

NAVY Transition Assistance Program

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NEED & CUSTOMER REQUIREMENT

Need: The need exists to have an uninterruptible power supply for communication equipment that is lighter weight and can also act as a battery charger for portable rechargeable lithium ion batteries that are being increasingly used by the warfighter.

Value to the Warfighter: The value to the Warfighter will be the replacement of two pieces of gear (a UPS and a charger) with one thereby reducing the volume by 50% as well as the carried weight by nearly 50lbs. This device will also provide 1 hour of run time as a UPS where presently only 10 minutes exist.

Operational Gap: This UPS product integrates lithium ion technology and gives a significant weight advantage and run time over similar lead based battery products.

Customer Specifications: INPUT SPECIFICATIONS:

Input AC Voltage: 80-265V
Frequency: 47-400Hz
DC Input Voltage: 22-32VDC

OUTPUT SPECIFICATIONS:

AC Output Power: 1250VA/1000W
DC Output: 500W @ 24VDC or 12VDC

Technology Description: To achieve the desired solution, Acumentrics standard lead acid based UPS technology has been adapted to integrate BB2590 lithium ion batteries to provide an extended run from 10min to 60 min while also charging up to 10 batteries for other portable equipment.

N06-105 - Acumentrics

Marine Portable Power Unit

SPONSORSHIP of original SBIR/STTR Topic

SYSCOM: MARCOR

Transition Target: Used for Multiple C4S systems within the Army and Marine Corp

Original Sponsoring Program: TBD

TPOC Phone Number:
703-432-3030



TECHNOLOGY DEVELOPMENT MILESTONES (SBIR/STTR)

Milestone	TRL	Risk	Measure of Success	TRL Date
Phase II- Complete Board Fabrication	6	Moderate	Receive Prototype Boards	12/09
Phase II- Complete Mechanical & Thermal Design	6	Low	Final CAD Model	12/09
Phase II -Prototype System Fabrication	7	Moderate	Complete Build	3/10
Phase II -System Design Validation Testing	8	Moderate	Pass Test Plan	5/10
Phase II -Complete Cost Analysis		Low	Final Report	5/10

Open contract: M67854-08-C-6532 ending June 2010

TECHNOLOGY TRANSITION OPPORTUNITIES (PHASE III)

Other Potential Applications:

Initial target platforms would be for all rapidly deployed forward moving units where battery charging and UPS capabilities in the 0-2kW range exist.

Business Model:

The technology would be transitioned to the military in the same manner as has been done with Acumentrics' standard UPS technology. That consists of direct sales to the military branches as well as sales to prime contractors where the product is either specified in a funded program or simply listed in the prime's general sales catalog.

Objective:

Acumentrics would like to identify prime contractors as well as suppliers that could market the product as an extension of their existing product lines to the military. Acumentrics would also like to identify key military programs where the product would be directly applicable or with minor changes.

Company: Acumentrics

Contact: Dr. Norman Bessette

Email: nbessette@acumentrics.com

Phone: (781) 461-8251