PowerBox™

Online Energy Management System

PowerBox™

Water Supply

Solar System

HVAC

PowerBox™

Lift

Electrical Installation

Lighting

Plumbing & Drainage

Power Supply

Helping you perform energy management

REC GREEN Energy Solutions Co., Ltd.

REC GREEN Technologies Co., Ltd.

PowerBox™ Online Energy Management System

PowerBox™ is a real-time energy management analysis and monitoring system. It provides an all-round energy performance monitoring integrating respective building services installations as well as renewable energy system within one single platform. PowerBox™ allows your property management staff, building service engineers and operators to review the energy performance of your building effectively, anytime and anywhere.
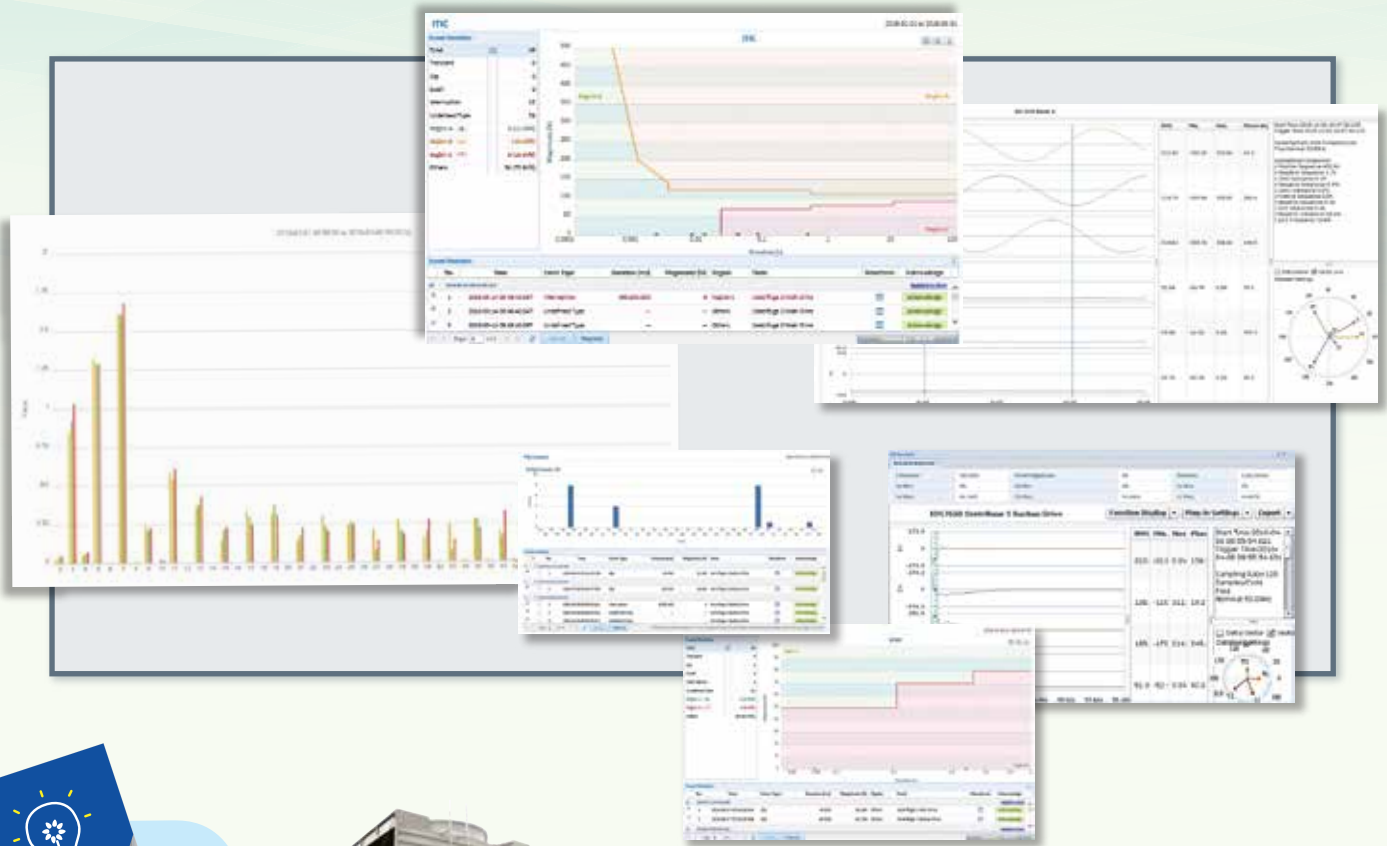
PowerBox™

