

SPM-611/612

SOLDIER-WORN POWER MANAGER



ENABLES A WIDE RANGE OF MILITARY APPLICATIONS

- Man-packable power integration
- Soldier-worn battery management
- BB-2590, Li-145, AA field charger
- Any suite of gear using multiple BA-5590s for power
- Fuel cell and solar power sources

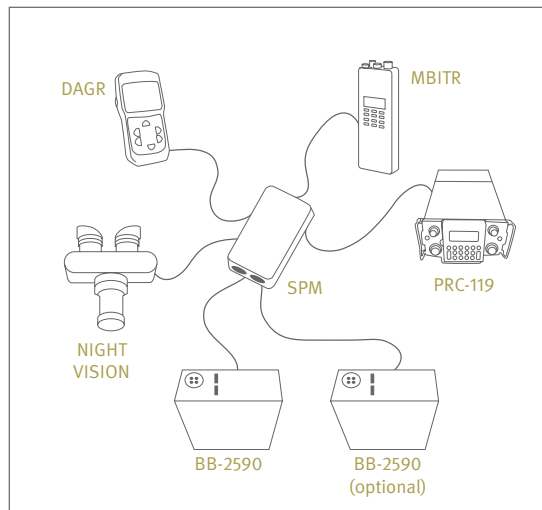
PROTONEX LEADS THE INDUSTRY IN HIGH-PERFORMANCE, ADVANCED POWER SYSTEMS FOR PORTABLE MILITARY APPLICATIONS

The SPM dramatically reduces the number and variety of batteries needed by today's dismounted warfighter, while actively monitoring and managing power usage to assure mission success. Protonex' unique system design combines 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 SPM system design offers a lightweight, compact, and rugged intelligent power management solution designed to withstand the harsh operating conditions of military field use. This unit directly powers virtually any man-packable military equipment, recharges a soldier's or squad's batteries, and intelligently adjusts to changing mission conditions or requirements.

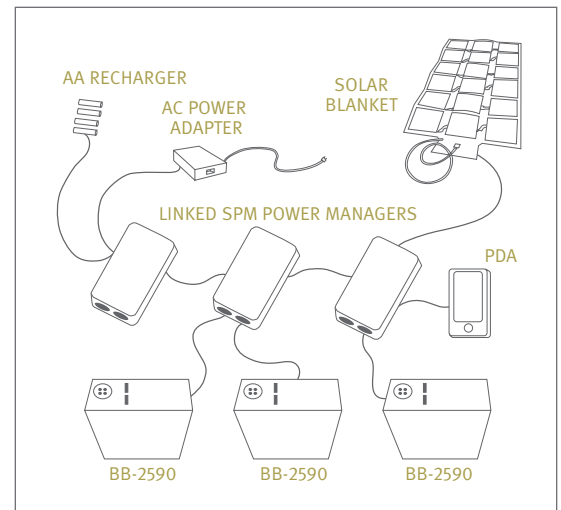
SPM-611/612 BENEFITS

- Manages and prioritizes battery usage
- Powers man-worn and man-packable gear
- Recharges military and commercial batteries
- Optimizes solar/alternative power sources
- Monitors power sources and loads, alerting warfighter to problems
- Dynamically adjusts to changing mission needs

ON-MISSION EXAMPLE



OFF-MISSION EXAMPLE



THE NEXT GENERATION OF PORTABLE POWER™

FEATURES & FUNCTIONS

- Six configurable power ports permit versatile operation powering devices, managing energy sources, and charging up to four batteries (BB-2590 or Li-145)—any or all of which can occur simultaneously
- Two outputs can power equipment at independently configurable 10–24 VDC. Two additional devices can be powered at 15 V nominal
- Full SMBus and USB connectivity for set-n-forget charging, accurate state-of-charge indication, battery health monitoring and reporting, and mission profiling/configuration
- Two-port energy scavenger efficiently harvests power from solar panels, primary batteries, automobile batteries and battery chargers, and other found power sources
- Compatible with Protonex M250-CX portable battery charger

SPM-611/612 TECHNICAL SPECIFICATIONS

PHYSICAL PORTS	Size	1.4 h x 4.2 w x 2.4 d inches (3.5 x 10.6 x 6.1 cm)
	Weight	0.9 lbs (0.41 kg)
	Color	Desert Sand
	Operating Temperature	-40 to 60°C
	Converter Efficiency	96–99%
	Ruggedization	Meets Applicable MIL-STD-810F
INPUT/OUTPUT	Number of Ports	Six
	Output Converters	Two, 10–24 VDC, Individually Configurable
	Battery Voltage	10–16 VDC, 14.4 V Nominal
	Max Current Per Port	10 Amps
	Protection	Over-voltage, Over-current, Short-circuit, Reverse Polarity, Surge, EMI (All Protection Self-resetting)
BATTERY CHARGING	Charging, Simultaneous	Two Batteries
	Charging, Sequential	Up to Four Batteries
	Types of Batteries	BB-2590, Li-80, Li-145
	Charging, AA	NiMH, NiCAD, or Li-Ion (Optional)
	Charging, Squad	Daisy-chain up to 10 SPM Units to Share Power Sources
USER INTERFACE	Port Charge Indicator	5-segment Meter for Each Port
	Port Status Indicator	3 Status Indicators (red/yellow/green) per Port
	Display Enable	Pushbutton Enables All Indicators
	Graphical Display	Full Configuration/Alerts (SPM-612)
SCAVENGER INPUT PORT	Number of Ports	Two, Auto-switching to One Scavenger
	Operational Range	4–34 VDC
	Max Current	10 Amps
	Optimized	For PV (Solar Blanket), BA-5590, and Vehicle Power Harvesting
	Comms Support	SMBus 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.