

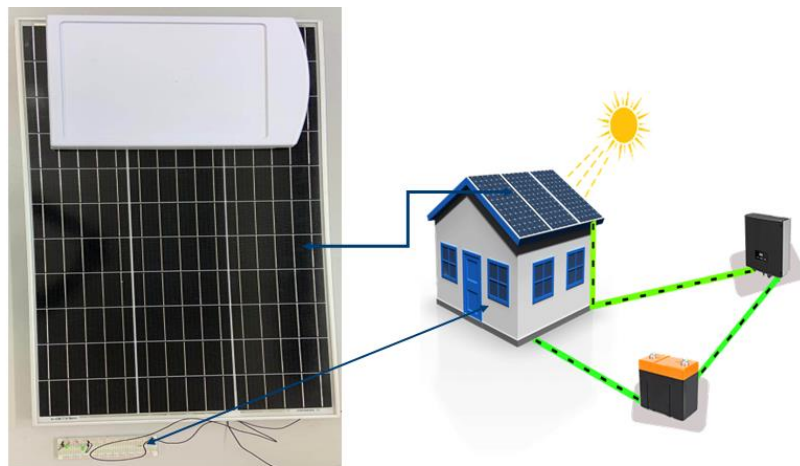
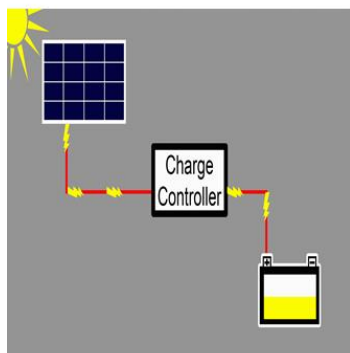
**Intelligent Home Micro Energy Grid (iMEG)**  
**(Analysis, Design, Fault Detection, Diagnosis, and Self-Healing, Resilience, Performance Enhancement and Optimization)**

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**Overview:**

The iMEG – Model-1 is designed to for On/Off electricity grid and to be connected to the grid for other scenarios as for emergency demanding or larger loads are required. IMEG-Home Power System – Model-1 is applicable for residential homes, farms, summer retreat, camps, and others to allow off grid living as reality.

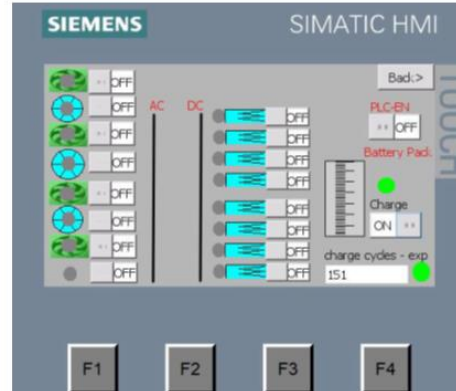
It integrates solar panels and battery based grid tied with innovative feature to supply your loads, saving electricity cost and to be able to sell the excess electricity generated by the solar panels back to the grid. The system is completely turn-key with easy and fast implementations and installation easy.



# Home Load Control



Load control user interface – Micro controllers



Load control user interface - PLC

## Description:

iMEG is a revolutionary product that combines two clean energies: Solar and battery technology. iMEG-Home Power System is a complete package that provides a reliable power solution for areas from economical and technical perspective. It offers a plug and play solution for power integrators. iMEG-Home Power System – Model-1 has comprehensive features of analysis, design, fault detection, diagnosis, and self-healing, resilience, performance enhancement and optimization.

The System is dispatchable and expandable, it includes:

