



MPS2000 Power System



Micro Power System MPS2000



5400W @ -54VDC

OVERVIEW

The MPS2000 is a micro power system designed for applications requiring high current output in limited space applications. The MPS2000 family provides a host of modeling options that can be tailored to meet the requirements of edge technology, data centers, customer premises or traditional telecoms.

The MPS2000 system brings to the market a collection of interchangeable components allowing the application to drive the design. With as little as a single shelf or as many as 4, the MPS2000 becomes a high current power supply. Add distribution, a full featured controller with SNMP and the components create a highly versatile package with full system features providing the greatest of flexibility.

With 3 rectifier choices in the same chassis, the MPS2000 provides as little as 1350 watts to much as 32.4 kW making it an industry powerhouse with 34 W/ inch³, in a 1RU 19" frame. With multiple choices and scalable options the MPS2000 is designed to grow with an ever-changing environment.

FEATURES

- ▶ 1RU system height, 19" or 23" mountings
- ▶ Scalable up to 4 shelves
- ▶ 1350, 2000 and 2700 Watt rectifier
- ▶ 120 or 240 VAC nominal input
- ▶ Front to rear cooling with variable speed fans for quiet operation
- ▶ Six (6) hardwired alarm outputs or optional Ethernet interface providing SNMP traps for remote surveillance
- ▶ Flush or mid-mount with rear access AC and DC terminations
- ▶ Bulk and Individual AC circuit options
- ▶ Optional low voltage disconnect

APPLICATIONS

- ▶ IP/Ethernet triple play
- ▶ Fiber-to-the-Node (FTTN)
- ▶ Broadband Loop Carriers (BLC)
- ▶ Digital Subscriber Line Access Multiplexers (DSLAM)
- ▶ Optical Multiplexers
- ▶ Outside plant electronics (OSP)
- ▶ Multi-dwelling unit (MDU) apartment buildings
- ▶ Multi-tenant office buildings
- ▶ Enterprise and customer premises



■ ■ RECTIFIER

Rated at 91% efficiency, the MSMB50 rectifiers utilizes plug-n-play mentality with flawless performance throughout its temperature range. Available in three output models, the MSMB50 rectifiers can be scaled to the load of the application. Designed for both 120 and 240 VAC environments the MSMB50's provide added flexibility by providing power where it is needed. This no-nonsense compact, 1RU rectifier serves as a robust, environmentally hardened workhorse solution to today's DC power needs.

■ ■ CONTROLLER

The MSC1100 controller provides comprehensive system and battery management. Features include configuration set up, performance monitoring, plant status, alarm reporting, and battery testing. The front panel meter and multiple LEDs serve to keep the technician informed of voltage, current and system status conditions. System set up and in-depth interrogation is performed via the RS232 port. Customized alarm reporting is provided through 6 user defined contact closures or an option SNMP interface.



- ▶ Voltage and current meter
- ▶ Multiple LED's for plant status
- ▶ RS232 local connectivity
- ▶ Alarm reporting via six (6) user programmable contact closures
- ▶ Optional SNMP interface for alarm reporting
- ▶ Battery temperature compensation
- ▶ Battery testing for capacity validation

■ ■ DISTRIBUTION

To complement the flexibility of the MPS2000, a 4RU distribution panel can be integrated into the system. With optional configurations, this 18 position panel supports both single and double wide bullet style receptacles allowing for the ultimate flexibility in load circuit requirements. Adding to the design flexibility, the consolidated distribution panel will support up to 6 battery loads without reducing the number of load output terminations.



MODEL #	MSM25A50	MSM40B50	MSM50B50
Input Voltage	90 -310 VAC Nominal: 110 / 240 VAC	90 – 310 VAC Nominal: 110 / 240 VAC Derated power @ 90 to 176 VAC, 1000 W @ 90 VAC	90 – 310 VAC Nominal: 110 / 240 VAC Derated power @ 90 to 176 VAC, 1350 W @ 90 VAC
Inrush Current	< 21A	< 16 A	< 21.8 A
Efficiency	> 91%	> 91%	> 91%
Losses, max.	< 200 W	< 235 W	< 355 W
Power Density	17 W / inch ³	23.6 W / inch ³	34 W / inch ³
Output Voltage	40 to 59.5 VDC Nominal: 54 VDC	40 to 59.5 VDC Nominal: 54 VDC	40 to 59.5 VDC Nominal: 54 VDC
Output Voltage Protection	59.5 VDC	59.5 VDC	59.5 VDC
Current Limit	27.5 A maximum	41.7 A maximum	56.25 A maximum
Rated Power	1350 W (25 A)	2000 W (40 A) @ 240 VAC 1000 W (20 A) @ 110 VAC	2700 W (50 A) @ 240 VAC 1350 W (25 A) @ 110 VAC

GENERAL

Shelf Output Power	1350 to 8100 W
Input Protection	Internal fuse (2), line & neutral
Input Switch	None
Output Connector	Rear
Output Voltage Regulation	< ± 0.6 %
Load Sharing	£ ± 5 %
Ripple & Spike	£ 100 mV peak to peak
Psophometric Noise	£ 2.0 mVrms (weighted)
Acoustic Noise	55 dBA
Total Harmonic Distortion, THD	< 5%
Power Factor	> 0.99
Safety	EN 60950 UL/cUL 60950-1 IEC 60950-1
EMI, radiated	FCC Class B CISPR 22 Class B
EMI, conducted	FCC Class B CISPR 22 Class B

ENVIRONMENTAL

Storage Ambient	-40°F to +185°F (-40°C to +85°C)
Operating Ambient	-40°F to +167°F (-40°C to +75°C) <i>Full power rating to +55°C, linear derating to +75°C for 2000 & 2700W modules</i>
Humidity	< 95% non-condensing

MECHANICAL

Shelf, overall	1.75"H x 14"D x 19"W
Rectifier Width, overall	4.94 inch / 125.5 mm
Height, overall	1.61 inch / 41 mm (1RU)
Depth, overall	10.63 inch / 269.9 mm
Weight	4.4 lbs / 2.0 kg
Cooling	Front to rear fan

STATUS INDICATORS

Rectifier	LED "AC ON", Green LED "CL", Yellow LED "RFA/FF", Red
-----------	---



PO Box 910, 1376 State Route 598 • Galion, OH 44833
(419) 468-7600 • fax: (419) 468-1154
www.peco2.com • email: pecosales@peco2.com

PECO II, Inc. is proud to
be certified

