

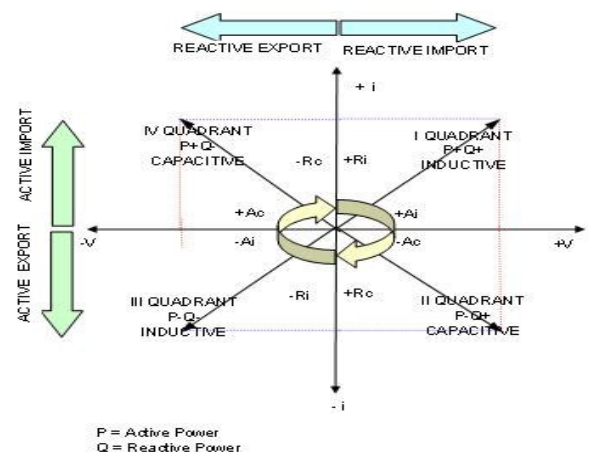
A 3 phase, 4 wire, class 1, whole current (10-100A), Time of Use, static Electricity meter conforming to IEC-62053-21/23 and IEC-62054.

**Dual processor Environment** with a processor dedicated to **metrology & computation** and the other for **communication & calculations**. Designed for MTBF better than 250 Years .

- A **dual processor** design achieves real time computing and very high BAUD rates (IEC-62056-21) ,**9.6Kbps** resulting in a quick downloading of data and at the same time permitting advance communication with **PSTN , PLC , GPRS, LOW Power Radio MODEMS**
- **6 separate  $\Sigma$  ADCs** for accurate measurement of total energy, thus alleviating the need for filtering algorithms for ADC multiplexing errors.
- **4 Quadrant Metering**, with active/reactive, import/export
- **Time of use metering**, Up to 12 configurable TOU slots & 12 tariffs, 3 types of days, 4 seasons, daylight saving in accordance with IEC 62054.
- TOU function is supported by EPSON's **factory calibrated RTC** with an accuracy of up to 3 minutes per year. RTC developed on GENUS feedback has a 32.768KHz **internal crystal** with a stability of better than  $\pm 5$  PPM
- Detects all types of **tampers, frauds and anomalies** & prevents energy pilferage
- Active and Reactive/Apparent Pulse outputs
- **85 days Load profile** with kWh, kVAh, kVARh Lag, kVARh Lead, average voltages & average currents, Average frequency for the integration period for integration period of 30 minutes.
- 12 months history of billing parameters
- Configurable parameters viz. TOU tables, Maximum Demand integration period, persistence time for tamper registration and restoration, apparent calculation method
- Supporting Software. The product is shipped with an efficient **meter reading program** and a highly user friendly base station software **URJA** for METER data processing
- **Battery backup** for meter reading in the event of power outage.
- Immune to very strong magnetic and radiated/conducted electromagnetic disturbance



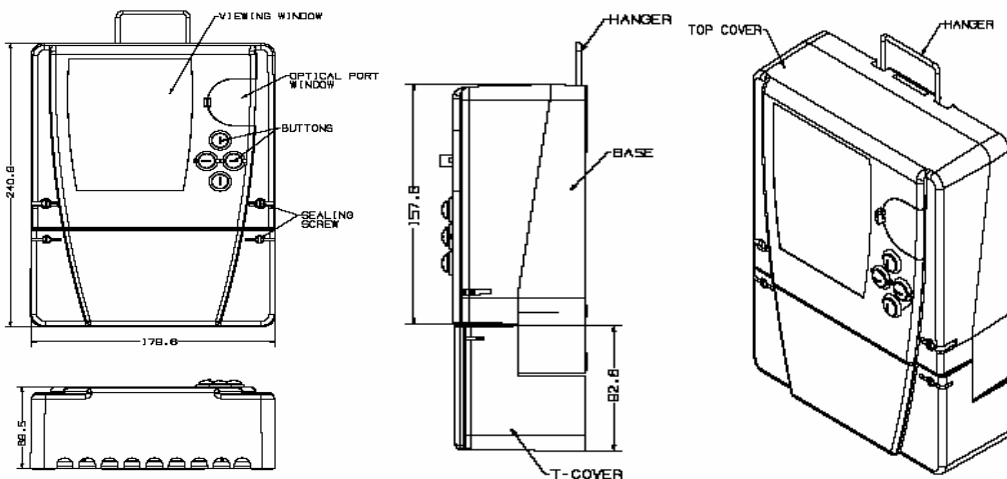
Quadrant Diagram



# SPECIFICATIONS

Standards: IEC 62052-11, IEC 62053-21/23, IEC 62054, IS 13779:99

Voltage	Nominal Operating Range Burden	230V(50Hz), 240V(50Hz), 120V(60Hz) -30% to +20% of $V_n$ Less than 4 VA/IW per phase
Current	Ratings offered Burden	10-60A, 5-20A, 10-100A, 20-120A (other values available on Request) Less than 0.5VA per phase
Frequency	Nominal Operating Range	50Hz, 60Hz -5% to +5% of $f_n$
LED Pulse outputs	configurable	Active Energy Reactive Energy/Apparent Energy
Temperature Range	Operating Storage	-10 to 55°C -25 to 70°C
Time Keeping	Type Accuracy Backup Time Backup Type	EPSON with Internal 32.768 kHz crystal Better than 3 minutes per year 10 years without power Lithium Ion battery
Data Storage		130 kilobytes of non volatile memory with a retention of minimum 20 years without power
Communications	Add-on options	Optical port hardware compatible to IEC 62056-21 Isolated RS232/RS485 for Remote Data Transfer Low power radio (433MHz/868MHz ISM band) Power line carrier communication (FSK 80kHz to 130 kHz) as per CENELAC
Tamper & Anomaly Detection		Missing potential, Voltage unbalance, Current Reversal Tamper, current Unbalance, Overload and power on/off events, Magnetic Tamper detection, Current Bypass, open, short detection, Top cover open
Mechanical	Material Dimensions Weight	Poly carbonate 240.9 mm L x 179.6mm W x 69.5mm H 1.6 kg approx.



## Genus Overseas Electronics Ltd.,

SPL-3, RIICO Industrial Area, Tonk Road,  
Sitapura, Jaipur-302 022, India

Tel: ++91-141-2770003, 2770004, 2770009:

Fax: ++91-141-2770319

E-mail: info@genusoverseas.com

Internet: www.genusoverseas.com