



Genus Agrim Smart Grids empower to not just conserve but control electricity. Genus offers innovative power distribution management solutions that are enabling households, businesses, utilities and entire cities to become more power-efficient, and also save millions every year.

Building Blocks For Power-Efficient Distribution Companies

The Genus agrim Pre Payment Energy Metering Solutions is a flexible and secure revenue management solution for electricity distribution companies, developers and societies. The solution automates and simplifies advance revenue collection, demand management and remote two way communication.

The solutions comprises Single Phase & Three Phase MKeypad based meter and a webbased central server for meter database & vending software management, along with an optional in-house consumer Interface Unit (CIU).

The internationally recongnised monetary TDES encrypted numeric meter specific vend token is generated from the central web server with configurable tariff structure and transferred into consumer meter using a meter keypad or CIU Keypad or electronically using optical RS232 port. The system recharge process is given below:





Genus Agrim Pre Payment Energy Metering Solution is available for Single supply source as well dual supply source that complies IS15884/IS13779 and latest CBIP report no.88.

SOLUTION FEATURES

- Secured web-based vending server
- Monetary consumption information
- Two way communication compatible
- In-house descriptive display unit
- Auto supply & load management
- Bicolour LED indication (Green & Red)
- DUAL Latching Relay for P-N elements
- Fail safe features
- Alerts before disconnection
- Configurable complex tariff structure

BENEFITS TO UTILITIES

- Advance revenue recovery
- Better demand & load management
- Remote two way communications
- Reduced infrastructure & resources for meter reading, bill distribution, payment collection and maintenance & operation
- Instant tariff implementation
- Inventory management

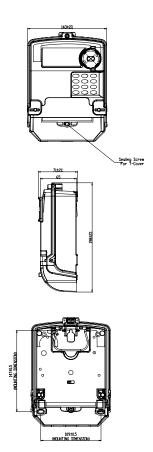
BENEFITS TO CONSUMERS

- Eliminate billing hassles like reading errors, wrong billing, bill receiving and due date penalties
- Display monetary consumption
- Demand & load monitoring
- Energy scrutiny & budgeting
- Conditional alarm alerts
- System transparency

Genus- $Agrim^{TM}$ DUAL supply source is used to record both GRID and DG supply consumption separately in one meter and deduct the amount according to current supply source tariff and instant load. Wireless remote communication through DCU is most beneficial for developers for two way communication compatibility.

Technical Specifications

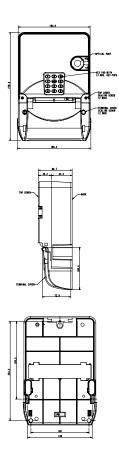
| | 1P Meter | 3P Meter |
|--------------------------------|------------------------------------------------------------|----------------------------------|
| Voltage Rating | 240V P-N, 1-P, 2W System | 240V P-N, 440V P-P, 3P-4W System |
| Current Rating Ib | 10 A | 10 A 20A |
| lmax | 60 A | 60 A 80A |
| Frequency | 50 Hz + 5% | |
| Metrology | ISI 5884/IS 13779 / IEC62051-11, | IS 13779 / IEC62051-11, |
| | IEC62053-21, Class 1.0 | IEC62053-21, Class 1.0 |
| Power Consumption | Current <2.5 VA | Current < 2.5 VA per phase |
| | Voltage < 2W / 10 VA | Voltage < 2W / 10 VA per phase |
| Time Clock & Calendar | RTC backup Lithium battery | |
| | Battery life: 7 Years | |
| LED Indications | Pulse LED for consumption | |
| | Bicolor LED credit status: Green for healthy zone else RED | |
| Environmental Operating | 100 01 | 50° C |
| Temp | -10° C to 50° C -25° C to +70° C | |
| Storage Temp | | |
| Operating Humidity | Up to 95% non condensing | |
| Mechanical Dimensions | | |
| (HXWXD) | | |
| Load Contractor | Latching Relays both in Phase & Neutral | |
| Imax Max Operations | 10000 Nos. | |



SINGLE PHASE

Functional Specifications

| Metering | Active | |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Display Features | Credit Balance Cumulative kWh Current demand & Load Monetary Consumption Tariff related information Histories for consumption auditing Tamper indication on predefined logics Current running load cost Approx Days left (till credit lasts) | |
| Tariff Configuration | Both slab and TOU tariff 08 Non-overlapping Boundaries and Rates Fixed & variable charges Tax & Rebates Weekly & Monthly consumption details for both SEB/DG supply sources Instant electrical parameters Billing history for upto past 6 months | |
| Load Configurations | Sanction load, Overload and Over Current Auto Connection & Disconnection Partial Back Up configuration for dual source | |
| Weight | Single Phase Meter : 0.85 KG Three Phase Meter : 2.50 KG CIU : 0.32 KG | |



THREE PHASE

