



Prepayment Energy Meter Product catalogue

Cypress Infratech Pvt. Ltd

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Domestic Presence

New Delhi (Registered Office) | Mumbai | Kolkata

Global Presence

Bangladesh

Company Overview

- Delhi based Greentree Energy Pvt Ltd was incorporated in year 2009 and provides Energy Design and Efficiency Consultancy Services, providing end to end energy consulting solutions
- Cypress Infratech Pvt Ltd (CIPL) , allied partner firm of Greentree was established in year 2013 with a vision of providing end to end Energy Metering & IOT Solutions to Telecom, & Infrastructure.
- It has three office locations in India; Noida (HQ), Kolkata, and Mumbai and is executing more than 200 domestic and international projects currently.

Key Highlights

■ Cypress Business Highlights

- CIPL has positioned itself in the field of customized energy Management Solutions & Products
- Developed ESS (Lithium Ion Energy Storage Solution) performance data logging system & “HEMS” Home Energy Management System for PANASONIC India
- Developed “TELESYNCH” Cloud based Software tool for Telecom Sites Energy Monitoring
- CIPL has developed Smart Prepaid Metering Solution
- Developed ECO Nirman (Building Energy Policy Compliance Tool) & ECO Bench (Building Energy Benchmarking Tool) for Bureau of Energy Efficiency (BEE), funded by USAID.
- Worked with State Designated Agencies (Uttar Pradesh, Uttarakhand, Bihar, Tamil Nadu etc.) in developing the Energy Efficiency Codes (ECBC) as per their states’ requirements.