- Mobile Access
- Metering
- Report
- Wireless
- Energy Management
- Trending
- Database
- Water Usage
- Electricity
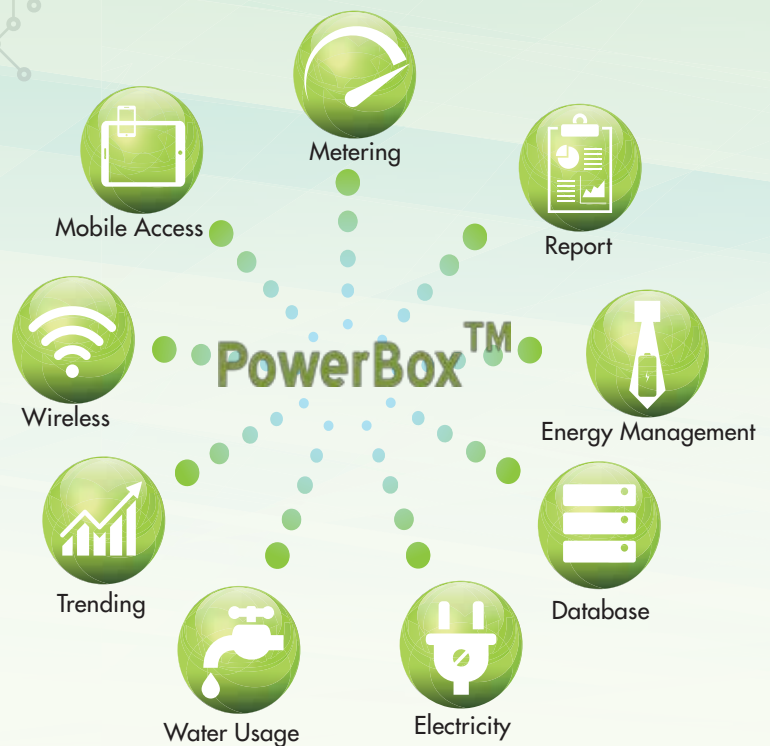
To achieve energy saving through PowerBox™ System

Identify the existing building services installation systems

Provide metering devices for monitoring

PowerBox™

**Data transferred for analysis**

Power Quality Monitoring

PowerBox™ provides monitoring and identification on power quality events, such as transients, voltage sags and swells and interruptions, consistently occurred in industrial and commercial applications because of unavoidable circumstances. Notifications of those events will be generated to operators 24/7 via SMS and Email. All power quality data, like harmonics, THD, waveform will be logged into the database for diagnosis and system reliability enhancement.

Reports and analysis
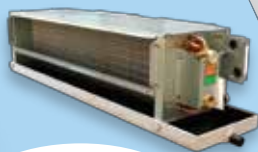
Develop effective energy saving opportunities

Achieve energy saving and reduce operation cost

PowerBox™ Advantages

Facilitate the understanding of energy consumption pattern

Raise stakeholder's awareness and energy conservation

Bill verification & Cost allocation for accountability

Identify Energy Management Opportunities

Optimize system equipment, user practices & operation system

Early warning for Preventive maintenance

Improvement in productivity, reliability and efficiency

Consumption
5.00 kW
ECO mode
ON OFF
75%

Core Functions

Comprehensive Energy Data Record

The following parameters are recorded:
- Electricity consumption (kWh)
- System related Parameters
- Load profile
  (daily, monthly and yearly trend)
- Flow rate
- Gas Usage
- Maximum demand (kVA)

