138
AN/PRC-150
AN/PSC-5D

MRC-42**
Power supply/charger with Li-ion UBI-2590 battery for AN/PRC-148 (MBITR)



MRC-62
Power supply/charger with sealed lead-acid battery UPS for:
TSEC/KY-57
TSEC/KY-99

MRC-33
NSN 6150-01-435-3924
Power supply/charger with MRC-490 sealed lead-acid battery for AN/PRC-119 series transceivers (SINCGARS)



MRC-82A
NSN 6130-01-513-9182
Power supply/charger with Lithium-ion (UBI-2590) battery UPS for:
AN/PRC-117F AN/PRC-138
AN/PRC-150 AN/PSC-5D
AN/URC-200

WKW-7
NSN 6150-01-435-3919
DC to DC power supply/charger with MRC-490 sealed lead-acid battery for:
AN/PSC-5D AN/PRC-113
AN/PRC-117F AN/PRC-138
AN/PRC-150 AN/URC-200



MRC-99-01**
NSN 6150-01-435-3920
Power supply/charger with a MRC-490 sealed lead-acid battery UPS for:
AN/PRC-117F AN/PRC-138
AN/PSC-5D AN/PRC-150
AN/URC-200

MRC-12A
Six position battery box, places six XX90 type batteries in parallel to combine the current capacity. 12 or 24V DC output



MRC-11A
Four position battery box, places four XX90 type batteries in parallel to combine the current capacity. 12 or 24V DC output

MRC-83
Two position battery box. Can be used with one or two XX90 type batteries. 24V DC output



For additional "MRC" and "WKW" power adapters, chargers and battery boxes visit: www.mcdowellresearch.com

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Power Supplies



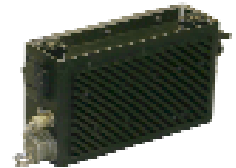
PP-2524/U
MRC-93
NSN 6150-01-520-8178
Self-contained power system with Battery UPS, designed to power the following:
AN/PRC-117F AN/PRC-138
AN/PRC-150 AN/PRC-5D
AN/URC-200

MRC-45
AC to DC power supply which is designed to power the following:
TSEC/KY-57
TSEC/KY-99
AN/KG-194-A



MRC-64-03
Rugged sealed DC to DC power supply that allows the use of 11 to 36 VDC input power sources to provide DC power for the Panasonic Toughbook series notebook computer

PP-8523/U
MRC-92
NSN 6130-01-508-4877
AC/DC power supply designed to power the following:
AN/PRC-117F AN/PSC-5D
AN/PRC-150 AN/PRC-113
AN/URC-200



MRC-122
AC to DC power supply that provides operating power to the Javelin Thermal Viewer

MRC-41**
NSN 6160-01-524-0032
AN/PRC-148 (MBITR) X90 External Battery Power Supply. The MRC-41 allows the operator to power an AN/PRC-148 transceiver, replacing the existing battery. The MRC-41-2 allows the operator to power two (2) each MBITR adapters



CH0018
NSN 6130-01-545-1984
AC/DC Power supply. 1500W, 28V DC output used with CH0006, CH0007 and CH0012 chargers

MRC-188
NSN 6130-01-546-2385
DC to DC power supply with optional battery for the INDRA SATCOM terminal



MRC-185
AC/DC power supply for the ROVER III receiver

RMT-8
Rugged, compact AC to DC power supply. 1500W 24V DC



** For additional versions and options see our web site: www.mcdowellresearch.com

For additional "MRC" and "RMT" power supplies and info visit: www.mcdowellresearch.com For additional info on CH0018 visit ulbi.com

Amplifiers, Speakers and Integrated Systems

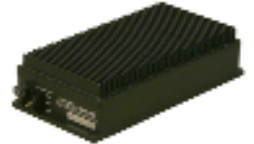


MBA-100

100 Watt multi-band amplifier. Frequency: 30-512 MHz. ALC adjustment & accuracy settable to 25, 50, 75 or 100 Watts.

MBA-50V

50 Watt VHF RF amplifier. Frequency: 30-108 MHz. SINGARS compliant



MRC-165

Amplified speaker compatible with ARC-210/RT-1747 and ARC-210/RT-1851 transceivers audio interface connections

MBA-21

20 Watt multi-band amplifier. Frequency: 30-512 MHz, 11-36 VDC input



MRC-67A

NSN 5965-01-511-3633

Amplified speaker. Rugged, waterproof audio speaker system for use in world-wide applications. Compatible with virtually any communication system using standard transceiver interface audio connections

MRC-112

Tactical telephone amplified speaker



MRC-200

Tactical repeater system. 20 Watt multi-band capability field interchangeable duplexors. Integrated power supply/charger

MRC-94

Dual transceiver case. Transport case mounted, self contained power system for operation of:
AN/PRC-117 AN/PRC-150
AN/PSC-5D AN/PRC-113
AN/URC-200



MRC-65 Series

Quad Radio Case. Provisions for four transceivers with AC/DC power and battery backup

MRC-34

NSN 6130-01-435-3922

Self contained AC/DC radio mounting system with battery backup for the following:
AN/PRC-117F AN/PSC-5D
AN/PRC-150 AN/PRC-138
AN/PRC-113



For additional Amps, Speakers and Integrated Systems and Info visit: www.mcdowellresearch.com

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Equipment Mount Systems



MIK-21-75

SatCom on the Move (SOTM) system with RAMP-75, 30-512 MHz, multi-band, RF Amp

MIK-21

SOTM system with AM/SAT-50 UHF SatCom RF Amp, both for use with AN/PRC-117F or AN/PSC-5D

RMT-103

Equipment mount that extends VRC-103 capabilities to include an additional radio and power ancillaries via 2, 6.1 Amp cigarette lighter plugs

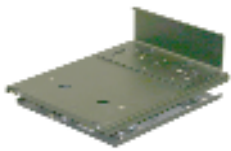


MRC-105

Shock-mounted, transit case system which is used with AN/PRC-117F transceiver and AN/PSC-5 (5D) series transceivers

MIK-14

Self contained single radio mounting system used with the following:
AN/PRC-117F
AN/PSC-5D



RMT-2

NSN 6150-01-435-3917

Shock mounted system designed to safely mount the following:

AN/PRC-117F AN/PRC-113
AN/PSC-140 series AN/PSC-138 series
WRC-200 series AN/PSC-5D

RMT-25

SATCOM antenna mount that bolts into existing mounting holes on the right rear (P/N RMT-25) or left rear (P/N RMT-25L) fender of the HMMWV



MIK-18

MRC-Lite Pallet

Self contained radio mounting system used with the following:

AN/PRC-150
AN/PRC-117F
AN/PSC-5D

RMT-26

HMMWV rear bumper mounted, telescopic SATCOM and standard whip antenna mount



RMT-185

Shock mounted system designed to safely mount the Rover III Video Receiver

MRC-195

Shock mounted transit case system for use as LOS or SOTM communications ability with RAMP-75, 30-512 MHz multiband RF Amp. For use with AN/PRC-117F
AN/PSC-5D



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For additional mount systems and information visit: www.mcdowellresearch.com