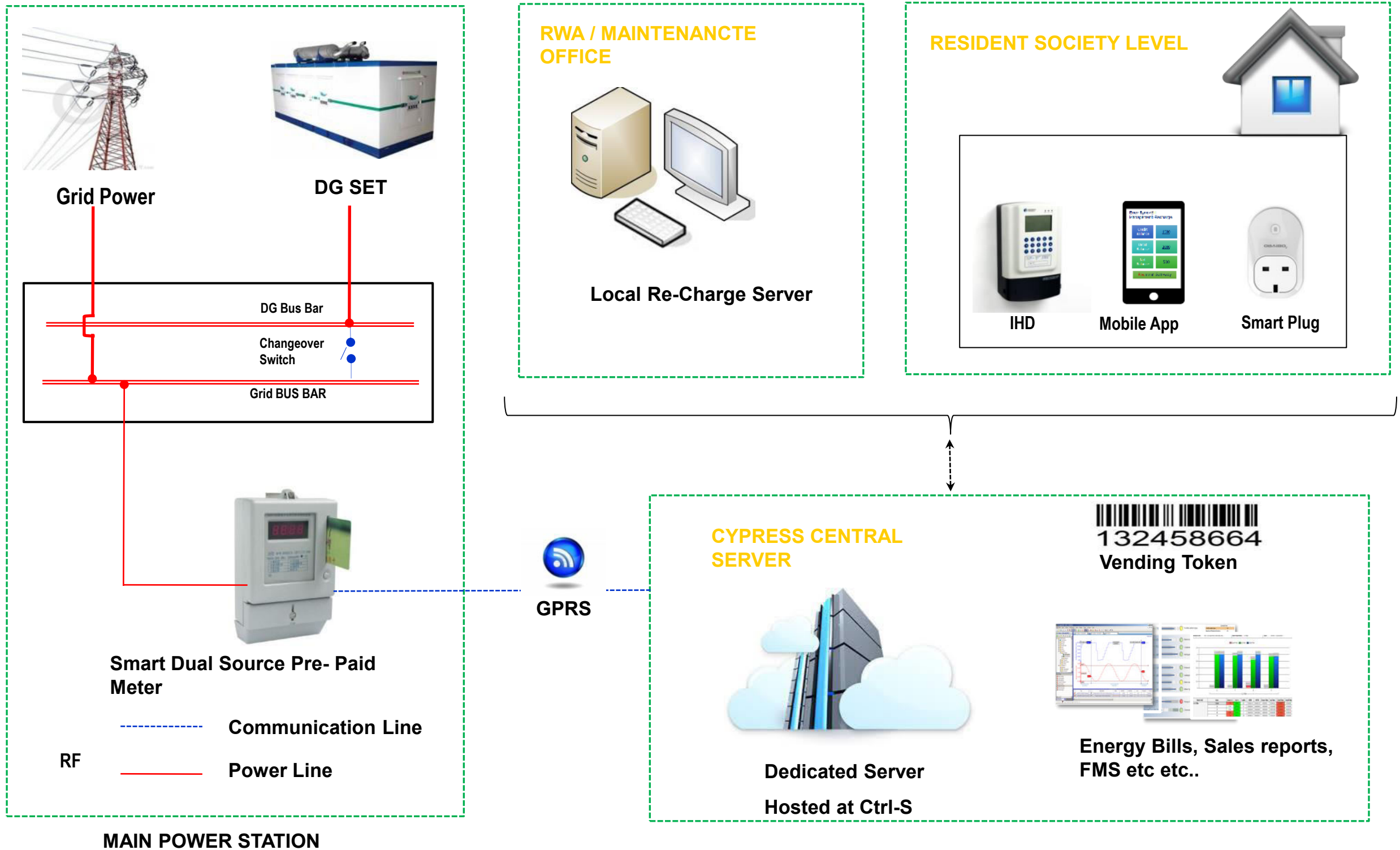
■ Greentree Business Highlights

- It has uniquely positioned itself in building energy efficiency domain by working with several public and private sector agencies on their buildings projects.
- Green Building Certifications – LEED (USGBC), GRIHA, IGBC, BREEAM, Green Mark
- Energy Modeling & Services, Solar and CFD simulations.
- Energy Audits and ESCO projects.
- It has also a working experience in South Korea, Kuwait, Vietnam, & Istanbul. It has a registered subsidiary firm: GreenTree Consultant Bangladesh with office located in Dhaka.



Prepaid Energy Meter - Engineering solution for Mid & High rise Apartments

Cypress brings a complete Solution for Energy Measurement, Vending and Billing. The Entire model is developed to ensure Timely Payments and no Power losses



Vending, Billing and Facility Management Solutions

Web Application

GRIDSYNCH
Simply Smarter

Projects > India > Maharashtra > Mumbai > Brigade Tower > Real Data

Customer Data | Tariff Data | Vending Data | Sales Data | **Real Data** | Billing Report | Complaints

Flat No: Go

Flat Number	Meter Number	Housing Type	Flat Owner	EB KWH	EB Runhrs	DG KWH	DG Runhrs	Recharge Amt
A-101	900001411	M1	Akshay Joshi	95.86	768	0	0	800
A-102	900001015	M2	Krishna kumar	12.64	367	10.6	204	1000
A-103	900001403	M3	Rohit Sharma	30.22	938	0	0	1200
A-104	900001304	M2	Deepak Tiwari	18.05	358	16.17	187	1400
A-105	900001247	M2	Mohit Gupta	0.21	723	4.73	67	1400

Energy Billing information:

- Monthly billing: Complete transparency on breakup of Energy bills and Maintenance bills.
- Running Hours of DG and Mains Supply is provided.
- Real time data monitoring with time stamps to know any tampering of any energy meter
- Bill recharge possible through RWA office and also from Mobile App

Facility Management information:

- Notices:** Important information Reaches your inbox, every time
- Events:** Bring everyone together, to celebrate or to solve issues.
- Directory:** Reach out to RWA, fellow residents & Emergency contacts.
- SMS/Email Broadcasts:** Send Important announcements and reminders, instantly.
- Complaints Management:** Track and resolve resident complaints, efficiently.
- Vendor Management:** Manage vendor contacts, invoices & payments effortlessly.
- Account management:** Manage Bank accounts and petty cash, painlessly.
- Payment Gateway:** Pay/ Collect maintenance dues online, hassle-free transactions