Comparing Energy Performance

- Comparing the energy saving before and after launching energy management solution
- Comparing the energy performance between different sectors / departments in a customized time period
- Comparing the energy performance with external factors (e.g. temperature, humidity)

Report Generation

- Generate operating data in trend, graphic or spreadsheet format
- Analysis the energy performance for consumption distribution, Efficiency, Benchmarking and improvement opportunity advices

Continuous Monitoring and Improvement

- Benchmarking for building services installations
- Identifying Energy Management Opportunities and Boosts Energy performance

Remote Access, Anywhere, Anytime

The PowerBox™ provides a web portal which can be accessed via browsers. In other words, you can review the energy consumption performance in your workstations or mobile devices remotely.
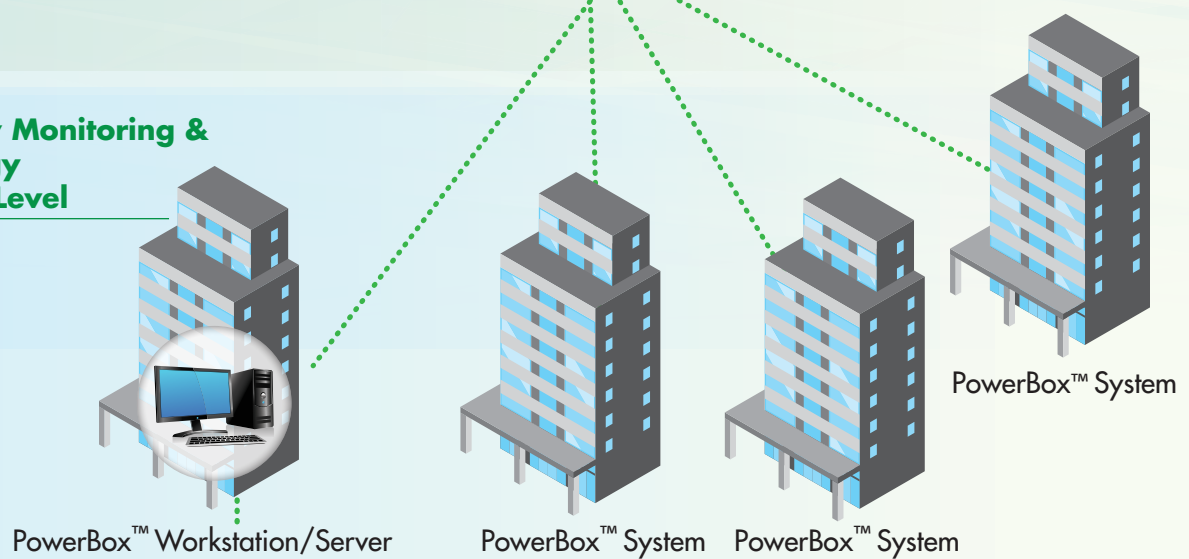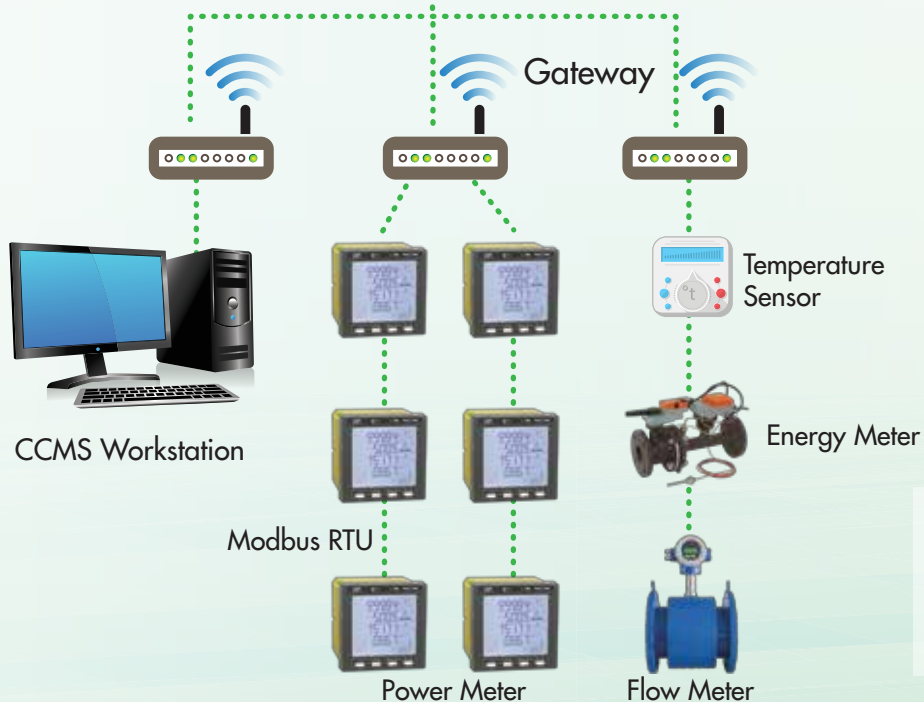
System Implementation

