



Power Monitors

M850-LDD MultiPower

Multifunction DC power meter

MultiPower DC M850-LDD

The M850-LDD is a multifunction power meter measuring all DC parameters, with the option of providing RS-485 (MODBUS) communication and a pulsed output in a 96 x 96mm DIN panel-mount case.

The M850-LDD has a universal power supply which is suitable for AC or DC auxiliary voltages. The M850-LDD covers a wide range of voltage and current inputs. The current input can be up to 5 amps direct or any value using a mV shunt output.

Communication

The M850-LDD has the option of providing RS-485 output using the well-established MODBUS protocol. This enables remote reading and programming of the M850-LDD using a host computer.

The RS-485 network allows up to 32 units to be connected in parallel, enabling them to be used with PC, PLC, RTU, dataloggers and Scada programs.

The M850-LDD communication port incorporates an auto-configure function which, when connected to an existing MODBUS network, will automatically detect the network's parameters.

Software

MultiView set-up and monitoring software is available free of charge from our website at www.pc-s.com.

Programming

The following can be programmed via the RS485 port: current inputs, demand times, relay divisor.

Display

The unique, 3 color option LCD FSTN display is designed to be read in a variety of conditions over wide viewing angles and distances. There are 3 color options of back-lighting available: blue, green or white. Each is user-selectable through the front control buttons.

Pulsed Output

An optional pulsed output relay can be ordered. The relay can be assigned to kW.h (import/export), or A.h.



MEASURED PARAMETERS

- DC Voltage (V)
- DC Current (I)
- DC Power (kW)
- DC Import Energy (kW.h)
- DC Export Energy (kW.h e)
- DC Ampere Hours (A.h)
- DC Amp Demand (A.d)
- DC Max Amp Demand
- DC Power Demand (kW.d)
- DC Max Power Demand

Standard Nominal Inputs

Voltage:
60V, 150V, 300V, 800V

Current (using external shunt):
50mV, 60mV, 75mV, 100mV

What's New!

Products constantly update. All specifications are subject to change without notice.
For more information on this product, please contact:

PC&S, Inc. at +1 (800) 523-9194 or +1 (973) 448-9400

www.pc-s.com

M850-LDD Multifunction DC Power Meter

ELECTRICAL SPECIFICATIONS

| INPUT | |
|--------------------------------|--|
| Ranges Un (Specify): | Directly Connected: 80-800V,DC 30-300V,DC 15-150V,DC or 6-60V,DC |
| Range | 2-120% Un |
| Overload | 120% Un |
| Rated In | mV,DC, 1A,DC or 5A,DC |
| Range | 2-120% In |
| Overload | 120% In 2 x In for 1 second |

| ACCURACY | |
|---|---------------------------|
| <i>(Specified at 23°C with 10% - 100% Un, 10-100% In)</i> | |
| Voltage & Amps | 0.5% of reading ±2 digits |
| Energy (W.h) | Class 1% to IEC 1036 |
| All Other Parameters | 1% of reading ±2 digits |

GENERAL SPECIFICATIONS

| ENVIRONMENTAL | |
|--------------------------------|----------------------------------|
| Working Temperature | 32°F to +140°F (0°C to +60°C) |
| Extended Working Temp. | Consult Factory |
| Storage Temperature | -22°F to +149°F (-30°C to +65°C) |
| Temperature Coefficient | 0.01% per deg C |

| APPLIED STANDARDS | |
|-------------------|-------------------------------------|
| General | IEC 688 BSEN60688 BS4889 IEC 359 |
| Safety | IEC 6101-1 2010 |

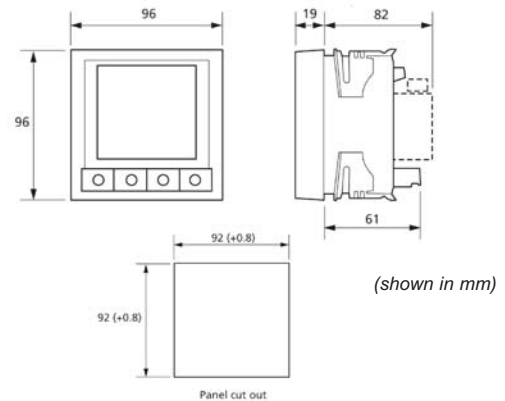
| APPROVALS | |
|------------------------|------------------|
| UL, C-UL CE | File No. E337752 |

| AUXILIARY | |
|-------------------------------------|--|
| Standard: 100-440V,AC / 100-420V,DC | |
| Optional: 19-69V,DC | |