Mobile Application

GRIDSYNCH
Simply Smarter

Providing Smart Home Solutions

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Recharge

Meter-ID: 900001214
Owner: Amandeep Tomar
Balance: 5000.00

Recharge With
Enter Amount **RECHARGE**

Select Month: Set Month
Select Year: Set Year

SHOW MY BILL



Features of Three Phase Prepayment Meter

- ❖ Meter can distinguish between Grid (Main) Supply and Auxiliary (Backup) supply and deducts the amount according to respective tariff and usage.
- ❖ State of the Art Anti-tampering Auxiliary supply sensing cable.
- ❖ Cut off power after the credit is used out.
- ❖ Meter has overdue function: It can overdue when it is in friendly hours.
- ❖ Low credit alarm: Meter/ IHD will sound beep when the balance is less than preset alarming credit
- ❖ Flexible Tariffs: 8 tariff registers available for configuration. ToU and Step Load tariff available.
- ❖ Built-in relay which can trip when over load for Set Main and Aux Load, balance run out, tamper happen and so on.
- ❖ Event Log : Token, recharge amount and tampering events.
- ❖ Tampering functions : Terminal cover opened, Terminal cover opened when power off, Phase sequence error, detected magnetic field, three phase unbalance.



Prepayment Meter

In Home Display



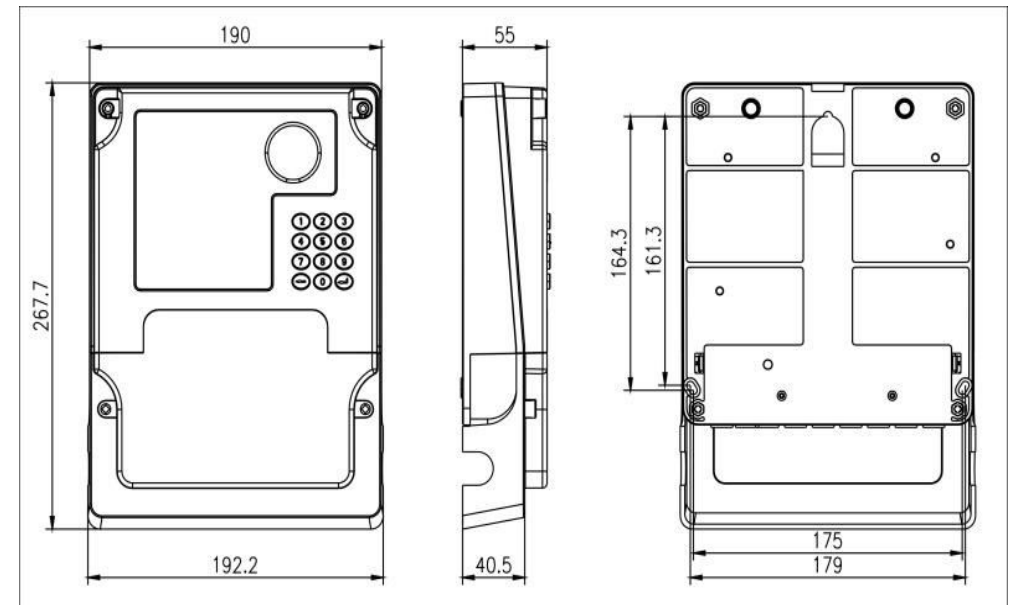
- ❖ IHD provides remote access to metering data for Energy monitoring.
- ❖ Keypad for entering 20digit recharge token.
- ❖ Provides user friendly display and easy distinguish between Main Supply and Auxiliary Power Supply.
- ❖ Alert on low credits and tampering.

Three Phase Dual Source Prepayment Meter

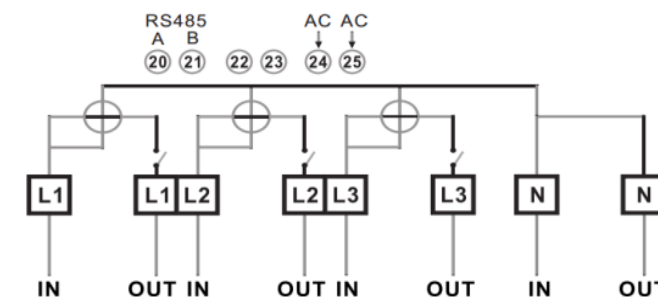
EM-346 adopts advanced microelectronics technology and provide advanced functionalities on Smart Prepaid Energy management. This meter distinguishes the Supply source and deducts the amount according to respective tariff and usage.

