Display parameters

CT-2EMG

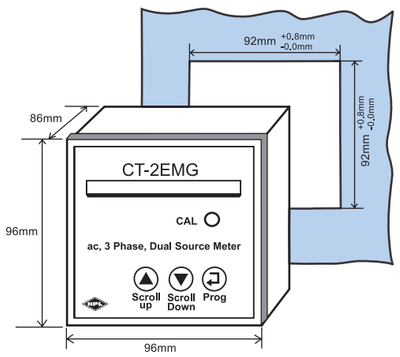
- Active Energy of Mains / Generator
- CT Ratio

CT-2EMG Plus

- Phase to Neutral & Phase to Phase Voltage
- Current Phase wise
- Frequency
- Active / Reactive Power Phase Wise
- Apparent Power Phase wise
- Total Active, Reactive & Apparent Power
- Power Factor Phase Wise
- System Power Factor
- Total Active Energy (mains + generator)
- Mains / Generator kW MD & kVA MD with Date & Time
- Power on Hours
- Run Hour for Mains and Run Hour for Generator
- Date & Time

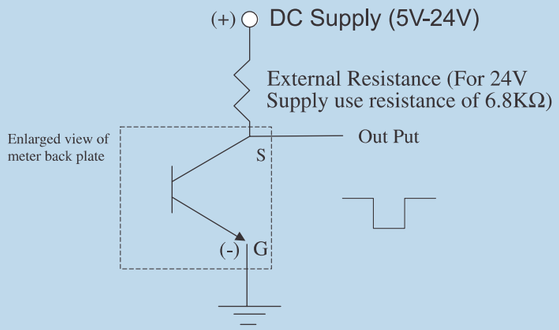
Includes above parameters of CT-2EMG meters

Cutout Diagram

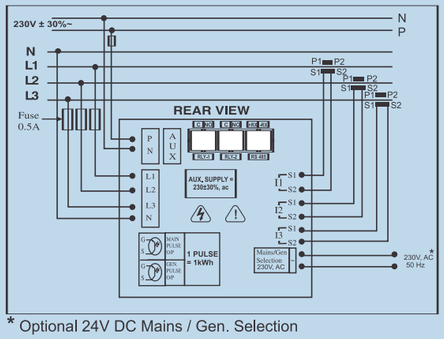


Pulse Output Wiring Diagram

- Separate pulse output for mains and generator.
- Pulse output is open collector type.
- External resistance is to be used between DC supply point & 'S' of pulse output.
- For 24V DC use an external resistance of 6.8KΩ
- This external resistance value will vary depending upon the external voltage (5-24V) being given by the user.



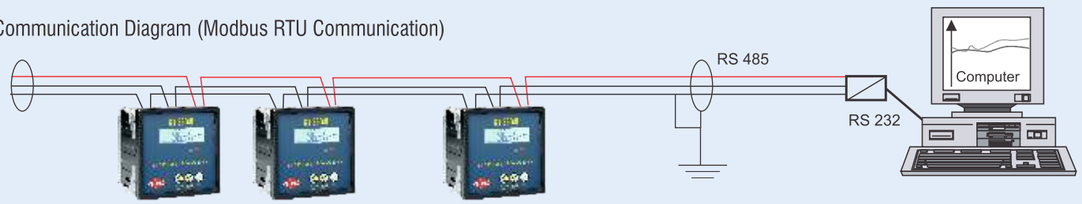
Wiring Diagram



Relays 1 & 2 are Optional in CT-2EMG Plus only

HEPPL/CT-2EMG/JUNE-15

Communication Diagram (Modbus RTU Communication)



HPL Electric & Power Pvt. Ltd.
1/21, Asaf Ali Road, New Delhi-110002 Ph.: +91-11-23234411
Fax : +91-11-23232639 E-mail : hpl@hplindia.com

www.hplindia.com

Technology of Measurement... defined

Multi Function Dual Source Meter

Mains & Generator Supply

Features

- Suitable for 3 Phase 4 Wire Network.
- Two separate energy registers i.e. one for consumption from mains and the other from generator.
- Flashing indication is provided on display to indicate the source in use.
- Compact Size 96mm x 96mm Flush mounted.
- RS485 MODBUS (Separate model) available to connect upto 32 Nos. CT-2EMG & CT-2EMG Plus on one Communication Port over a cable distance of 1000 meters on a network. Totally 255 devices can be connected on a MODBUS network.
- Current reversal indication provided on display.

