The DC Energy Meter is a micro-controller based unit which measures fifteen electrical parameters for four Loads, and displays them on a 16X2 line backlit LCD.

The unit is meant for use in DC load measurement. It requires two (V+) and (V-) wires from Battery terminal and four wires from four shunts.

The unit basically measures battery DC Voltage & four Channels DC Current. Based on these inputs, the KW and KWh for each channel are calculated.

The unit is fully solid state and will give years of trouble-free service once installed correctly.
**Technical Specifications:**

**Electrical**
- Voltage Input: 25 to 75VDC
- Current Input: 0-75mVolt (Shunt Secondary)
- Accuracy: Class 1.0 (Between 5% to 120% of Shunt secondary)
- Shunt Ratio: Site selectable
- Power Supply: Auxiliary not needed. Unit has in-built DC supply with an operating range of 25-75VDC.
- Display parameters: DC Energy (KWh), DC Volts, DC Amps, DC KW, Date & Time.
- Communication: RS485 on ModBus-RTU protocol
- Data Retention: In ferro-magnetic non-volatile memory, no battery. Data retention for 15 years without power
- Display: 16X2 Line LCD Display

**Mechanical**
- Dimensions: 96X96X80 mm (WXHXD)
- Cut out size: 92X92 mm
- Weight: To be determined
- Enclosure: ABS plastic molded.

**Operating temp.**: 0 deg. to 60 deg. Celsius

**Connection Scheme:**

![Connection Diagram](attachment:connection_diagram.png)

Specifications are subject to change due to continuous improvement.

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