Technical Parameters

Wiring configuration:	3phase 4wire
Connection type:	Direct Connected
Voltage:	3*240V AC (-40% to 20%)
Current:	10(60) A
Accuracy class:	1 S
Frequency:	50Hz ($\pm 5\%$)
Impulse constant:	1000imp/kWh
Power consumption:	$\leq 8VA$ $\leq 1W$
Starting current:	0.004Ib
Temperature range:	-20~70°C
Average humidity:	75%
Maximal value:	95%
Display:	LCD 6+2
Ingress protection:	IP 51
Enclosure:	Engineering Plastic
Communication port:	RF or RS485
Standards:	As per IS : 13779



Dimensions



Connection Diagram

Single Phase Prepayment Meter

CYP-PM101 single phase prepayment meter is a smart, integrated meter for measurement of single phase grid supply. Based on the electricity consumption, the prepaid recharge amount gets deducted with respect to various tariff configured in meter.

Technical Parameters

Wiring configuration : 1phase 2 wire

Connection type: Direct Connected.

Voltage: 230V AC (-40% to 20%)

Current: 5(40)A

Accuracy class: 1 S

Frequency: 50Hz ($\pm 5\%$)

Impulse constant: 1000imp/kWh

Power consumption: $\leq 8VA$ $\leq 1W$

Starting current: 0.002Ib

Temperature range: $-20\sim 70^{\circ}C$

Average humidity: 75%

Maximal value: 95%

Display: LCD 6+2

Ingress protection: IP 51

Enclosure: Engineering Plastic

Communication port: RS485 or RF

Standards: As per IS 13779



Cypress & SKN Bentex Partnership

- ❖ Prepaid Energy Meter Product and Solution developed by Cypress.
- ❖ SKN Bentex is contract manufacturer for Cypress.
- ❖ SKN Bentex group has history of 35years.
- ❖ SKN Bentex produces Electronic Meter since year 2000 and primarily supplying to State discoms.
- ❖ Bentex has installed more than 10000 Dual source prepaid meter and supplied millions of Energy meter to Utilities and in retail market.
- ❖ 96 Position Fully Automatic and Semi Automatic test benches from Europe
- ❖ Bentex and Cypress collectively have 70+ Engineering Staff and others 300+
- ❖ 35000Sqft Factory Area.



Quality Assurance

Safety & Reliability

Established Sales Channel

Projects running on Dual source Prepaid Meter

WITH OLD DESIGN



UttarPradesh

1. Omaxe NRI city, Greater Noida
2. Amrapali greens, Indirapuram, Ghaziabad, U.P.
3. Landcraft, Raj Nagar Extension, U.P.
4. Leela Homes, Vaishali, Ghaziabad, U.P.
5. Gulmohar Greens, Mohan Nagar, Ghaziabad,
6. Crossing Republic, Noida Ext., U.P.

Haryana

1. SRS, Faridabad,
2. Shri Sai, Ozone Park, Faridabad.
3. Besttech Spa, Gurgaon.
4. Besttech SpaNext, Gurgaon.

WITH LATEST DESIGN



UttarPradesh

1. Panchsheel Greens, Noida Ext, U.P
2. Panchsheel Hynish, Noida Ext, U.P
3. Amrapali Leisure Valley, Noida Extn, U.P.



Few Consulting Projects by us...

