

# emfis<sub>DC</sub>

## Digital Multi-Function Panel Mounted DC Meter



### Salient Features

- ✓ Displays : Voltage, Current, Power, Energy
- ✓ RS485 MODBUS RTU Communication (Optional)
- ✓ Password Protected Programming
- ✓ Backlight LCD type Display (16 X 2 line Dot Matrix)
- ✓ 6 Months History for kWh, MD kW, Channel Peak Load available on communication
- ✓ Reverse Shunt Connection Indication
- ✓ Reverse Voltage Connection Indication
- ✓ Shunt disconnection indication

## Display Parameters

Measures & Displays the following parameters :

- Real Date / Time
- System Voltage
- Current Channel wise
- Power Channel wise
- Energy Channel wise
- Total Energy

## Resolution :

- System Voltage XX.X V
- Current Channel wise XX.XX A (< 100A)  
XXX.X A (≥ 100A)
- Power Channel wise XX.XX kW (≥ 1kW)  
0.XXX kW (< 1kW)
- Energy Channel wise XXXXXX.X kWh

## Technical Specifications

### Enclosure :

Bazel Size 96mm x 96mm  
Cutout Size 92mm x 92mm  
Termination Rear Side  
Operating Temperature -10 to 70°C

### Front Panel :

Display 16x2 line Dot Matrix Backlit LCD Display  
Character Size 5.0mm x 3.00mm  
Protection Index IP 54 (On Front Panel)

### Inputs :

#### Current :

Current Channels 4 Channels / 6 Channels  
Current Sensor External Shunt (configurable shunt rating from 40 to 100 mV in multiples of 1 mV)  
Current Range Configurable (10 to 1000 Amps in multiples of 1A)

#### Voltage :

Input Voltage 20V DC to 60V DC  
Over Voltage 80V (Continues)

Auxiliary Supply Self Powered

Power Consumption <1Watt (20V to 60V)

Accuracy ± 1% (for 5% to 120% of range)

#### Communication :

Protocol MODBUS in RTU mode  
Slave ID 1 to 247 (Programmable)  
Baud rate 4800/ 9600/ 19200/ 28800 /38400 configurable

Stop Bit 1

Parity None

Data Bit 8 bits

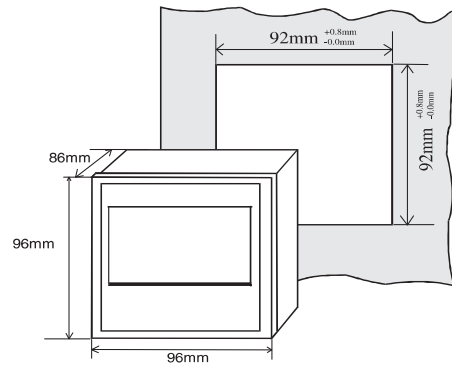
## Communication Parameters

- Real Date / Time
- System Voltage
- Current Channel wise
- Power Channel wise
- Total & Channel wise Cumulative Energy
- Last 6 Months kWh Channe wise
- Last 6 Months MD (integration period 30 minutes) Channel wise
- Last 6 Months Peak Load (integration period 30 seconds) Channel wise

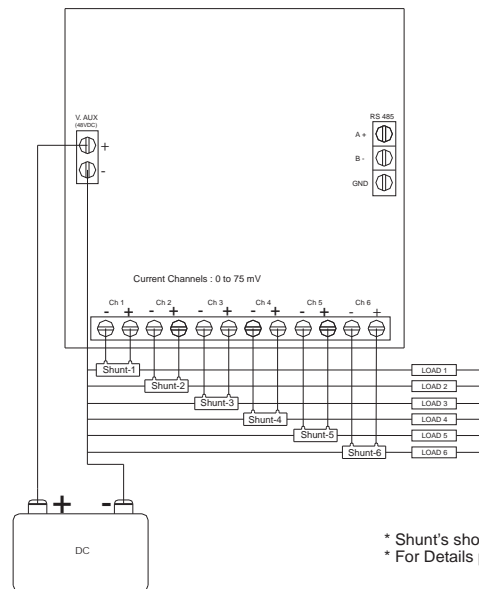
## Models Available

- 4 Channels with communication
- 6 Channels with communication
- 4 Channels without communication
- 6 Channels without communication

## Cutout Diagram



## Wiring Diagram



\* Shunt's shown are not part of the Supply  
\* For Details please refer installation manual



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