Management Tool for Decentralized Utilities

MicroPowerManager (MPM) is a decentralized utility and customer management tool. Manage customers, revenues and assets with this all-in one Open Source platform. Documentation: https://micropowermanager.io/

Steamaco meter integration for MicroPowerManager.
https://github.com/inensus/Steama-Meter-Package

Spark meter integration for MicroPowerManager. https://github.com/inensus/Spark-Meter-Package

This application is used to register customers and meters to MPManager
https://github.com/inensus/Customer-Meter-Registration

Calin Smart meter integration for MicroPowerManager.
https://github.com/inensus/Calin-Smart-Meter-Package

Stron meter integration for MicroPowerManager. https://github.com/inensus/Stron-Meter-Package

https://github.com/inensus/MicroStar-Meter-Package

https://github.com/inensus/SunKin-Meter-Package

https://enaccess.org/

Hardware and Software

MicroPowerManager (MPM)

This is an open source software solution for mini-grid customer and asset management, originally developed by INENSUS and first launched in 2020. This software provides a robust set of features, including a customer relation management (CRM) tool, a comprehensive ticketing system and maintenance, etc

OpenPAYGO Pass

Introducing OpenPAYGO™ Pass: Enhanced Paygo Activation in Areas without Mobile Money, the latest open-source innovation created by SolarisLab in conjunction with EnAccess

Open Smart Meter

The Open Source GSM Smart meter enables adoption of affordable solar energy solutions in Nigeria through energy as a service business model.

Battery Management System

A battery management system (BMS) is the core electronic circuit of every modern Li-ion based energy storage system. It enables energy access companies to develop customised solutions including second life applications of used electric vehicle batteries, suitable for productive use appliances, mini grids, etc.

AirLink

AirLink uses financed phones as relay-extensions of the internet in remote areas, to extend productive asset data coverage in even the most rural communities. By introducing open-standards communications, AirLink allows customers' phones and PAYGo assets to communicate between themselves and each other using widely available, standard low-energy Bluetooth connectivity.

OpenPAYGO Token

The OpenPAYGO Token is an open source token system to enable PAYGO functionality in new products. This system can be used by product manufacturers creating new devices and can be integrated with any PAYGO software platform.

Cicada

Many Pay-As-You-Go (PAYG/PAYGO) systems are based on 2G/GPRS communications. But as 2G towers get replaced by 3G and 4G infrastructure, energy access organizations around the world will need to update their hardware. Okra's communications solution, Cicada, is an open source module with 2G, 3G, 4G, and WiFi capabilities.

Previous generation DS1000 Single Phase Prepayment Meter

Configuration
DS1000 DS1000 measures reactive energy in addition to active energy and is ideally suited for utilities who wish to bill or monitor energy consumption based on Kilovolt-reactive-hour (kVArh) measurement. The meter offers additional instrumentation values and maximum demand as well.

- Accuracy Class 1.0 to IEC 62053-21
- Standard IEC 62055-31 for STS prepayment
- Contactor Disconnect
- Basic Feature Extensive security data
- High security, compact design

- DIN double insulated, glass filled polycarbonate case
- Rate select for two rate meters, switch to neutral
- IP54 in accordance with IEC 60529:1989
- 15 years service life
- Unidirectional or bi-directional measurement
- Metering Security
- STS/CTS Compliance
- Communication

- Mechanical Meter are compliant to IEC 62055-31, having an ingress protection of IP54 to IEC 60529 and comply with EMC standard IEC 50081-1.
- Security DS1000 offers high security with various useful security features. The meter stores all registration and configuration data to nonvolatile memory. All data is retained for the life of the meter. Recordable security features are provided.
- Advanced Feature IEC 62056-21 optical communications and serial communications
- Maximum demand, Voltage and current instrumentation values registration
- Display DS1000 can be configured by the customer to display English characters or OBIS identification codes.
- An optional battery can support the display during power outages.