Projects	Certification	Projects	Certification
University of Petroleum & Energy Studies, India	GRIHA - 4 Star	Service Building - 2 X 600 MW SCCL, India	GRIHA - 4 Star
Fortis Hospital, NCR	GRIHA - 3 Star	Vallabh Bhawan, India	GRIHA - 4 Star
Fortis Memorial Research Institute, NCR	GRIHA - 4 Star	New Terminal Building, Port Blair Air Port, India	GRIHA - 3 Star
Oriflame Factory Building, India	LEED - Gold	HAL Office Building, India	GRIHA - 3 Star
POSCO Power Mirae, South Korea	LEED - Platinum	UHBVN Office Building, India	IGBC NC - Platinum
SK Chemicals, South Korea	LEED - Gold	Extension of IGNOU Campus, NCR	GRIHA - 4 Star
SKN Head Office, South Korea	LEED - Platinum	IGNOU Regional Centre, India	GRIHA - 3 Star
Nokia Factory Building, Vietnam	LEED - Silver	MES 505 Workshop, NCR	GRIHA - 3 Star
JM Orchid, NCR	IGBC - Gold	CSIR Innovation Complex, India	GRIHA - 4 Star
Skytech Matrott, NCR	IGBC - Gold	GNDA Building, NCR	LEED India NC - Platinum
KT Cheongjin, South Korea	LEED - Gold	DSI IDC 200 bedded hospital, NCR	GRIHA - 3 Star
Lecture Theatre cum Lab Complex, IIT Delhi	GRIHA - 3 Star	ISM Dhanbad, India	GRIHA - 3 Star
Elite Homz, NCR	IGBC - Gold	Panchsheel Pratistha Group Housing, NCR	IGBC - Gold
Jewel of Noida, NCR	IGBC - Gold	MICM Building, India	GRIHA - 4 Star
Assotech Blith Group Housing, NCR	IGBC - Silver	NIT Rourkela, India	GRIHA - 3 Star
Lotus Arena , NCR	GRIHA - 4 Star	NRL Corporate Office, India	GRIHA - 4 Star
The British School, NCR	GRIHA - 5 Star	UPNEDA Training Centre, India	Net Zero and ECBC Compliance
Office Building for Minarch Overseas, NCR	LEED India - Gold	Lotus Arena 1, NCR	GRIHA - 4 Star
Office Building for Four Star Reality, NCR	LEED India - Gold	Indian Institute of Agricultural Biotechnology, India	GRIHA - 4 Star
GAIL (India) Limited office building, India	GRIHA - 3 Star	New Delhi District Court, NCR	GRIHA - 3 Star
Homes 121, NCR	IGBC - GOLD	Ormiston Primary School, New Zealand	Green Star
Ajnara Daffodil, NCR	IGBC - GOLD	Flat Bush Stage 4, New Zealand	Green Star
JM Aroma, NCR	IGBC - GOLD	Carlton Gore, New Zealand	Green Star
N2 - Tower 5,6 and 7, NCR	IGBC - Gold	Katmandu, New Zealand	Green Star
Trinity NX, NCR	IGBC - Platinum	Flat Bush Stage 5, New Zealand	Green Star
Mansion 'de Salam, Bangladesh	LEED - Gold	Vodafone Stage 1, New Zealand	Green Star
Marriott Hotel, Nepal	LEED - Gold	96 SGBR, New Zealand	Green Star
Palmal Group, Bangladesh	LEED - Gold	46 Sale Street, New Zealand	Green Star
GGSIJU, NCR	GRIHA - 5 Star	Building A, New Zealand	Green Star
Police Residential Complex, NCR	GRIHA - 4 Star	Hopetoun ST Apartment, New Zealand	Green Star

Cypress - Products & Solutions

ECOnirman & ECObench Tools

USAID INDIA Building Energy Tools

ECBC Conformance Check Tools | **Energy Benchmarking**

Click here

Online ECBC Conformance Check using the Prescriptive and Whole Building Performance Methods

Click here

Building Energy Benchmarking

Remote Telecom Tower Management

GRIDSYNCH Simply Smarter | **TeleSync** | **Cypress delivering the best**

Username: demouser | Location: Maharashtra, India

SYSTEM MONITOR BATTERY BANK

Circle Name: Maharashtra | Site ID: Pune | Contributor ID: 98205102001905

GENERAL OVERVIEW

Manufacturer: Panasonic | Date of Installation: 07/14/2014 | Remaining Warranty (Period): 5 year

SYSTEM PERFORMANCE OVERVIEW

Parameter	Value	Status
Ah/Day	24	A
Ah/Unit	20	A
Charged kWh	35	POAH
Bulk Voltage	30	V
Bulk Current	85	A

