

BPM-602

BATTLEFIELD AIR OPERATIONS POWER MANAGER



ENABLES A WIDE RANGE OF MILITARY APPLICATIONS

- BAO Kit field power
- GSK field power
- Li-145 field charger
- Any suite of gear using multiple BA-5590s for power
- Fuel cell and solar power sources
- Mission power usage recorder of man-portable gear

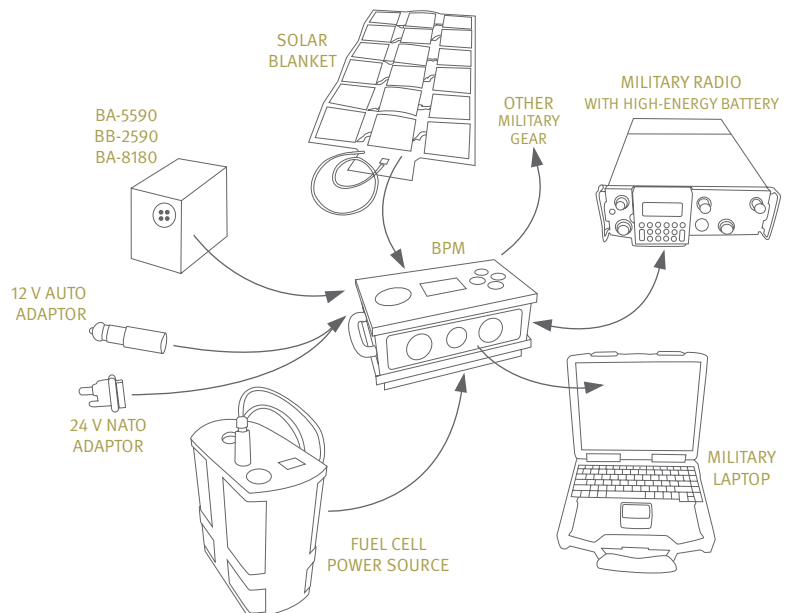
PROTONEX LEADS THE INDUSTRY IN HIGH-PERFORMANCE, ADVANCED POWER SYSTEMS FOR PORTABLE MILITARY APPLICATIONS

The BPM-602 is designed to support a host of power conversion and battery charging capabilities for the Air Force Battlefield Air Operations (BAO) Kit mission requirements. Protonex' unique system design combines both leading edge advances in ultra-high efficiency power conversion, equipment power management and energy harvesting technology in one product to offer benefits nowhere else available to military users. The BPM-602 system design offers a lightweight, compact and rugged intelligent power management system designed to withstand the harsh operating conditions of military field use. This product contains features and functions that extend beyond the BAO mission application and that can be readily adapted to support a number of alternative mission uses.

BPM-602 BENEFITS

- Reduces soldier carry weight and bulk
- Runs cool even under heavy load with 96–99% efficient power conversion
- Lowers operational life cycle cost
- Integrates three or more devices into a single unit
- Offers flexibility for a wide range of applications

BAO KIT APPLICATION EXAMPLE



THE NEXT GENERATION OF PORTABLE POWER™

FEATURES & FUNCTIONS

- Three interchangeable 30 V bidirectional ports are fully protected against over-voltage, over-current, reverse polarity, and are fully EMI/EMC filtered
- Two individually adjustable outputs can be set to 10–24 VDC, and are capable of driving 5 Amps each, with both channels simultaneously fully loaded
- Energy scavenger efficiently harvests power from solar panels, primary batteries, automobile batteries and battery chargers, and other found power sources. Port is fully protected and filtered
- Charges one or two Li-80, Li-145, or BB-2590 batteries simultaneously
- Rugged, submersible case assures reliable operation in adverse environments
- USB interface on both programmable ports enables configuration, monitoring, tracking, and firmware upload via attached military portable PC
- Compatible with Protonex M250-CX portable battery charger
- Customized cable sets available on request

BPM-602 TECHNICAL SPECIFICATIONS

PHYSICAL	Size	3.3 h x 6.0 w x 2.3 d inches (8.4 x 15.2 x 5.8 cm)
	Weight	1.2 lbs (0.56 kg)
	Color	Desert Sand
	Operating Temperature	-40 to 60°C
	Converter Efficiency	96–99%
	Ruggedization	Meets Applicable MIL-STD-810F
INPUT/OUTPUT PORTS	Number of Ports	Three
	Operational Range	30 VDC Nominal, 18–34 VDC
	Max Current per Port	20 Amps (All Ports Simultaneously)
	Comms Support	SMBus 2.0 Compliant
	Protection	Over-voltage, Reverse Polarity, Over-current, Short Circuit, EMI, Surge, Auto Resetting
OUTPUT PORTS	Number of Ports	Two
	Operational Range	10–24 VDC
	Programmable	In 0.1 V Increments Under Firmware Control
	Max Current per Port	5 Amps (All Ports Simultaneously)
	Comms Support	Integral USB
	Protection	Over-voltage, Reverse Polarity, Over-current, Short Circuit, EMI, Surge, Over-temperature, Auto Resetting
SCAVENGER INPUT PORT	Number of Ports	One
	Operational Range	4–34 VDC
	Max Current	10 Amps
	Optimized	For PV (Solar Blanket), BA-5590, and Vehicle Power Harvesting
	Comms Support	SMBus 1.1 and 2.0 Compliant
	Protection	Over-voltage, Reverse Polarity, Over-current, Short Circuit, EMI, Surge, Over-temperature, Auto Resetting

All specifications subject to change without notice.

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