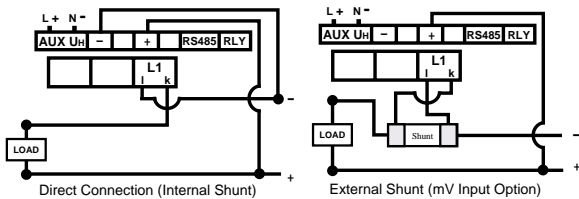
| INSULATION | |
|------------------------------|--------------------------|
| Insulation Category | III |
| Degree of Pollution | 2 |
| Rated Impulse | IEC 60947-1-V |
| Withstand Voltage | imp: 4kV |
| Electrical Security | IEC 61010-1 |
| Inputs + Aux to case | 3kV rms 50Hz for 1 min. |
| Inputs + Aux to RS485 | 3kV rms 50Hz for 1 min. |
| Inputs + Aux to relay | 1k5V rms 50Hz for 1 min. |

| ELECTROMAGNETIC COMPATIBILITY | |
|---|--------------------------|
| Immunity to: | |
| Electrostatic Discharges (ESD) | IEC 61000-4-2-Level III |
| Radiated Radio-Hz Fields | IEC 61000-4-3-Level III |
| Electrical Fast Transient/Bursts | IEC 61000-4-4-Level III |
| Impulse Waves | IEC 61000-4-5-Level III |
| Conducted Disturbances | IEC 61000-4-6-Level III |
| Voltage Dips & Short interruptions | IEC 61000-4-11-Level III |
| Emissions to: | |
| Conducted and radiated | CISPR11-Class A |

DIMENSIONS



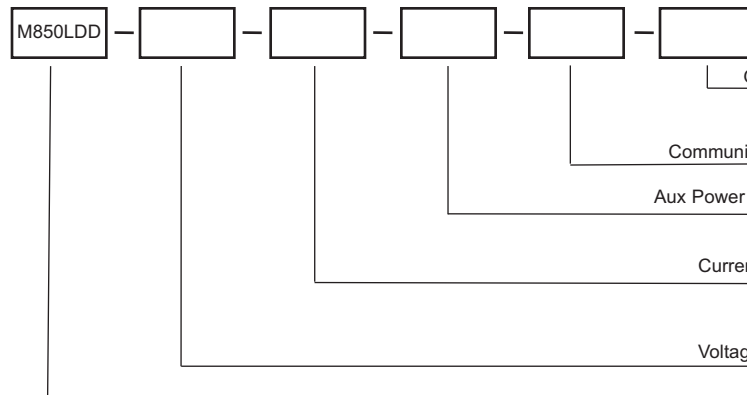
CONNECTION DIAGRAM



NOTE: Voltage (-) is internally connected to L1 (I).

ORDERING INFORMATION

Select your requirements from the table below to build your part number:



| | |
|-------|--|
| RTV | NEMA4 with RTV internal sealing and panel gasket |
| SPC14 | Square splashproof cover |
| V2 | 100mV,DC shunt calibrated |
| V14 | 60mV,DC shunt calibrated |

| | |
|------|--|
| OP | Pulsed Output |
| OS | MODBUS (RTU) RS-485 |
| OPOS | MODBUS (RTU) RS-485 plus Pulsed Output |

| | |
|-----------|--|
| (No Code) | 100-440V,AC / 100-420V,DC (standard configuration) |
| PK | 19-69V,DC |

| | |
|----|-----------------------|
| AA | 5A,DC |
| AO | 50mV,DC (from shunt) |
| AP | 100mV,DC (from shunt) |

| | |
|-----|------------|
| V16 | 80-800V,DC |
| V17 | 30-300V,DC |
| V18 | 15-150V,DC |
| V19 | 6-60V,DC |

| | |
|------|--------------------------------------|
| Item | M850LDD Multifunction DC power meter |
|------|--------------------------------------|



For more information and certifications, please contact:

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