Apollo Hybrid Power System



Portable Hybrid Micro Electrical Grid



The Apollo Hybrid System was designed to meet the needs of small and large scale power demands where electrical utility grids are unavailable. In designing the Apollo Hybrid System, Energy Solutions borrowed object oriented design from the software world. Object oriented design involves building complex systems from simple objects connected together. The Apollo Hybrid System is made of simple building blocks such as: the renewable energy building block (the Apollo MMX), the energy storage building block (Apollo Energy Storage), the supplementary generation building block (Apollo Supplementary Generation), and the power conversion building block (Apollo Power Converter). Each is designed to be portable and to efficiently perform a particular task. Each is designed to function cooperatively when

connected to other components. Each is designed to be easily replaced without affecting the remainder of the system. Using this "object oriented approach", systems can be configured to meet most project electrical needs by selecting the appropriate "object" quantities. For example, the most basic configuration consists of one Apollo MMX tracker, one supplementary generator, one energy storage case, and one power conversion case. A system of this size could provide 3kW of continuous power while maintaining a 25% increase in fuel efficiency over stand alone generators. Adding renewable energy blocks and energy storage blocks would increase fuel efficiency. Moving from a 3 kW system to a 100 kW system is an extension of the same object oriented approach.





FEATURES

- Off Grid
- Long Term
 Sustainability
- Quick Setup / Takedown
- High Power Density
- Hot Swappable
 Components
- Expandable

MECHANICAL

- Smallest Footprint of Available Hybrid
 Power Systems
- Disassembles into
 Transportable Pieces

ELECTRICAL

- Available 3kW to
- DC Voltage: 48VDC
- 30 Second Inrush
 20% Over Capacity
- > 10 Second Inrush
 30% Over Capacity
- True Sine Wave