

Configurable, Modular, and Scalable for Continuous and Reliable Energy

On-grid...

off-grid...

and as grid backup

Whatever your Energy Source or Connection

ZBB optimizes energy availability with its integrated management platform and intelligent storage.

ZBB offers a portfolio of intelligent management platforms that can be configured to create a hybrid power conversion system for grid interactive, grid independent and grid conversion environments in a variety of applications around the world. When combined with ZBB's EnerStore™ Zinc-bromide flow batteries or other energy storage devices, the platform creates an expandable system that independently optimizes the supply of each generating source.

ZBB's EnerSystem™ integrated energy management platform with energy storage:

- Easily integrates one or multiple energy generation sources now and in the future
- Reduces the dependence on gen sets and minimizes fuel consumption
- Eliminates the variable output of renewable energy sources
- Delivers a firm supply to the loads connected to and from the grid supply
- Provides a continuous supply of energy and optimizes all of the interconnected resources

ZBB EnerSystem Platforms



Grid Interactive (Grid-Tied)

When ZBB's EnerSection™ power and energy control system is connected to a stable grid, it can be used as a bi-directional, hybrid conversion platform, integrating multiple renewable and/or conventional power sources with energy storage. It provides for steady state output, emergency power supply and/or arbitrage pricing schemes to and from the utility supply.



Grid Independent (Off-Grid)

When grid power is cost prohibitive, sporadic or completely unavailable, ZBB's EnerSystem makes tapping into renewable energy sources as easy as using the traditional grid – and just as reliable. It's modular, flexible and supports the integration of nearly any combination of on-site power generating sources for an "always on" micro grid. ZBB's EnerSystem allows you to recognize electrical cost savings and reduce diesel fuel power generation.



Grid Conversion

If your energy supply is inconsistent, ZBB's EnerSystem platform allows you to use the grid's electrical supply as a one way input to provide continuous power flows from connected resources – improving overall power availability. This platform isolates the load from various grid disturbances, variability of renewable sources and minimizes the need to switch-to or start-up diesel gen sets.

Whether you are connected to the grid or not, each unique EnerSystem platform configuration provides an intelligent energy management system with energy storage that allows you to realize multiple value streams including reducing use of fossil gen sets, firm and shift renewable generation outputs, deliver 'supply response' storage dispatch, improve power quality and even be used as an emergency power system independently of the grid during outages.

ZBB's EnerSystem platform is the answer for providing continuous and reliable energy to utility, governmental, commercial, industrial and large residential customers.