

AQUION ENERGY

When considering a battery storage system Aquion ticks all the boxes, **new systems or replacing old lead based batteries.**



Aquion Energy's-line Battery stack:

The stack is a 48 volt system best suited to most inverter chargers worldwide.

The battery is better known as one of the true environmentally friendly batteries with 100% recyclable components. In place of lead and acid the Aquion use s salt as the electrolyte making this battery very safe and environmentally friendly, if ever there was spill its simply salt water that will leave the battery no added risk of burns or explosion.

The system is expandable, each stack holds 2.4 Kwh of power at 48 Volts, batteries can be expanded in parallel giving your more stored energy on demand.

Each battery allows for 780Watts continues power so a traditional storage bank will allow for 3,500 to 7,000 watts continues power.

Retro Fit to existing solar systems:

The stacks can be retro fitted to existing solar systems using an interface between your solar system and the Aquion stacks.



AHJ Battery Chemistry

- STAINLESS-STEEL: Max. Weld Steel LUGS CONTACT
- BASE OXIDE: Polypropylene/Glass Composite
- COATED: Synthetic Coated Insulation
- CARBON: Carbon Titanium Fluoride Composite Anode
- SALT WATER: Absorbent Gel Electrolyte



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ALPHA ESS

Before you invest, there are some things we would like to share, so you get as much from your solar system and battery storage unit as possible, below is some information to help understand solar and its best use.

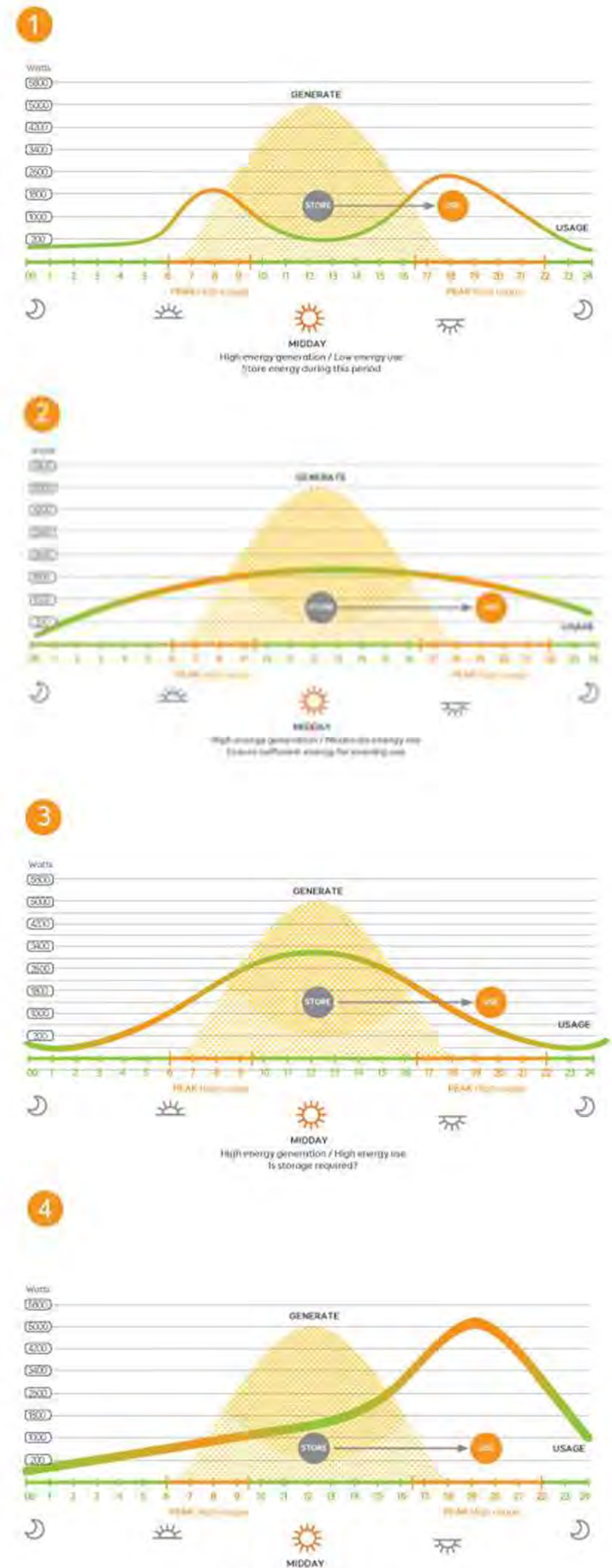
Solar Power works naturally when the sun rises and sets, early morning will see the energy produced from the solar system increase as the sun rises allowing for more energy to be consumed directly from the solar system, early and late in the afternoon a solar system will have very low actual real power to supply on demand and as result will see what is being produced from the solar system used and any remaining demand will have to come from the grid this isn't ideal given that most homes have a working family between the best hours of solar production meaning most of the solar energy is sent back to the grid giving you very little relief from grid use and energy charges.

Graph # 1 shows a typical home daily power use, the solar production far outweighs the demand so 80% is exported and absolute waste of your solar power.

Graph #2 shows a home with moderate energy use during the day struggles to use all the solar energy produced, in this example what we call the base load or demand didn't exceed 2,200 watts but the solar produced 5,000 watts sending 55% of your solar energy to the grid again home battery storage system would have captured this surplus.

Graph #3 shows a home with high daily use will still see a high percentage exported, battery storage will again capture this energy for use when needed. The inclusion of a battery storage solution whether an off grid power unit or home energy grid connect system will enable you to capture the solar energy while you are not at home or any surplus energy produced even while you are home to be stored and used on demand when you need it below is an example is a battery storage unit at work, the load to the home was supplied by the solar and surplus captured for later use.

Graph # 4 shows Load shifting is also important, if you can manage to move your heavy loads such as appliances for cleaning or washing to after 10Am and before 2Pm and include such things as your pool or water pumps this will help reduce the battery capacity needed in your home battery system, batteries are the single most costly part of a battery storage of off grid power system so smart load shifting will reduce battery quantity and battery storage prices. Going to stand alone power isn't complicated, if you size your solar system and batteries and install an expandable battery storage system you will feel comfortable enough to disconnect from the grid and have a truly stand alone solar system and home battery storage unit.



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