Centralized Energy Management Level

PowerBox™ Centralized Workstation

Centralized Server

Internet
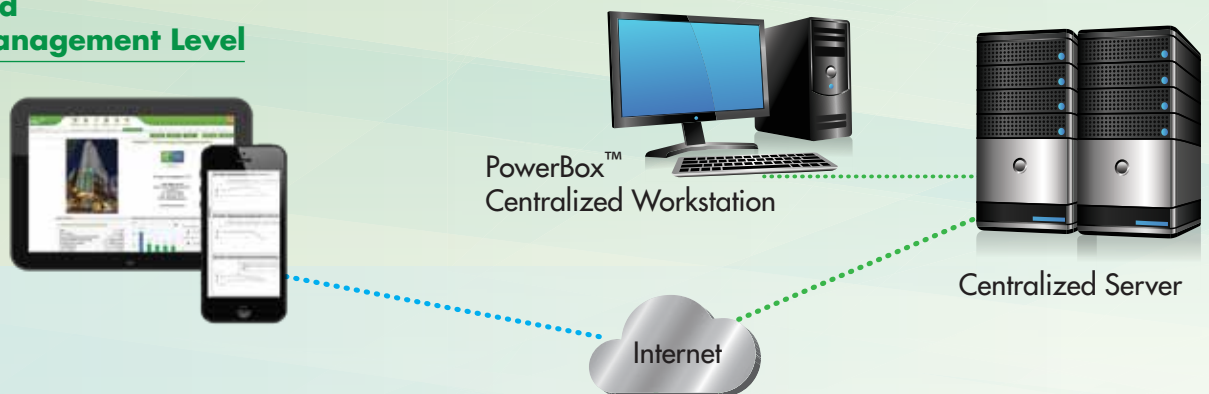
Power Quality Monitoring & Building Energy Management Level

PowerBox™ Workstation/Server

PowerBox™ System

PowerBox™ System

PowerBox™ System

PowerBox™ System

System Monitoring Level

Gateway

CCMS Workstation

Modbus RTU

Power Meter

Temperature Sensor

Energy Meter

Flow Meter

Reference:

.... Energy Information

.... Raw Data

PowerBox™ Centralized Database Architectures

- Central Energy Management to monitoring, managing and reducing cost and effort of operations.
- Comparison of energy consumption across different locations
- The centralized database can be accessed via Tablet and Smartphones. With internet connection, the energy performance can be reviewed in anywhere at any time.

Offices

Hospitals

Data Centers

Commercial Buildings

Shopping Malls

Hotels

Applications

The PowerBox™ System can be custom designed to suit the needs of clients, office spaces, system scales and even entire building applications.

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For more information of PowerBox™, please contact REC Green Technologies Co., Ltd. via any of the below channels.

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