

# Garper CES

## What is GCES

GCES is a smart electricity panel that provides a central and automated energy management platform for commercial and residential clients.

## What it does

GCES gives the end user visibility and control of their electricity consumption. It detects energy saving opportunities and abnormal electric consumption to enable user to take preemptive action against energy waste and facility shutdowns. GCES Facilitate integration of alternative energy sources into the existing wiring infrastructure.

## Benefits

- Centralized, flexible, and verifiable *Load Management System*
  - o Manages the entire electricity network down to each single circuit in the premises from a single point
  - o Real-time monitoring and control of all electrical circuits
  - o Automatic rate driven DSM (e.g. Dishwasher will not start is price is above \$.20per KW)
  - o Power distribution changes of appliances
  - o Remote Control of appliances (Phone, Internet)
- Phase balancing for optimal electric consumption
- Preventive Maintenance:
  - o Automatic disconnection of appliances in case of faulty or degraded power supply or where demand exceeds the maximum connection capacity.
  - o Deviation from normal patterns will generate alerts
- Alternative Power Enabled (e.g. Solar Panels)
- Smart house features; set facility into configurations "Night Mode" or "Away"

Successful implementation of smart control capability at end-user premises can reduce electricity demand by as much as 15%.

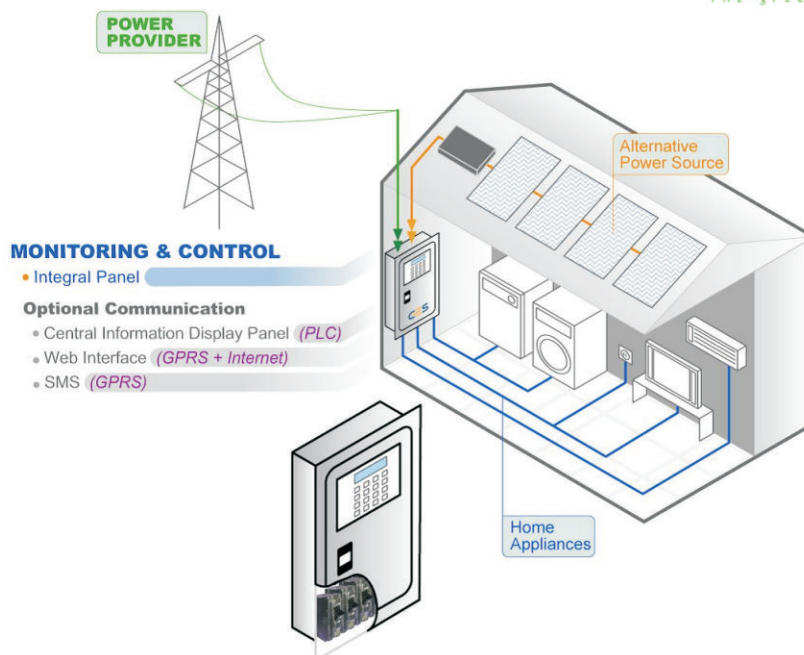


*The Greenest Way to Save Energy*

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Electricity network

Three wire 1-phase supply 120/240 systems.  
Three wire 3-phase supply 240V system.  
Four wire 3-phase supply 120/208Y system.

Alternative energy

Connect PV, Wind, generator without the need to rewire the electrical infrastructure

Maximum current rating

200A

Up to 24 output circuits

24 electronic circuits controlled by 24 high reliable "Zero Cross" Arc-less "Smart Switches" which do not damage the appliances during switching. Each electronic circuit is independent, thus increasing the reliability of the overall system.  
Its rated current is 40A.

Meter

- Power meter and A.M.R with 10 'Time of Use' Tariffs, enables prepaid electricity, and remote tariff definitions.
- Displays the current & consumption in kWh of all the 24 circuits/appliances.
- Displays the consumption in kWh saved by using an alternative source.

Communications

RS232  
P.L.C  
GPRS/ ETHERNET

Electricity pricing mechanism

Remote control

Enables monitoring and controlling all circuits.  
Remote service and AMR.

Programmable parameters

Tested according to UL 67

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