



DC Energy Meter

Instrument
Division

DC Energy meter 96 x 96 mm size is suitable to measure the DC energy of 4 individuals channels with suitable enable/disable facility.

Data sheet No. : DC KWH /10/11



Principle

DC energy Measurement is based on the principle of integration of DC power with time incorporating State of art microprocessor based design

Features:

- 1 Programmable & password protected for the tampering protection. To widen the usage, different shunt ratio can be programmed directly through switch
- 2 Programmable shunt ratio
- 3 Programmable device ID and selectable baudrate.
- 4 EEPROM based memory for Energy data retention.
- 5 RS 485 Modbus communication.
- 6 Measure DC energy of four channels simultaneously.
- 7 Energy displayed on 16 X 2 Alphanumeric character LCD display with backlit.

Auxiliary Power Supply:

Self Powered

Application:

The DC energy meter have been designed for industrial & Telecom applications purpose.

Specifications :

Electrical

Input Voltage	40V to 220 V DC
Input Current	4 channels through external Shunt (75 mV).
Accuracy	±1.0% of the reading for DC energy & power. ±1.0% of full scale for DC current & voltage..
Resolution	0.001KWH for DC energy. 0.1V for Voltage 0.1A for Current 0.1KW for power
Insulation resistance	> 20M ohms at 500V DC.
Dielectric Test	2KV RMS for 1 minute.
Power consumption	2 VA at 48V DC
LCD Display	16 * 2 LCD Black characters with yellow backlit.

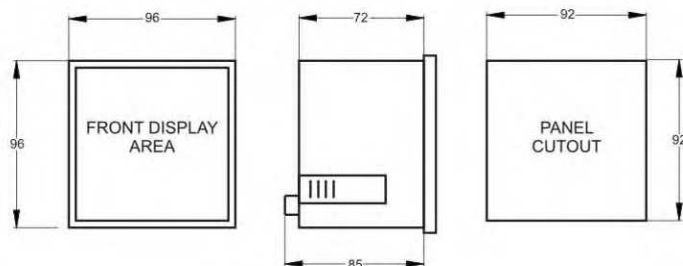
Environmental

Humidity	≤ 95 % RH Non condensing.
Operating temperature	0°C to +60°C
Storage temperature	20°C to +70°C

Mechanical

Mounting	Flush mounting with side clamps.
Dimension	96 X 96 X 75 mm
Weight	
Termination	8 pin VH connector for current input. 2 pin VH connector for V input. 3 pin VH connector for RS-485 communication.

Meter Dimension & Installation cut out



Connection Diagram

