

PRACTICABLE

DEPENDABLE

RELIABLE

AFFORDABLE

MELBOURNE

Monday to Friday 8am to 5pm

> Saturday Closed

Unit 5 / 11 Industrial Avenue Thomastown VIC 3074 (03) 9302 3602

1300 735 902

BRISBANE

Monday to Friday 8am to 5pm

> Saturday Closed

11 Colebard St East Acacia Ridge, QLD 4110 (07) 3272 9001

1300 735 840

PERTH

Monday to Friday 8am to 5pm

> Saturday 8am to 12pm

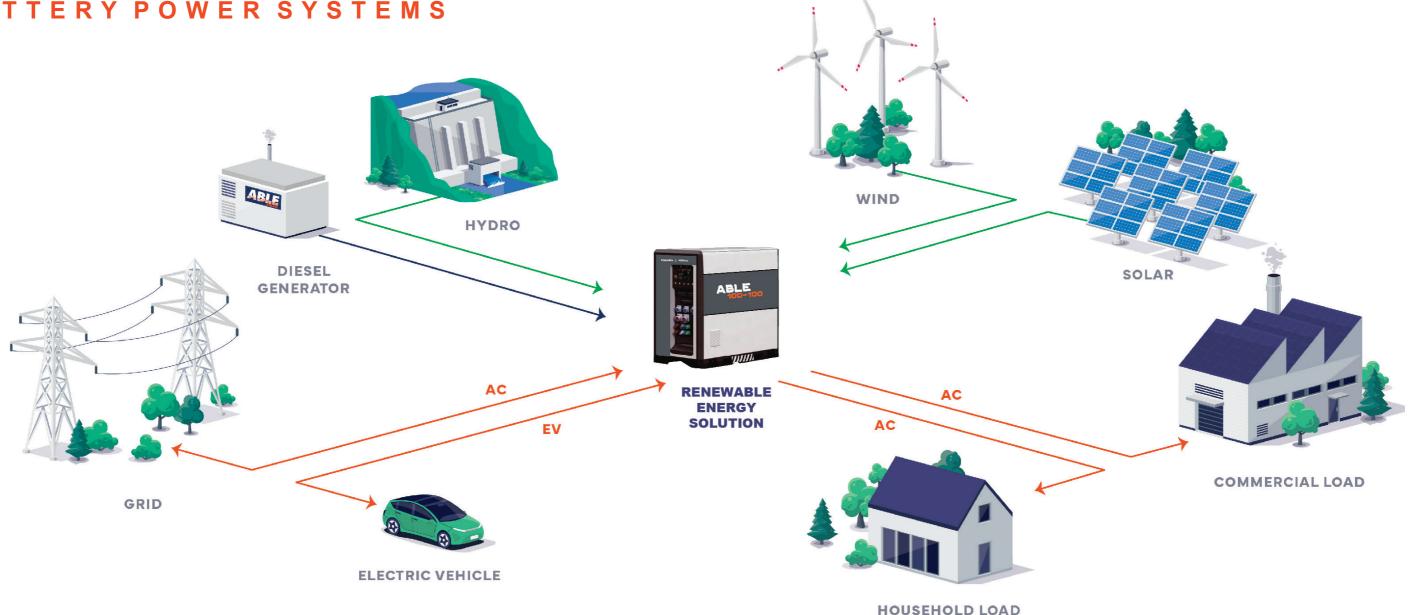
Unit3/41 Tate St Bentley, WA 6102 (08) 9358 2299

1300 793 001

www.ablesales.com.au



ABLE RENEWABLE ENERGY BATTERY POWER SYSTEMS



Powering a cleaner, better and more sustainable future.

The BATTERY POWER SYSTEMS form part of the Able Renewable Energy Solution that can use more than one energy source to generate electricity or power a device.

The BATTERY POWER SYSTEMS are a pre-assembled integrated Battery Energy Storage System (BESS), that is also considered as a hybrid energy solution that can use more than one energy source to generate electricity or power a device.

For example, the BATTERY POWER SYSTEMS can be more than just a battery for solar, in that it can combine solar power photovoltaics (PV) and an internal combustion engine (ICE) generator with its internal BESS (battery energy storage system) to provide reliable and affordable electricity.

The BATTERY POWER SYSTEMS can provide benefits such as lower costs, better reliability, and increased flexibility whilst reducing the carbon footprint in the roadmap towards net zero emissions and a better, sustainable future.