DETAILED STATUS

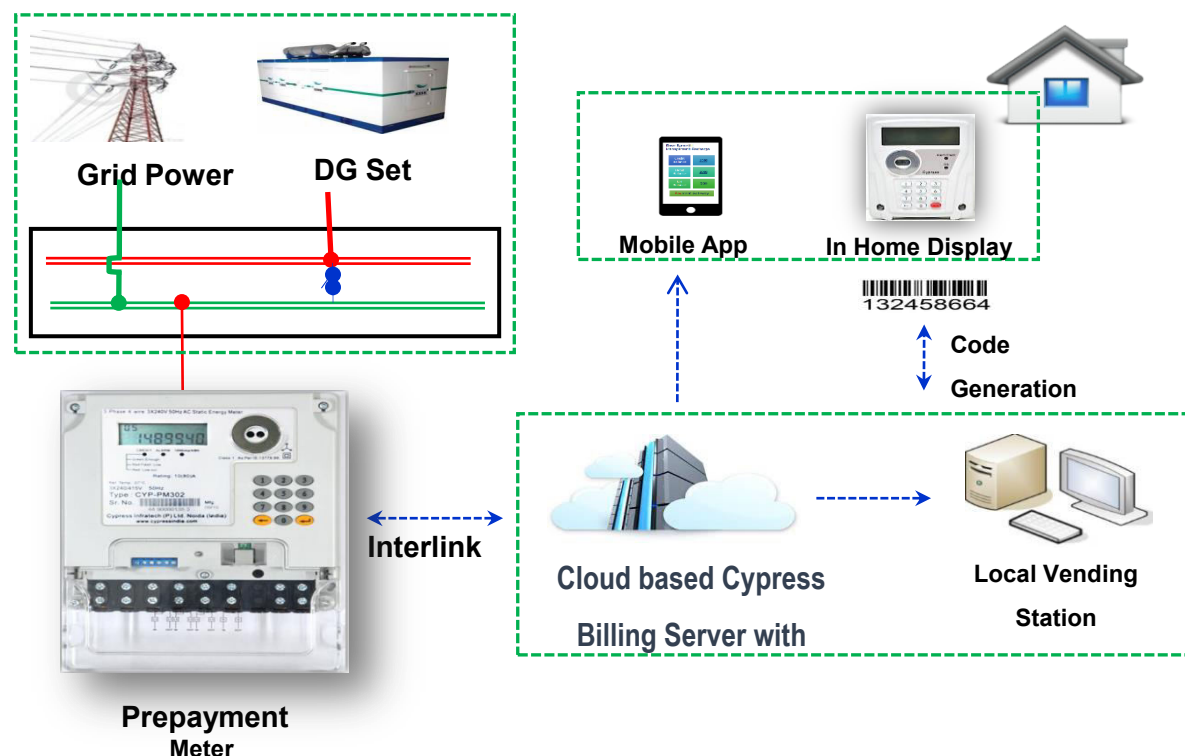
Module No.	Active Module	Sub Status	State of Charge (SoC)	Conversion (%)	Positive Energy	Negative Energy	Service Date	Details
1010001-001	1	Charging	30%	45	12	45	05/05/2014	AAA
1010001-002	0	Charging	40%	15	14	34	05/05/2014	AAA

SOME USEFUL WIDGETS

Calculator | Unit Converter

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Pre-paid Meters



Home Energy Management Tool (HEMS)

eHomeCloud | Energy Management | Settings | Alerts | Reports | Configuration | Personal Setup

Energy Overview | Circuits | Total Carbon Footprint | Standby power loss | Calculator | Manage | Welcome Samvedana | Logout

Energy Overview

Graph Type: Circuits Overview

Time Range: Last 30 Days

Unit: Energy

Source: Total

Total Energy consumption for Circuits

Energy consumed (kWh)

Circuits: Dining Room: Lights & Fans, Bed Room: Lights, Fans & Lowpower socket, Kitchen: H-power socket, Study Room: Lights & Fans, Bed Room: AC, Kitchen: Lights & Fans, Study Room: AC, Dining Room: Lights & Fans

Buttons: Get in Backup, Energy Usage, Energy Billing, Current Status, Circuits Overview





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