

What's NEW at ...



# M850-MP1

## MultiPower Meter

### Main Features:

The M850 MultiPower is a complete 3 phase digital universal metering system in a standard 96 x 96 mm DIN case. It is a cost-effective replacement for traditional panel meters. This multifunction power meter is suitable for low, medium and high voltage control panels, gensets, building management systems, and power management systems.

- Complete 1-phase and 3-phase digital universal metering system. Covers a majority of applications without any modifications.
- Measures a standard range of 16 different parameters. Easy to use and easy to program from the front panel.
- CT ratios, PT ratios and calibration data is stored in non-volatile EEPROM memory. In power loss conditions, the data is retained.
- Four, easy to access, front control buttons are used for scrolling up or down through the parameters.
- Unique blue LED display is designed to be read in a variety of conditions, including bright sunlight over a very wide viewing angle. There are 8 levels of user-adjustable brightness.
- RS485 option and pulsed output are plug-in options that can be ordered with the MultiPower meter or retrofitted when required.
- Plug-in option of RS485 (Modbus protocol). Enables remote reading of up to 32 MultiPowers.
- Pulsed output via a plug-in relay option can be assigned to W.h and VARh.



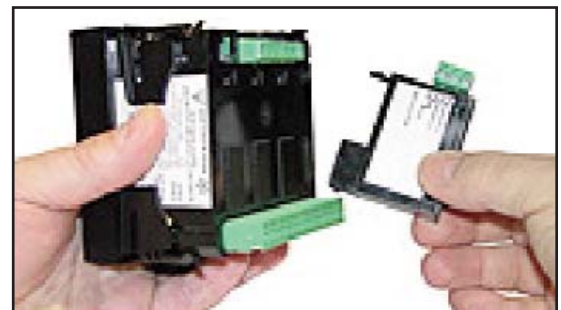
### PARAMETERS MEASURED

Phase Voltage (V)	Reactive Power (VAR)	Instantaneous VA Demand
Phase to Neutral Voltage (V)	Apparent Power (VA)	Maximum Amp Demand
Phase Current (I)	Reactive Energy (VARh)	Maximum Watt Demand
Frequency (Hz)	Power Factor (PF)	Maximum VA Demand
Active Power (W)	Instantaneous Amp Demand	
Active Energy (kWh)	Instantaneous Watt Demand	

### PLUG-IN OPTIONS

Versatile plug-in units for RS485 (Modbus protocol) and pulsed output options can be purchased with the MultiPower meter or can be retrofitted at a later time. The RS485 enables remote reading of up to 32 MultiPower units on a 2-wire bus using Modbus protocol. The RS485 option is compatible with PC, PLC, RTU, Data loggers and Scada programs.

The pulsed output can be assigned to W.h and VARh.



# M850-MP1 MultiPower Meter



PC&S products are manufactured under a total quality system that provides total engineering integrity. Products have been engineered to satisfy specifications, performance, reliability and life cycle to exacting standards.

PC&S strives to meet customer requirements and exceed expectations. We do this through monitoring and measuring our process and product, customer satisfaction, internal auditing, analysis of production data, continual improvement including corrective and preventative action. Our quality management systems are certified in accordance with ISO 9001:2000 standards.

## System Types

The M850-MP1 can be used on the following measured system without any changes apart from wiring and programming configuration:

Single Phase	3 Phase 3 Wire Balanced	3 Phase 4 Wire Balanced
Single Phase 3 Wire	3 Phase 3 Wire Unbalanced	3 Phase 4 Wire Unbalanced

## General Specifications

### Accuracy

<b>Volts/Amps:</b>	0.5% of reading $\pm$ 2 digits
<b>Frequency:</b>	0.1Hz $\pm$ 1 digit
<b>Active Power:</b>	1% of reading $\pm$ 2 digits
<b>Reactive Power:</b>	1% of reading $\pm$ 2 digits
<b>Apparent Power:</b>	1% of reading $\pm$ 2 digits
<b>Power Factor:</b>	1% of range
<b>Energy:</b>	IEC 1036 class I

**Rated Un  
Un Overload  
Burden  
Rated In  
Input Overload  
Input Burden  
Frequency  
Auxiliary Voltage**

28V to 330V (L-N) and 48V to 570V (L-L)
800V continuous
0.5VA
0.5 to 6 amp via CT
10 x In for 1 second
0.5VA per phase
45/65Hz
100 to 440V,AC, 19 to 69V,DC, 100 to 420V,DC
45 to 65Hz, burden <10VA

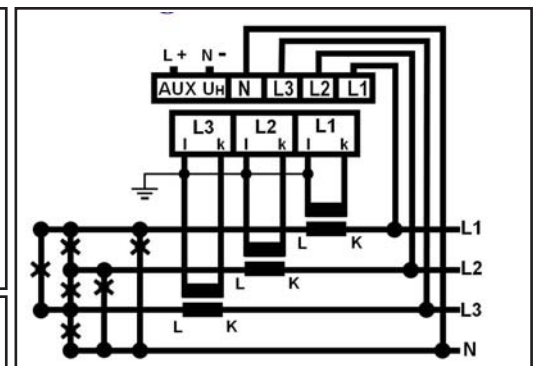
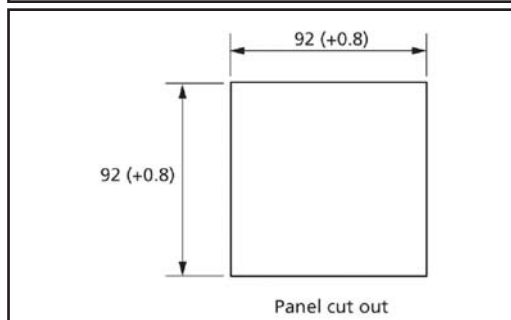
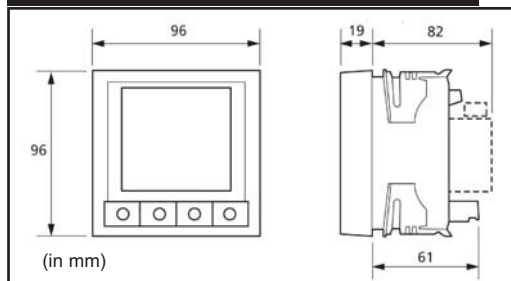
### User-Adjustable Display

Digits: 3 lines 9999; Update time: 1 second  
Brightness: 8 levels of adjustment

**Storage Temperature  
Working Temperature  
IP Rating  
Approvals**

-40°F to +185°F (-40°C to +85°C)  
-4°F to +158°F (-20°C to +70°C)  
IP52  
UL Pending, CE

## Wiring and Connection Diagrams



I = X1      k = X2  
L = H1      K = H2



**PANEL COMPONENTS & SYSTEMS, INC.**  
MAIN OFFICE: Tel.: (973) 448-9400 Fax: (973) 448-1674  
149 Main Street, Stanhope, NJ 07874

Your Local PC&S Distributor:

### Additional Offices:

South East:	Charlotte, NC	Phone: (704) 535-3357
South Central:	Tulsa, OK	Phone: (862) 258-6974
Canada:	Edmonton, AB	Phone: (877) 962-0557

**multitek**

1 800 523-9194 ● www.pc-s.com