



# M850-MPD

## MultiPower DC Meter

### Main Features:

The M850-MPD is a complete DC measuring, digital universal metering system in a standard 96 x 96mm DIN case. This multifunction power meter is suitable for DC applications ranging from 0-800V,DC (0-10A or 0-50mV shunt operated DC amps). This easy-to-read meter measures, calculates and displays main electrical parameters on your DC system quickly and easily.

- Complete digital universal metering system. Covers a majority of applications without any modifications.
- Measures a standard range of 9 different parameters. Easy to use and easy to program from the front panel.
- Free software for monitoring and logging.
- Four, easy to access, front control buttons allow you to scroll up or down through the parameters.
- Non-volatile eeprom memory retains all current ratios, demand time periods and calibration data in power down (power loss) conditions.
- Unique blue LED display is designed to be sunlight readable over a very wide viewing angle. There are 8 levels of user-adjustable brightness.
- RS485 (Modbus RTU) plug-in module can be purchased with the meter or retrofitted later. The RS485 enables remote reading of up to 31 units.
- Plug-in module for pulsed output can be assigned to W.h. or A.h.



### PARAMETERS MEASURED and DISPLAYED

DC Amps	DC Energy (Watt Hours)	Max. Amp Demand
DC Volts	Amp Demand	Max. Power Demand
DC Power (Watts)	Power Demand	A.h (Ampere Hours)

### COMMUNICATIONS VIA PLUG-IN OPTIONS

We'll give you a hand in making communications a 'snap'! Both the RS485 and pulsed output options are versatile plug-in units. They can be purchased with the M850 meter or can be retrofitted, when required. The pulsed output option can be assigned to W.h. or A.h.

The RS485 enables remote reading of up to 31 Multipower units on a 2-wire bus using Modbus protocol. The RS485 option is compatible with PC, PLC, RTU, data loggers and Scada programs.

#### Part numbers for plug-in modules:

**Pulsed Output:**  
M850Pulsed

**RS485 Output:**  
M850RS485



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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 9001:2008 standards.

## General Specifications

### INPUT

<b>Rated Un</b>	80V-800V,DC; 30V-300V,DC; 15V-150V,DC or 6V-60V,DC
<b>Burden</b>	<0.5VA per phase
<b>Rated In</b>	1A-10A or mV input (50mV, 60mV or 70mV)
<b>Burden</b>	<0.5VA per phase

Voltage (-) is internally connected to L1 (I)

### OVERLOAD

Un x 1.25 indefinitely  
In x 5 for 1 sec.

### ACCURACY

<b>Voltage</b>	0.5% of reading ± 2 digits
<b>Current</b>	0.5% of reading ± 2 digits
<b>Power (W)</b>	1% of reading ± 2 digits
<b>Energy</b>	IEC 1036 Class I

### AUXILIARY VOLTAGE

100-440V,AC (45-65Hz); 100-420V,DC (45-65Hz)  
Burden: <10VA

### DISPLAY

<b>Digits</b>	3 lines 9999
<b>Digit Size</b>	14.2mm 7 segment
<b>LED</b>	Bright blue (standard); red (optional)
<b>Update Time</b>	1 second

### ENCLOSURE

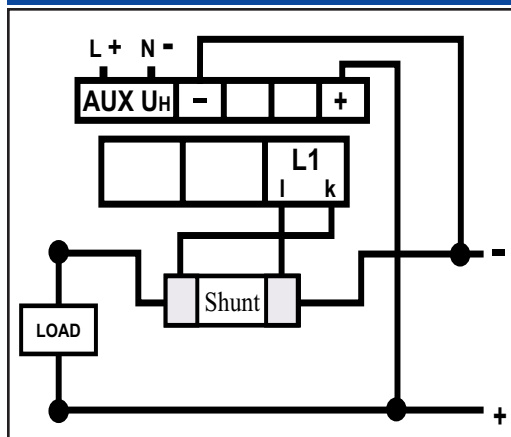
<b>Standard DIN</b>	96mm x 96mm x 60mm
<b>Panel Mounting</b>	4 retaining clips
<b>IP Rating</b>	IP 52 / NEMA (Front); IP30 / NEMA (Case)

### APPROVAL

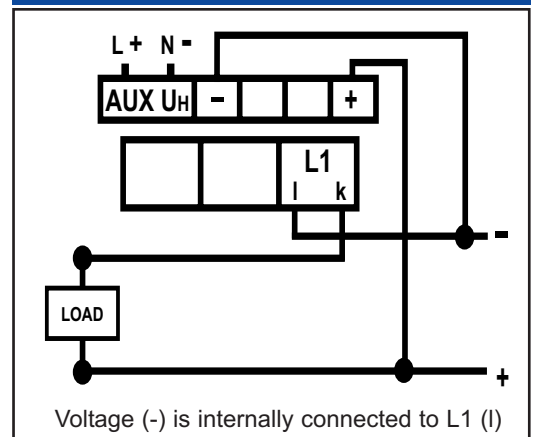
UL (File No. E337752)

## DC Wiring

### External Shunt



### Direct Connection



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