



Micro Power System



MPS10

Micro Power System MPS10



900W @ -54VDC



Rear View

OVERVIEW

The MPS10 is a micro power system optimized for use at the network edge. It works in both controlled and uncontrolled environments, enabling deployment in outside plant enclosures or at the customer premises. The low profile, compact, integrated design provides all of the power, distribution and management required for applications where space is at a premium. Designed for remote surveillance via the Ethernet connection, the MPS10 can provide the necessary alarms and status conditions allowing the user to make informed decisions before conditions become critical.

FEATURES

- ▶ 1RU system height, 19" or 23" mountings
- ▶ Temperature hardened with output to +75°C
- ▶ 6 Amps per rectifier
- ▶ 120 / 240 VAC nominal input
- ▶ Front to rear cooling with variable speed fans for quiet operation
- ▶ Remote surveillance via optional Ethernet interface or six (6) hardwired alarm outputs
- ▶ Flush or mid-mount with rear access distribution terminations
- ▶ Single AC circuit powers the entire shelf
- ▶ Manual battery disconnect facilitates maintenance and testing
- ▶ 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

The MSM6A50 rectifier is a single phase, hot swappable, fan cooled rectifier that provides 300 W of output power. This compact, 1RU rectifier provides the same output current at either nominal input of 120 / 240 VAC. The product is environmental hardened and designed to operate up to 75°C. Front panel LEDs provide rectifier status for quick indication of proper operation.

■ ■ CONTROLLER

The MSC1100 controller provides comprehensive system and battery management. Management features include initial set up and configuration, performance monitoring, plant status and alarm reporting, and initiating and reporting the results of battery test. 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 optional 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



■ ■ SYSTEM SHELF AND DISTRIBUTION

Designed for 19" or 23" applications, the MPS10 may be equipped with up to three rectifiers for a total capacity of 900 Watts. The compact MPS10 provides similar features as found with larger products, including 8 GMT fuses, a battery disconnect and optional LVD. A single 20 Amp AC input feed serves the entire system.

■ ■ SPECIFICATIONS

INPUT

Voltage Range	120 / 240 VAC
Frequency	45 – 65 Hz
Current	< 13.5 Amps
AC Input Type	Single Feed w/ IEC Receptacle, or Individual Feed w/ IEC Receptacles, Rear Access
Customer Provided Protection	20 Amp Circuit Breaker

OUTPUT

Voltage Range	-53.3 VDC to -57.4 VDC
Current	16.5 Amps @ -54 VDC 18.8 Amps @ -48 VDC
Power	300 W per rectifier
Efficiency	87.5%

NOISE

Voice Band	≤ 24 dBrc CCITT, w/ batteries ≤ 40 dBrcs CCITT, w/o batteries
Wide Band Acoustic	≤ 10 mVrms @ 10k to 100M Hz ≤ 50 dB(A)

SHELF & DISTRIBUTION

Standard	8 GMT Fuse Positions, Rear Access 1 Battery Disconnect
-----------------	---

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) Power derating above +65°C, 150W per rectifier at +75°C
Humidity	< 95%, non-condensing
Heat Dissipation	< 136 BTU/hr per rectifier

MECHANICAL

Weight	Shelf Assembly: 7.9 lb (3.6 kg) Rectifier Module: 2.2 lb (1.0 kg)
Dimensions (Shelf Assembly)	Width: 17.02" (432.3 mm) Height: 1.75" (44.5 mm) Depth: 13.24" (336.2 mm)
Cooling	Fan cooled with speed control
Mounting Options & Projection	Flush or Mid-Mount, adjustable for 19" or 23"

SAFETY

UL60950



DOCUMENTATION

Product Manual	4380467PD
J-Specification	J438173

ORDERING INFORMATION

DESCRIPTION	PART NUMBER	DESCRIPTION	PART NUMBER
Shelf, 19"	438173-L1	Low Voltage Disconnect	438173-L70
Controller & Software Distribution Kit	438173-L80	Battery Temp Probe (optional)	438173-L60
Distribution, 8 Pos GMT fuse	438173-L20	Cable, Battery Temp Probe, 10'	438173-L61
Fuse, Battery Disconnect	3150098P-30	Cable, Battery Temp Probe, 50'	438173-L62
Rectifier, -48V 6A 300W	MSM6A50	AC Line Cord, 10', 5-15	438173-L110
Rectifier, blank	4281003P	AC Line Cord, 10', none	438173-L111
Adapter, 19" to 23" mounting	438173-L145	AC Line Cord, 10', L620P	438173-L112
Alarm Module, SNMP	438173- L90	Product Manual, Printed Hard Copy	438173-L175
Alarm Module, Relay	438173-L91		
Cable, alarm, 10' for List 91	438173-L95		
Cable, alarm, 50' for List 91	438173-L96		
		SPARES	
		Controller, Micro Power System	MSC1100
		Kit, Spares	438173-L170



P.O. Box 910 • 1376 SR 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

