

## Smart Metering Head-end

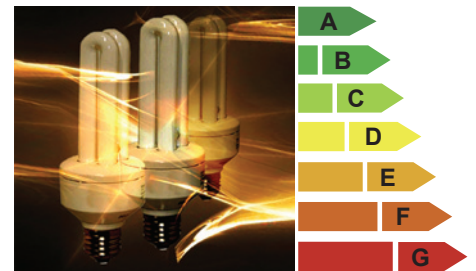
### Overview

A SmartPower Product

Efacec, in line with its technological strategy that has been conducted since 2006, aiming to answer the new energy and environmental challenges, developed a new range of solutions for Smart Grids, designated by: SmartPower.

In this scope of extensive provider of Smart Grids solutions, Efacec presents the M Converge.

The M Converge is the Efacec solution for the head-end software for Smart Grids. This solution performs an important role on the management and monitoring of the Smart Grids infrastructure, like meter concentrators, Distribution Transformer Controllers (DTC), Smart Meters, communication devices, electric vehicles charging stations and any other IP capable device.



### Description

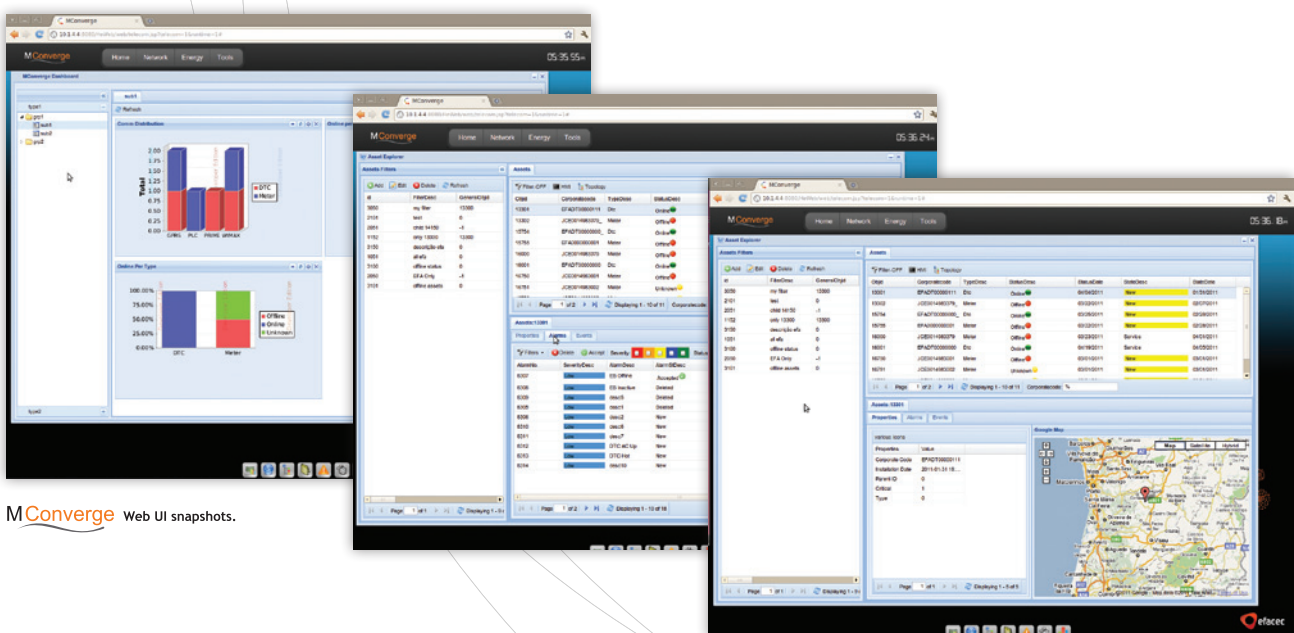
The M Converge is state-of-art software, based on a J2EE cluster. By fully supporting load balancing it is highly scalable, both up and out. M Converge features web UI interface, web services servers, JMS, reports server, among other components.

The user interface, based on the HTML5 web standards, runs on any standards compliant web browser, providing ubiquitous user access.

The M Converge is an innovative product targeting simplicity for Smart Grids monitoring. Plug-and-play engineering, automatic network discovery, device and polling profiles are examples of features that enable trouble free rollout of any Smart Grids project.

The M Converge event correlation engine generates user manageable alarms according to project requirements. The correlation engine can be configured and adjusted in order to decrease alarm overwhelming and flickering, hence making massive deployments manageable.

Being a flexible solution M Converge has multiple interfaces to external systems, such as MultiSpeak 3.0 or SNMP. M Converge is open not only by supporting industry standards but also by allowing additional interfaces to 3rd party systems or devices to be developed over web services or any other integration technologies.



MConverge Web UI snapshots.

## Main Features

The **M Converge** is modular, offering a set of configurable functions, according to the requirements of each project. These characteristics are adequate for the implementation of phased solutions, thus, protecting the customer's initial investment.



M Converge modules	
<b>Network</b>	Communication network infrastructure monitoring and management
<b>Metering</b>	Metering data collection, control and reconfiguration
<b>Electric Vehicles</b>	Electric vehicle charging infrastructure monitoring and management
<b>Interfaces</b>	Interfaces to SCADA, OMS, MDM, NMS
<b>Tools</b>	Manage head-end and Efacec devices (firmware versions)
<b>Reports</b>	Report designer and server
<b>Web UI</b>	Monitoring and management user interface
<b>mCustomer</b>	HTML5 application to display customer data on mobile environments (iPhone, Android)
<b>mRollout</b>	Mobile application to help field crews on meter deployment

### Network

- Metering network autodiscover
- Ping, HTTP ping, monitoring
- SNMP interface monitoring
- Meter monitoring
- Alarm correlation engine
- Polling managed by device profile, easy to configure
- All kinds of meter concentrator readings

### Metering

- Control of meter breaker
- Meter reconfiguration: tariffs, tariffs intervals, ...
- Meter readings (TOU, Voltage, Frequency, ...)
- Meter events
- Meter QoS events
- Alarm correlation engine
- Polling managed by meter profile, easy to configure
- All kinds of meter readings

### Electric Vehicles

- Communication status
- Charging station status
- Events and alarms
- Start/end charge events
- Interface to charging station controls
- Charging station firmware management
- Reports: cards usage, charging station usage, ...

### Interfaces

- MultiSpeak interface
- SNMP traps and interface for NMS
- Webservices, JMS
- SAP

### Tools

- Head-end management
- **G Smart** firmware management
- **M Box** firmware management
- Third party devices firmware management

### Reports

- Report designer
- Reports server that connects to the RDMS
- ETL providers

### Web UI

- Meter Monitoring
- Dashboards
- Alarm visualization
- Maps and tree topology of communication assets (PLC, Mesh)
- Head-end and device management

### mCustomer

- Connects to head-end to get customer data
- Displays TOU and power consumption

### mRollout

- Mobile application
- Reports meter properties and geo location
- Test meter connectivity to head-end
- Trace assets on the head-end



### Automation Business Unit

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View the product on our website.

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