

# M850-MPD DC MEASURING MULTIFUNCTION METERS

## DESCRIPTION

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 up to 10A directly connected or up to 10,000A via a shunt. The bright LED display is easy to view in all lighting conditions.

## APPLICATION

The range is a cost effective replacement for traditional panel meters and is suitable for low, medium & high voltage control panels, gensets, building management systems, power management and more.



## RANGE

### STANDARD FUNCTIONS:

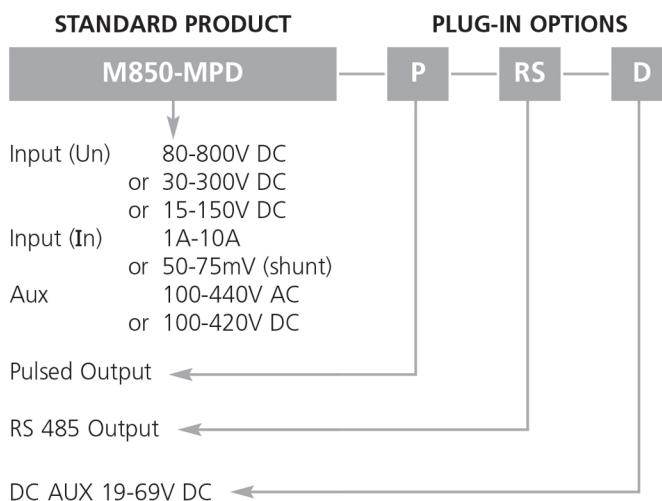
DC Amps	AMP Demand
DC Volts	Power Demand
DC Power (Watts)	Maximum Amp Demand
DC Energy (Watt hours)	Maximum Power Demand
	Ah Intergrated Current Range

## PROGRAMMABLE FUNCTIONS

All models feature the following user-programmable functions:

- Current rating
- Baud Rate, Parity, Stops
- Single system
- RS485 address, 1-247
- Security code access for programming

## ORDERING INFORMATION



**Order example:** a standard product with RS 485 output is part number M850-MPD-RS (please specify inputs)

## PLUG-IN OPTIONS

Both pulsed output (for Wh or VAh) and RS 485 output (Modbus protocol) are plug in options which can be supplied with the multifunction meter. If purchased separately please use ordering codes above.



Pulsed Output when ordered separately use part PULSE-M850



RS 485 Output when ordered separately use part RS485-M850

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## SPECIFICATIONS

### INPUT (ACCURACY RANGE)

Un (options)  
80V to 800V dc, 30V to 300V dc, 15V to 150Vdc or 6V to 60V dc  
Burden < 0.5VA  
In (options)  
1A to 10A or mV input (50mV, 60mV or 75mV)  
Burden < 0.5VA  
Voltage (-) is internally connected to L1 (I)

### OVERLOAD

Un x 1.25 indefinitely  
In x 5 for 1 sec

### ACCURACY

Voltage 0.5% +/- 2 digits  
Current 0.5% +/- 2 digits  
Power (W,) 1.0% +/- 2 digits  
Energy IEC 1036 Class 1

### AUXILIARY VOLTAGE

100V to 440V ac (45Hz to 65Hz)  
100V to 420V dc  
Burden: < 10VA

### DISPLAY

Digits 3 lines 9999  
Digit size 14.2mm 7 segment  
Update time 1 second

### INSULATION

Installation Category III (480V)  
Degree of Pollution 2  
Rated Impulse Voltage IEC 60947-1-V  
imp 4kV  
Meter Front Class II  
Electrical Security IEC 61010-1

### ELECTROMAGNETIC COMPATIBILITY

Immunity:  
ESD IEC 61000-4-2-Level III  
Radiated IEC 61000-4-3-Level III  
Fast Transient IEC 61000-4-4-Level III  
Impulse Waves IEC 61000-4-5-Level III  
Conducted IEC 61000-4-6-Level III  
Voltage Dips/Short Interruptions IEC 61000-4-11-Level II  
Emissions:  
Conducted and Radiated CISPR11-Class A

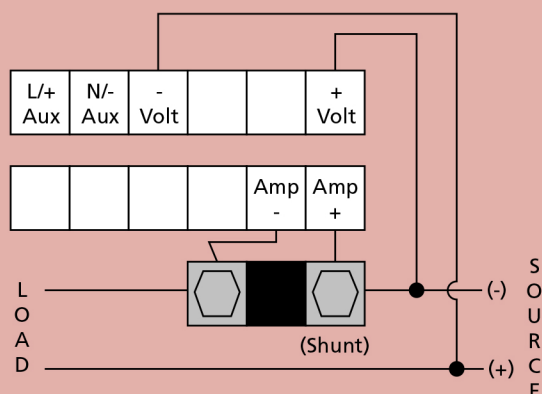
### ENVIRONMENT

Working Temperature 0 to 60 deg C  
Storage Temperature -40 to 85 deg C  
Relative Humidity 0-95% non condensing  
Shock 30G in 2 planes

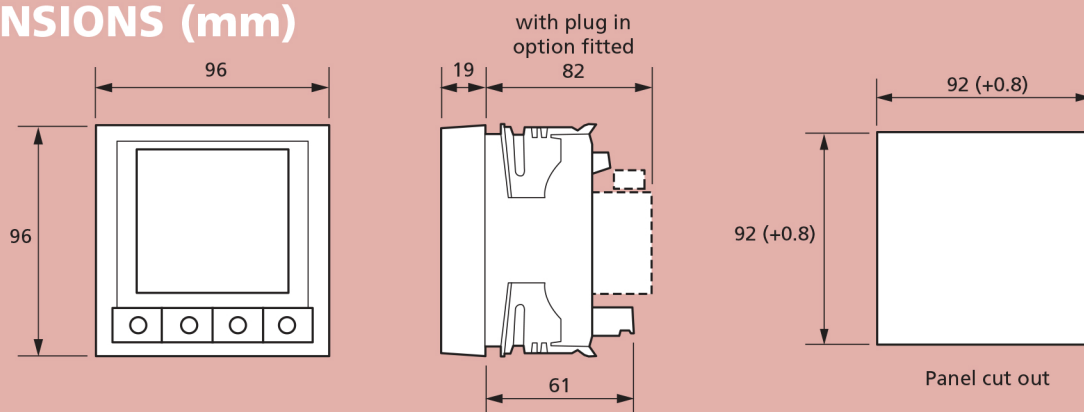
### ENCLOSURE

Standard DIN case 96 x 96 x 60mm  
Panel mounting 4 retaining clips  
Cutout 92.8mm x 92.8mm  
IP Rating - Front IP52 / Nema  
IP Rating - Case IP30 / Nema

## CONNECTION DIAGRAM



## DIMENSIONS (mm)



Our policy is one of continuous development and therefore specifications may change without notice.