

Grid & Sub-Station Meter

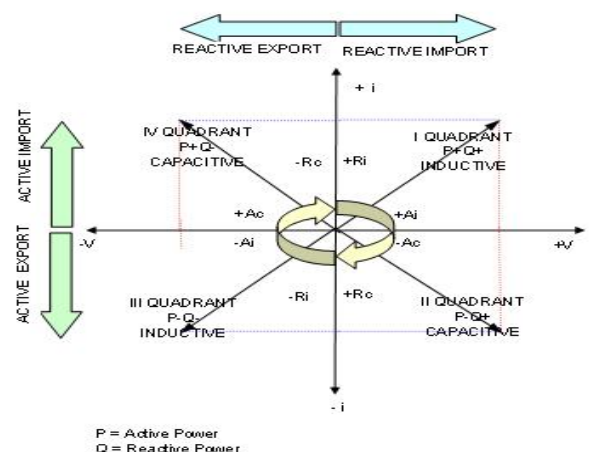
3 phase, 4 wire, class 0.2S, HT CT/PT operated ,ABT compliant, Time of Use, static Electricity meter conforming to IEC-62053-22 , IEC-62054 and IS14697.

Dual processor Environment with a processor dedicated to **metrology & computation** and the other for **communication & calculations**.

- **6 separate Σ ADCs** for accurate measurement, Achieving accuracies better than Class 0.2S in Both active and reactive energies thus alleviating the need for filtering algorithms for ADC multiplexing errors.
- **Dual processor** design achieves the very high BAUD rate (IEC-62056-21) ,up-to **38.4Kbps** resulting in a quick downloading of data and at the same time permitting advance communication with **PSTN , PLC , GPRS, LOW Power Radio MODEMS**
- **ABT Compliant** for availability based tariff structure.
- **True 4 Quadrant Metering**, with active/reactive/apparent, 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 2 minutes per year. RTC developed on GENUS feedback has a 32.768KHz **internal crystal** with a stability of better than ± 4 PPM
- Detects all types of **tampers, frauds and anomalies** & prevents energy pilferage
- **Capable of directly** reading Primary side values .
- Active and Reactive/Apparent Pulse outputs
- 35 days Load profile with kWh import/export, kVAh import/export, kVArh Lag import/export, kVArh Lead import/export, average voltages & average currents, Average frequency (Coded) for the integration period for integration period of 15 minutes.
- 12 months history of billing parameters
- 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
- Immune to very strong magnetic and radiated/conducted electromagnetic disturbance



Quadrant Diagram



SPECIFICATIONS

Standards: IEC 62052-11, IEC 62053-22, IEC 62054, IS 14697:99

Voltage	Nominal Operating Range Burden	63.51V(50Hz), -30% to +20% of V _n Less than 4 VA/IW per phase
Current	Ratings offered Burden	-/1A 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		162 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, CT bypass , CT open, CT short detection,
Mechanical	Material Dimensions Weight	Poly carbonate 275 mm L x 172.5mm W x 77mm H 1.2 kg approx.

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GENUS has a policy of continuous product upgrades. Specifications may change without notice