

Stand Alone Power - Comprehensive System™

Our **Comprehensive System™** units are designed to power a range of larger properties, from single dwellings, businesses and homesteads, to stations with multiple buildings and small communities. This powerful system is your complete alternative to grid connection and is adaptable to the largest energy requirements.

Our highly advanced ac-coupled technology offers greater flexibility for 1-3 phase applications and mini-grid scenarios where expansion may be required. Our systems can consist of multiple decentralised units, centralised units, or a combination – simply connect a new dwelling to the existing mini-grid network. The possibilities are endless!

Features:

Reliability – high quality components; dependable grid-quality electricity, day & night

Simplicity of use – 100% grid compatible structure with “set & forget” operation

Low Maintenance – sealed gel, maintenance-free batteries

Efficient – highly efficient ac-coupled system configuration

Safe – exceeds applicable safety standards; concealed wiring; sealed batteries

Scalable – modular design & ac-coupling

Monitoring – options to monitor entire mini-grid locally & remotely



The Comprehensive System is available in the following designs:



EnergyBox™ – plug-and-play, fully self-contained weatherproof enclosure – removes the requirement for compatible inverter and battery housing

AdaptUnit™ – installs within suitable existing infrastructure (e.g. a shed or utility room) – for circumstances where EnergyBox is an unnecessary extra

Comprehensive System Specifications

Power (instantaneous)	10 kW – 100 kW (Inverter alone)	1 - 3 Phases
Surge Capacity	Large overload ratings	
Operational Range (°C)	- 25°C / + 50°C	
Charging Current (48V)	100A (120A max per Inverter)	
System Connection	Hard Wired	
Monitoring	Complete mini-grid monitoring solution – remote & local monitoring	
Battery Selection (48V)	60 kWh – 300 kWh (centralised or decentralised)	

Unit Selection	AdaptUnit EnergyBox	Suitable housing required for system components Self contained – no existing infrastructure needed
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Power Source Selection	Solar Photovoltaic Panels; Wind Turbines; Hydro & Fuel Generators	
Power Input Range (AC)	5 kW (21A) – 270 kW (1125A)	
Solar guide: (Provided for reference only based on optimal pitch/orientation; Adelaide weather data used)	8 kW	22 kWh/day (Winter) – 42 kWh/day (Summer)
	15 kW	40 kWh/day (Winter) – 77 kWh/day (Summer)
	30 kW	81 kWh/day (Winter) – 155 kWh/day (Summer)