PRODUCT OVERVIEW

The BATTERY POWER SYSTEM is a complete solution that includes:

- Energy Management System (EMS)
- Power Conversion Equipment (PCE)
- · Interface for communicating with other devices
- Battery Energy Storage System (BESS)
- · Battery Management System (BMS)
- Electrical protection devices



Output Voltage



Polyphase System



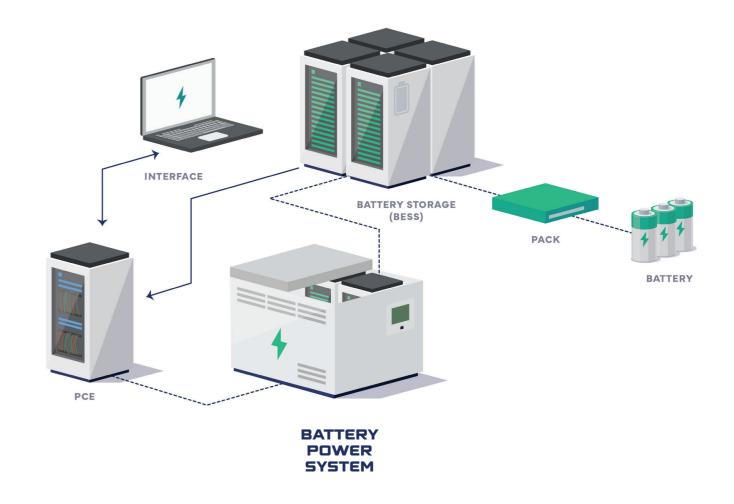
LiFePO4 Lithium Iron Phosphate



Battery Cycle Life to 80% SOH



Battery Life with Daily Use



CONFIGURATION



Energy Management System - system operation data monitoring, operation strategy management, historical data record, system status record, etc.



Power Conversion Equipment - bidirectional AC / DC converter can realize the bidirectional conversion from DC to AC and AC to DC. It can not only convert AC to DC to charge battery, but also convert DC to AC to supply power to load or feed back to power grid.



Battery Management System - the core components of the system can effectively protect the battery from overcharge, overdischarge and over-current. At the same time, the balanced managemnt of the cells can ensure the safe, reliable and efficient operation of the whole system.



Battery Modules - the system mainly consists of safe, efficient and long-life lithium iron phosphate cells, which are connected in series to form battery modules, and multiple modules are connected in series to form battery clusters.

MODULAR & SCALABLE



Suitable for a variety of applications with a variety of benefits.

Maximising Renewables Power – storage of renewable power such as solar power for use when the sun doesn't shine.

Battery Backup UPS - provides seamless power supply in case of primary power failure, no break during power outages.

Load Sharing & Peak Shaving – synchronising seamlessly with a diesel generator, providing additional power as a "load stabiliser" to cover peak and low loads. This allows the generator to operate at a stable curve, reducing fuel consumption, failure rate, and maintenance costs.

Rapid Power Discharge - Providing power to loads for high and rapid power usage as a form of capacitor. Charging a BESS at a continuous lower rate to store energy for a short, rapid and high discharge when demanded.

Time-Of-Use Optimisation – storage of power during low cost period of primary supply.

















BATTERY POWER SYSTEM APPLICATIONS

Farms & Wineries **Entertainment Events EV Fast Charging Stations**

Construction Sites Water Borefields & Transfer Stations Communications Hubs Mining Camps & Villages

Aerodromes Medical Centres

ABOUT ABLE SALES

Australian owned and operated and with three warehouses across Australia, ABLE SALES specialises in sourcing and supplying a quality range of equipment and construction machinery.

Providing products directly from the factory to the end user, Able Sales offers customers a cost advantage in both procurement and operational costs.

Having built a strong reputation of establishing ongoing relationship with our customers, Able Sales has an Australian based customer support team and maintains a full stock of parts for all our products.

Passionate about innovation and the future, the team at ABLE SALES are constantly developing new products and strengthening existing product lines focused on addressing the needs of our customers.