HPL offers energy metering solution for two sources in one meter

ISO-9001:2008
ISO-14001:2004

POWER OF TECHNOLOGY

METERING




CT-2EMG

Dual Source Meter

Salient Features

- One Meter records Active Energy of two Sources
- Backlit LCD type display
- RS485 Port

CT-2EMG Plus

Dual Source - Multifunction Meter

Salient Features

- Measures over 45 parameters including Voltage, Current , Frequency , kW, kVA, kVAr, PF, Active Energy for Mains, Generator and Total, MD in kW and kVA for Mains and Generator separately with Date and Time, Run Hours, Power on Hour.
- Relay outputs for V, I, kW, kVA, F, kW Demand, kVA Demand.
- Last 6 months history parameters for kWh and MD through communication.
- Last 10 event logging for Mains / Generator switching.

Includes features of CT-2EMG meters also

Technical Details of CT-2EMG & CT-2EMG Plus

ENCLOSURE

Dimensions	96mm x 96mm x 86mm
Weight	< 400 gms

FRONT PANEL

Display	Single Line 7 digit Backlit LCD Display
Digit Height	10mm x 5mm
Protection Index	IP 54 (Front Panel)

INPUT CURRENT

Via Current Transformer with Primary	From 5A to 6000A Configurable in multiples of 5 & from 1A to 1200A configurable in multiples of 1
Insulated Sec.	5A / 1A (Programmable)
Current Circuit Burden	<0.25 VA
Overload without CT	7A
Overload with CT	6500A

ACCURACY

Class	1.0 & 0.5

INPUT VOLTAGE

Measurement Range	50V AC to 300V AC (P-N) for CT-2EMG & 120V AC to 300V AC (P-N) for CT-2EMG Plus
Voltage Circuit Burden	0.1 VA

AUXILIARY SUPPLY

Supply Value	230V AC, ±30%, 50Hz
Burden	≤ 2.5 VA

PULSE OUTPUT

Duration	100msec (min.)
Width	1 Pulse = 1 kWh
Potential free Contact (Open Collector Type)	Integrated with an external DC Voltage of 5V to 24V

Relay Specification Available with CT-2EMG Plus Model

Relay Rating	5A/30V DC/250V AC Resistive

HPL

Model Available For CT-2EMG & CT-2EMG Plus

CT-2EMG

Description	Mains/Gen Selection	Class 1.0 (Ref.)	Class 0.5 (Ref.)
Basic Version	24V DC	NDUSCT2EMGA0	NDUSCT2EMGA05
Basic Version with RS485	24V DC	NDUSCT2EMGA1	NDUSCT2EMGA15
Basic Version	240V AC	NDUSCT2EMGB0	NDUSCT2EMGB05
Basic Version with RS485	240V AC	NDUSCT2EMGB1	NDUSCT2EMGB15

CT-2EMG PLUS

Description	Mains/Gen Selection	Class 1.0 (Ref.)	Class 0.5 (Ref.)
Basic Version	230V AC	DUSCT2EMGPC01	DUSCT2EMGPC05
Basic Version with RS485	230V AC	DUSCT2EMGPC11	DUSCT2EMGPC15
Basic Version with RS485 with 2 Nos. Relay output	230V AC	DUSCT2EMGPC21	DUSCT2EMGPC25
Basic Verison	24V DC	DUSCT2EMGPD01	DUSCT2EMGPD05
Basic Version with RS485	24V DC	DUSCT2EMGPD11	DUSCT2EMGPD15
Basic Version with RS485 with 2 Nos. Relay output	24V DC	DUSCT2EMGPD21	DUSCT2EMGPD25

Parameters for Relay Outputs

There are 2 relay outputs available which can be programmed for the following:

1. Source of supply-Mains or Generator or Both or None
2. Programable Relay Parameters (Voltage, Total kW, Total kVA, F, kW Demand, kVA Demand, Total Current)
   - Higher Threshold
   - Lower Threshold
   - Time Delay
3. Hysteresis
4. NO/NC state

Parameters on Communication

- All measured parameters
- 6 Months history for kWh for Mains and Generator
- 6 months history for MD with Date and Time for Mains and Generator
- Last 10 event logging from Mains to Generator & Generator to Mains.

HPL