



# **The Unique Energy Management Solution for Cooperative Housing**

**July 2014**



Unique is the perfect energy management solution for cooperative housing projects that buy electricity in bulk and distribute it to tenants.



## The Unique Advantage

- **Easy solution for revenue collection**
- **Transparency** – Customers/tenants can view their daily, weekly & monthly consumption in their accounts on an internet portal.
- **Energy and water savings** provide high ROI
- **Variable tariff** based on TOU (Time of Use)
- **Different tariffs** for standard power grid vs. alternative generator rates



## The Unique Solution

1. Smart meters installed in each apartment measure consumption of energy, cold and hot water, and calories consumed through hot water use. Meters are available in a variety of strengths, based on the customer's consumption (single phase or three phase, 60A, 80A, 3x60A, 3x80A, 3x100A, CT connection).
2. Temperature sensors automatically and remotely measure and control the building's heating and cooling systems.
3. Remote power limitation and/or disconnection when customers do not pay.
4. Variable tariff based on TOU (Time of Use)
5. Different tariffs for standard power grid vs. alternate generator rates.
6. Pre-payment and post-payment billing options available



## Post-payment Software

1. In post-payment mode, monthly bills are automatically generated and sent to customers/tenants.
2. Account information is available via an internet portal, allowing customers to view and compare their monthly, weekly and daily consumption.
3. Customers can compare the lower costs of standard power grid vs. higher costs of an alternative generator.



## Pre-payment Software

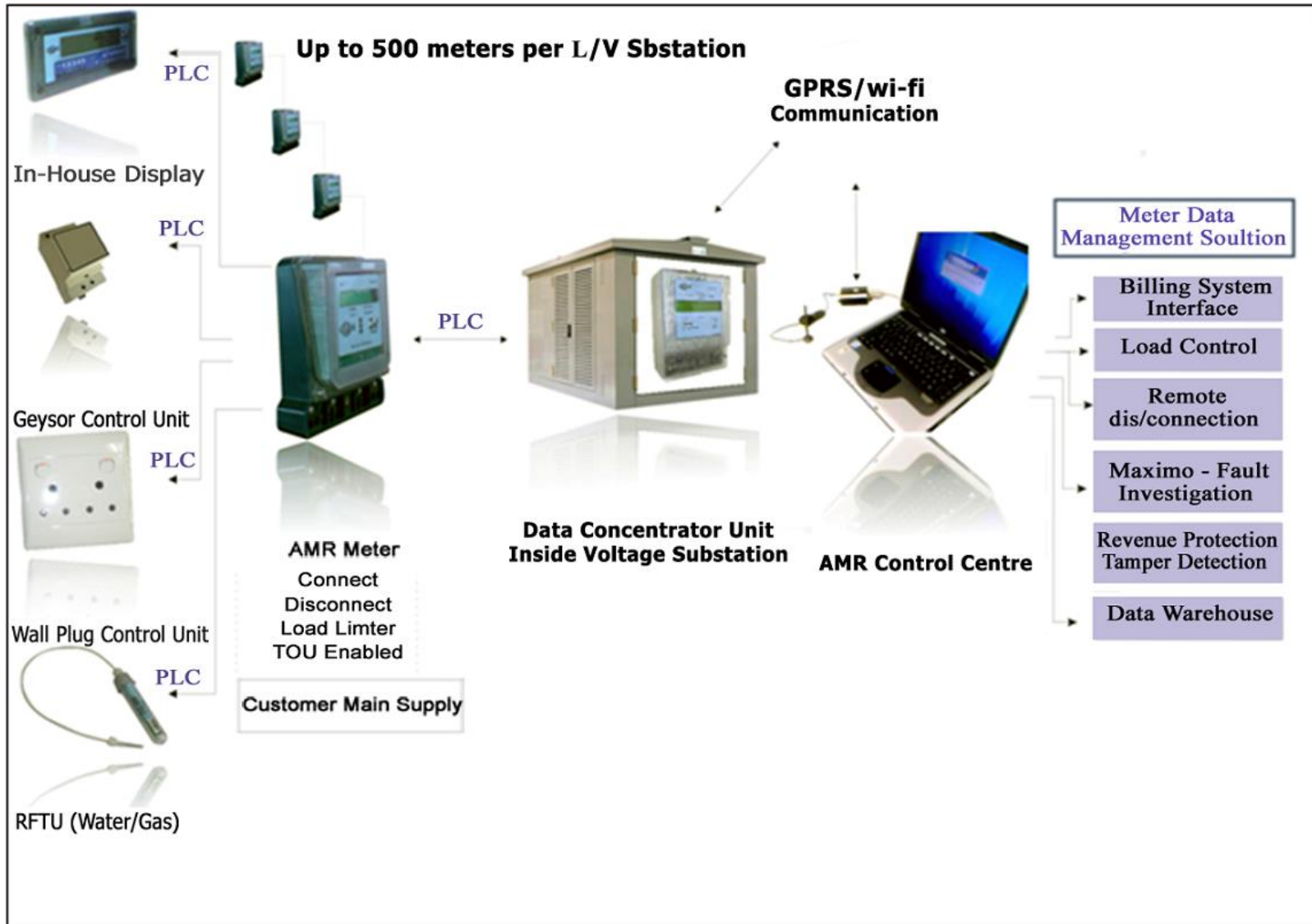
1. In pre-payment mode, customers/tenants purchase electricity (online or at vending stations). Unique software automatically and remotely credits their meter for their purchase.
2. Unique software automatically generates a receipt for the electricity purchased and sends it to the customer/tenant.
3. Customers can view their accounts on the internet portal, to see their purchased electricity and compare periodic monthly, weekly and daily consumption.