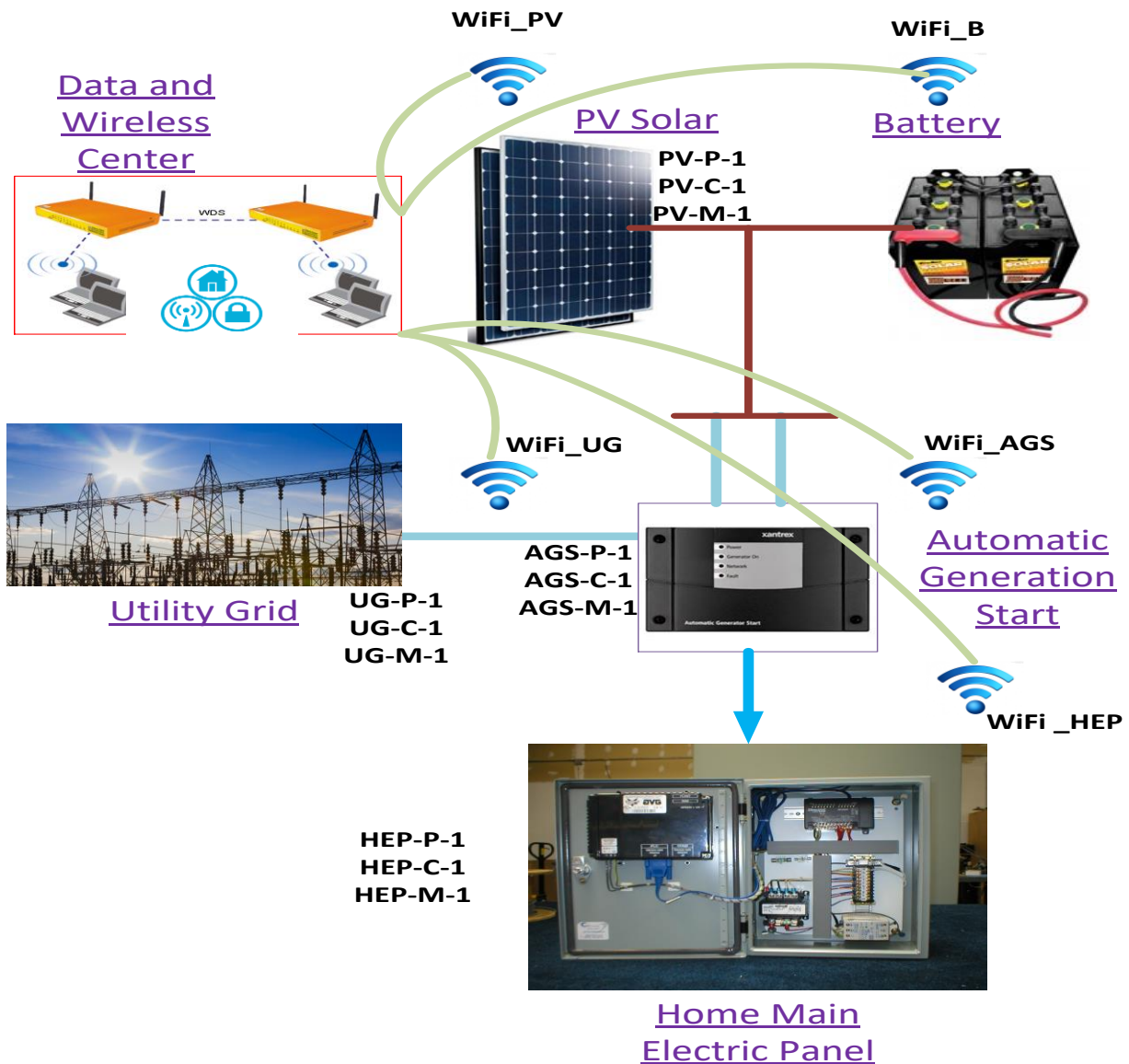
- Polycrystalline Solar array with roof, wall and ground mount
- Battery bank with cables and hardware- maintenance free
- Hybrid Inverter/Charger grid tie inverter
- MPPT charge controller (securely and reliably stabilization)
- System distribution and Control Panel
- Auto generator start as automatic transfer with System Control Panel
- Measurement and monitoring platform with wireless and mobile App options.

## Functions:



iMEG fits for residential homes, houses, school campuses public parking garages, remote areas difficult to reach. iMEG is a highly integrated product that offers a plug and play solution for power integrators: it provides the following functions to meet the market's needs:

- All-in-one solution
- Solar panels included
- Battery cabinet: IP65 water and dustproof
- Safety design for power disturbances
- Modular design for easy maintenance
- Power Storage with high capability
- It's easy to monitor and see your home's solar savings—anytime, anywhere—from your computer or mobile device.



**System Components:**

## Materials

### Solar Array

Description	Quantity
215W Modules: CSA / MC4	12
Two Tier Roof/ Ground Mount 205-215 Modules	2
MC 4MM #10 M/F connector -100'	4
3/4 Hole, 1/2" thread Strain Relief for Solar Modules	4
12 circuit/breaker, Separate 200A BUSBAR	1
15A PV Breaker for PV Combiner, 150VDC	4

### Inverter 48V

120/240-60, 4500W, 48VDC Series Inverter/Charger	1
Power Distribution Panel	1
MPPT60 Charge Controller	1
System Control Panel	1
Auto Generator Start	1
QTY 1 Breaker 60A, 160VDC, panel mount, UL/CSA	2
Mounting and Wiring of single Inverter System	1
10', red and black heat shrink, Inverter to battery Cable	1

### Battery 48V

Deep Cycle AGM 6V Maintenance Free Batteries 390AH	8
16" 2/0 Battery Cables	7
Battery Cable Hardware: 1/4" x 1 1/2" BOLT	2
1/4" Flat Washer	4
1/4" Lock Washer	2
1/4" Nut	2
3/8" Flat Washer	16
3/8" Lock Washer	16
3/8" Nut	16

### Installation:

We will be responsible to engineer, construct and install each System in a professional manner following standards. The installations will be within 4-10 business days, as per the system rate. And the cost of installation varies depending on the system rate and sizing.

**Maintenance:**

We will be responsible to operate and maintain each System. Maintenance is free for the first 3 months, then under contact-term maintenance.

**Warranty:**

5-year warranty (except battery is 1-year warranty)

Optional, Lifetime Warranty