SOURCING &
SUPPLYING
A SELECT RANGE
OF PRODUCTS



QUALITY FOCUSED



AUSTRALIAN BASED
SUPPORT



COMPETITIVE PRICES

INTERNATIONAL & AUSTRALIAN STANDARDS

STANDARDS & CERTIFICATION		
UN38.3	This is a global protocol which includes identifying/classifying lithium batteries; testing/qualification requirements; design guidance/conditions and packaging/shipping obligations. The transportation standard applies to batteries transported (by air, sea, rail or roadways) either on their own or installed in a device. Note that lithium batteries have been identified as a Class 9 dangerous good during transport.	
IEC 62619:2022 CMV	Specifies requirements and tests for the safe operation of lithium cells and batteries used in industrial applications, including stationary applications.	
RCM	Regulatory Compliance Mark (RCM) is a trade mark for electrical safety for equipment which is compliant with the Australian Electrical Equipment Safety Scheme (EESS).	
AS 62040.1.1-2003	Uninterruptible power systems (UPS) General and safety requirements for UPS used in operator access areas.	
AS/NZS 3008.1.1:2017	Electrical installations - Selection of cables for alternating voltages up to and including 0.6/1 kV - Typical Australian installation conditions.	
AS/NZS 4777.1:2016	Grid connection of energy systems via inverters. Installation requirements.	
AS IEC 62477.1:2016	Establishes a common terminology and basis for the safety requirements of products that contain power electronic converters.	
AS 62368.3:2023	Specifies the requirements for circuits that are designed to transfer DC power from a power sourcing equipment (PSE) to a powered device (PD). The standard adopts and modifies IEC 62368 3:2017 and will supercede AS/ NZS 60950.1	
AS/NZS 5139:2019	Electrical installations - Safety of battery systems for use with power conversion equipment.	
AS 60947.3:2018	Low-voltage switchgear and controlgear Switches, disconnectors, switch-disconnectors and fuse-combination units (IEC 60947-3:2015 (ED. 3.2) MOD).	
IEC 60529:1989+AM- D1:1999+AMD2:2013 CSV	Degrees of protection provided by enclosures (IP Code).	
AS/NZS IEC 60947.1:2015	Low-voltage switchgear and controlgear general rules.	
AS/NZS 3001:2008	Electrical installations - Transportable structures and vehicles including their site supplies.	
AS/NZS ISO 31000:2009	ElRisk management - Principles and guidelines.	
AS/NZS 3112:2017	Approval and test specification - Plugs and socket-outlets.	
AS/NZS 4509.1:2009	Stand-alone power systems safety and installation (Reconfirmed 2017).	



Integrate more than one energy source to generate power.

Optimise the efficiency of power generation and consumption while reducing noise and emissions.

When used with diesel generators, fuel and cost savings are realised by minimising the engine run-time and maximising use of stored energy.



FROM \$119,000

The **BATTERY POWER SYSTEM** is a complete solution that includes:

- Power Management System (PMS)
- Power Conversion Equipment (PCE)
- Interface for communicating with other devices
- Battery Energy Storage System (BESS)
- Battery Management System (BMS)
- Electrical protection devices

All in an Australian outdoors suited cabinet.





Scalable | Modular Increase Capacity Through Connecting Additional Units



Battery Capacity



Output Power



Output Voltage



LiFePO4 Lithium Iron Phosphate



Battery Cycle Life to 80% SOH



Battery Life with Daily Use

SPECIFICATIONS

PARAMETER	PAK 066-066
Rated Power Output (kVA)	66kVA - 66kW
Maximum Power Output (kVA)	188 (10 second load)
Output Voltage (V)	415 (3 Phase)
Rated Frequency (Hz)	50
Overload Capacity	125% (60 second load)
Battery Type (Chemistry)	LFP – LiFePO4 Lithium Iron Phosphate
Total Capacity (kWh)	68
Cycle Life	7000 cycles to 80% SOH >15 years with daily use
Maximum AC Current (Amps)	271
Power Management System (PMS) Generator Starts/Stops	Automatic
Power Management System (PMS) Breaker Closing/Opening	Automatic
Power Management System (PMS) System Logic Deployment	Automatic
Working Temperature	-20 to 55°C
Communication	RS485, CAN, LAN
Communication Protocol	Modbus-RTU, PLC, CAN, SCADA
Protection	Outdoor IP65
Dimensions L x W x H (mm)	2200 x 1100 x 2200
Weight (kg)	1600
Expandable	16x

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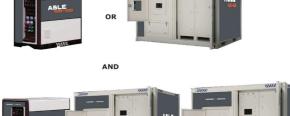


FROM \$142,000

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Battery Capacity



Output Power



Output Voltage



LiFePO4 Lithium Iron Phosphate



Battery Cycle Life to 80% SOH



Battery Life with Daily Use

SPECIFICATIONS

PARAMETER	PAK 100-100
Rated Power Output (kVA)	100kVA - 100kW
Maximum Power Output (kVA)	250 (10 second load)
Output Voltage (V)	415 (3 Phase)
Rated Frequency (Hz)	50
Overload Capacity	125% (60 second load)
Battery Type (Chemistry)	LFP – LiFePO4 Lithium Iron Phosphate
Total Capacity (kWh)	100
Cycle Life	>15 years life to 80% SOH with daily use
Maximum AC Current (Amps)	360
Energy Management System (EMS) Generator Starts/Stops	Automatic
Energy Management System (EMS) Breaker Closing/Opening	Automatic
Energy Management System (EMS) System Logic Deployment	Automatic
Working Temperature	-20 to 55°C
Communication	RS485, CAN, LAN
Communication Protocol	Modbus-RTU, PLC, CAN, SCADA
Protection	Outdoor IP65
Dimensions L x W x H (mm)	2200 x 1100 x 2200
Weight (kg)	1900
Expandable	16x

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