

SPM-622 SQUAD POWER MANAGER



ENABLES A WIDE RANGE OF MILITARY APPLICATIONS

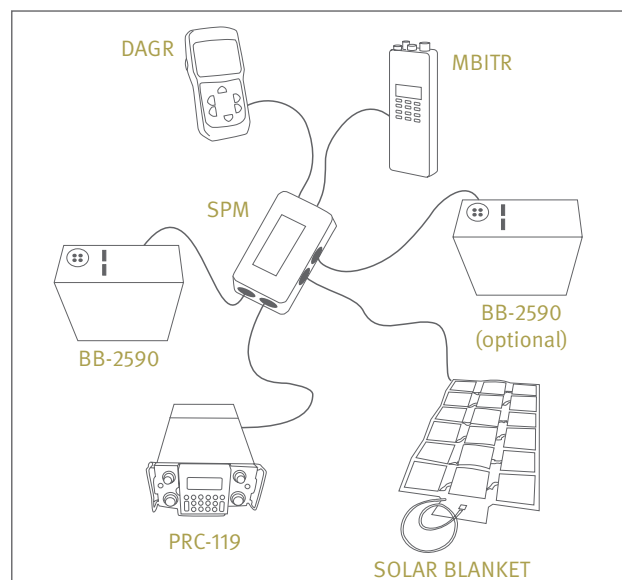
- Man-packable power integration
- Squad battery management
- BB-2590, Li-145, AA field charger
- Any suite of gear using multiple BA-5590s for power
- Fuel cell and solar power sources

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 available nowhere else. 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 squad's batteries, and intelligently adjusts to changing mission conditions or requirements.

SPM-622 BENEFITS

- Manages and prioritizes battery usage
- Powers man-packable gear and man-worn 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
- Fully submersible for use in all weather
- Data logging for mission analysis and planning



THE NEXT GENERATION OF PORTABLE POWER™

FEATURES & FUNCTIONS

- Six universal power ports permit versatile operation powering devices, managing energy sources, and charging up to five batteries—any or all of which can occur simultaneously
- Two ports can power equipment at independently configurable 3–34 VDC. Up to three additional devices can be powered at nominal battery voltage
- Provides graphical display to show power trends and permits advanced configuration
- Graphical interface shows detailed port status and trends, battery health and configuration information
- 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 M300 portable battery charger

SPM-622 TECHNICAL SPECIFICATIONS

PHYSICAL	Size	1.8 h x 4.0 w x 2.3 d inches (4.6 x 10.2 x 5.8 cm)
	Weight	0.9 lbs (0.40 kg)
	Color	Desert Sand
	Operating Temperature	-40 to 60°C
INPUT/OUTPUT	Number of Ports	Six Bidirectional
	Port Voltage	3–34 VDC
	Port Max Power	150 Watts (14V nom), 300 Watts (28V nom)
	Port Max Current	10 Amps
	Battery Voltage	10–34 VDC, 12–28 V Nominal
	Port Protection	Over-voltage, Over-current, Short-circuit, Reverse Polarity, Surge, EMI
	Protection Reset	Automatic Self-reset
BATTERY CHARGE	Data Interface	USB 1.0 Port
	Simultaneous Charge	Up to Three Batteries
	Sequential Charge	Up to Five Batteries
	Military Battery Support	BB-2590, BB-2557, Li-80, Li-145, 28 V Vehicle, Conformal Bat.
	Commercial Battery Support	AA, AAA, RCR-123, 12 V Vehicle
ENERGY HARVESTING	Smart Charging	SMBus 1.1 and SMBus 2.0 Support, All Ports
	Harvester Ports	Up to Two
	Harvest Range	4–34 VDC
	Solar Algorithm	Peak Power Point Tracking (PPPT)
	Primary Battery Harvesting	Automatic
USER INTERFACE	Fuel Cell Interface / Control	Automatic
	Port Charge/Status Indicator	Graphical display of all power levels & remaining mission time
	Graphical Display	Backlit LCD Interface
	Control Keypad	Up, Down, Enter and Escape buttons

All specifications subject to change without notice.

©2013 Protonex Technology Corporation. Protonex is a trademark of Protonex Technology Corporation.

Protonex Technology Corporation ■ 153 Northboro Road ■ Southborough, MA 01772–1034

T 508.490.9960 ■ F 508.490.8575 ■ www.protonex.com