MI-GRID ESSENTIAL POWER

What can Mi-Grid Power?

Mi-Grid powers regular 120/240VAC electrical circuits. Mi-Grid Essentials limits high power circuits to utility and generator.

How does it work.

Mi-Grid at its heart is an energy management system. It controls all available AC and DC sources, including Solar, Battery/Inverter, Utility & Generator, routing power based on what is available, reliable and least expensive.

Essential Circuits

A small Mi-Grid can operate a large electric system by splitting the power into essential & intermittent circuits. ***Essential circuits*** are 120VAC circuits, lights, ceiling fans and all outlets (see diagram). ***Intermittent circuits*** are high power 240VAC circuits. With a larger inverter, some 240VAC circuits can be moved to the essential panels.

Essential circuits are directly connected to the inverter, never losing power. Activating within 1/60th of a second, all essential circuits stay on.

The 240VAC circuits are connected to an intermittent panel. These circuits operate as normal, on loss of utility power they will only operate with the generator. A very small Mi-Grid system can power a large house or business with little or no inconvenience and saving significant capital costs.

240VAC power systems, air conditioners, hot water tanks, electric stoves, ovens, pumps, etc. operate with the generator. Not needing to be powered all the time, the generator runs only as needed, reducing fuel, maintenance and lengthening the life of the of the Generator.

Larger Inverter

With a larger inverter, more circuits can be placed into the essential panel, including whole house Air Conditioners. The larger the inverter, the more can be connected.

Off-Grid

Mi-Grid essentials works on-grid or off-grid. Off-Grid, Mi-Grid reduces generator run time by up to 90% compared to operating with a generator alone. And a Mi-Grid Essentials system is 1/3rd the price, **OR LESS**, of a stand alone solar energy system.

Phased installation

All Mi-Grids can be installed starting with the backup generator, then adding the battery, inverter and solar systems, spreading cost over time.

Retrofit

Mi-Grid can be retrofit onto an existing Grid-Tied solar energy system.

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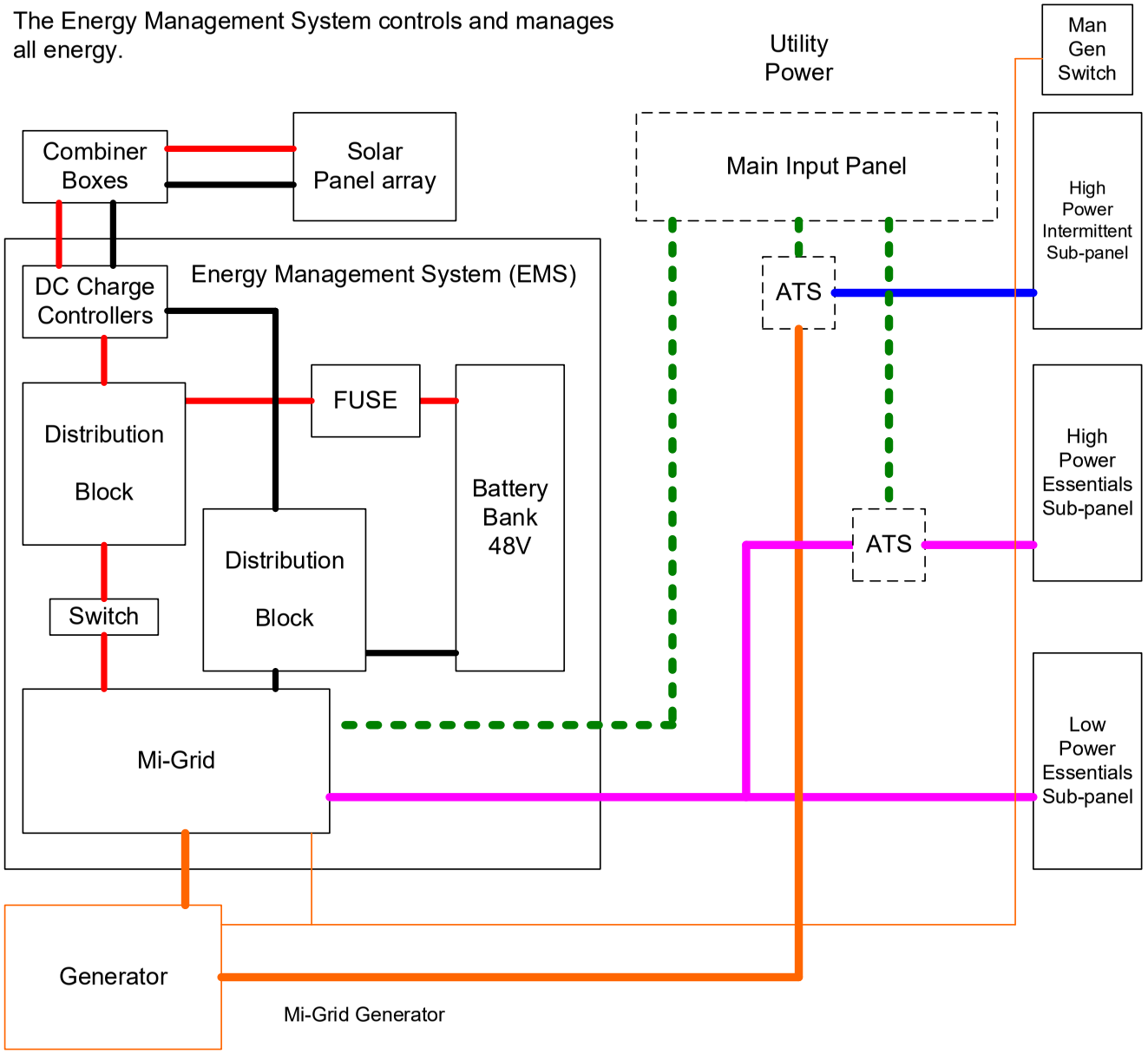
Mi-Grid System

The Energy Management System controls and manages all energy.



Intermittent items

Only run when the generator is running.

These would include very high power items, agricultural water pumps, non-essential water heating, non-essential appliances

Essential 240VAC

These items include all high power AC systems which need to run when utility power is out

These are powered directly by the utility and switched with a transfer switch to Mi-Grid

Essential 120VAC

These items include all AC outlets, lights and any other circuits powered by 120VAC

These are powered directly by the Mi-Grid system at all times and will never lose power.

Mi-Grid Generator

The Generator supplies supplemental power. It automatically recharges the batteries in times when the solar is insufficient.

It also supplies power to intermittent, non-essential systems