## How does Unique Technology's Smart Meter System Work?

- Unique's Smart Meters are installed in or outside the customer's residence. When meters are installed outside, display units can be installed inside the residence.
- Meters communicate to a concentrator installed on the low voltage side of the transformer, using low voltage power lines for communication (PLC).
- The concentrator communicates to a control center using cellular or other wireless communication.
- The control center integrates with other systems such as building management systems (BMS), billing, vending and heating/cooling systems.
- Two-way communication enables remote reading, remote fraud and bypass detection, remote re-programming, remote connection and disconnection.
- Electricity meters can receive and relay readings from hot/cold water meters.
- Temperature sensors automatically measure and control building's heating and cooling systems.
- Loads in the customer's residence can be remotely controlled using an Appliance Control Device (ACD) that communicates via PLC.
- A smart meter with GSM GPRS communication monitors energy produced by the alternative generator.

# Overview of Unique's Smart Meter System







## What Makes Unique's Meter a Smart Meter?

- Two way communication
- Remote disconnection/connection
- Remote power limitation
- Credit or prepayment meter, remotely interchangeable
- Variable tariff based on Time of Use (TOU)
- Special tariff for alternative generation
- Anti-tamper (optional)
- Anti-bypass (optional)
- Ability to separate between meter and display unit
- Remote reading
- Remote firmware upgrade
- Control center can send messages to customer



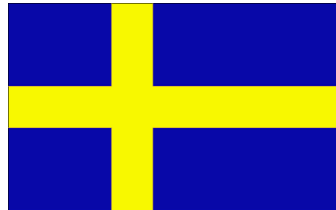
# Customers across the World who have Implemented Unique's Cooperative Housing Solution

- South Africa
- Sweden
- Israel
- Kenya
- Uganda



## South Africa

- The Southdale shopping mall successfully installed the system 12 months ago. 12 additional shopping malls will implement the solution in the coming year.
- The solution is being implemented in a housing project comprising more than 20,000 apartments.
- The solution has been implemented in large commercial and industrial customers.



## Sweden

### Unique Energy Metering solution has been installed in:

- Approximately 12,000 residential apartments
- Approximately 3,000 meters installed in camping sites, in a similar system
- Several shopping malls
- Major commercial and industrial customers



**Israel**

## **Unique Energy Metering Solution has been installed in:**

- Approximately 15,000 residential apartments
- Several shopping malls
- Major commercial and industrial customers