

HESS

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# HOME ENERGY STORAGE SYSTEMS

ENERGY STORAGE

One of the most cost effective residential energy storage systems available, HESS has been specifically designed for reliability and durability in the harsh Australian conditions.

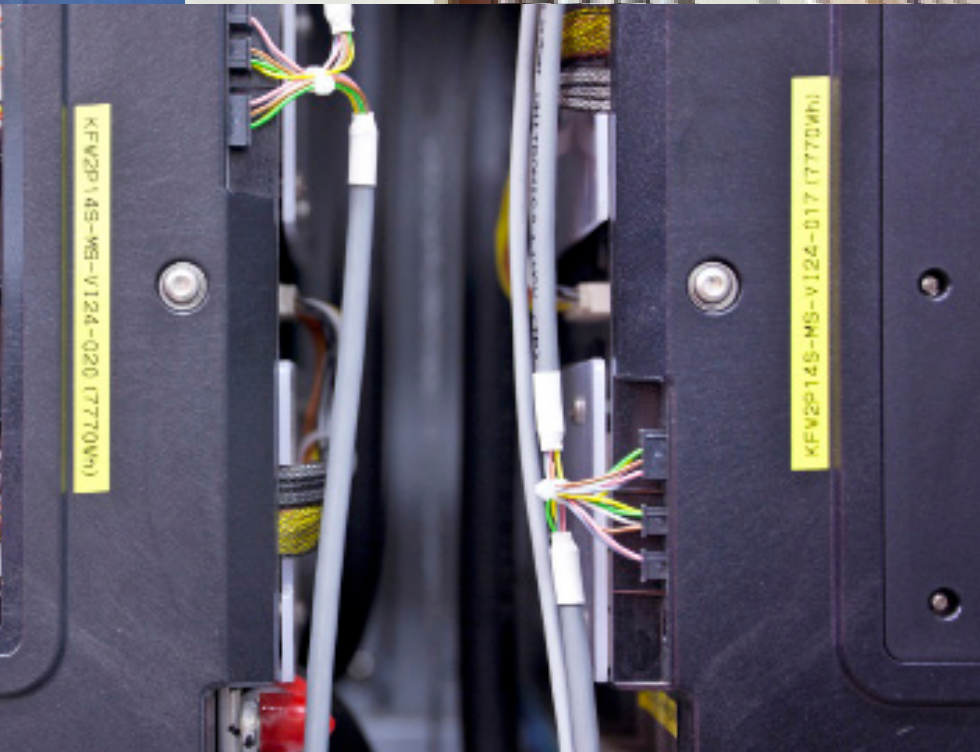
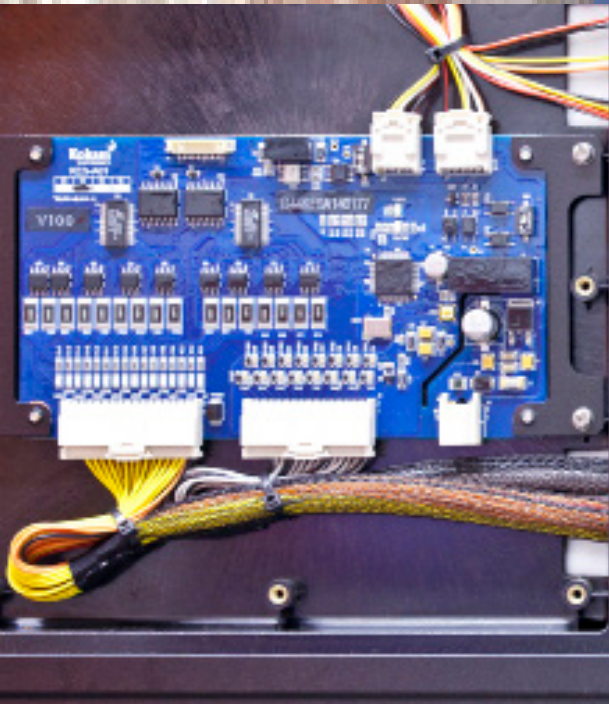
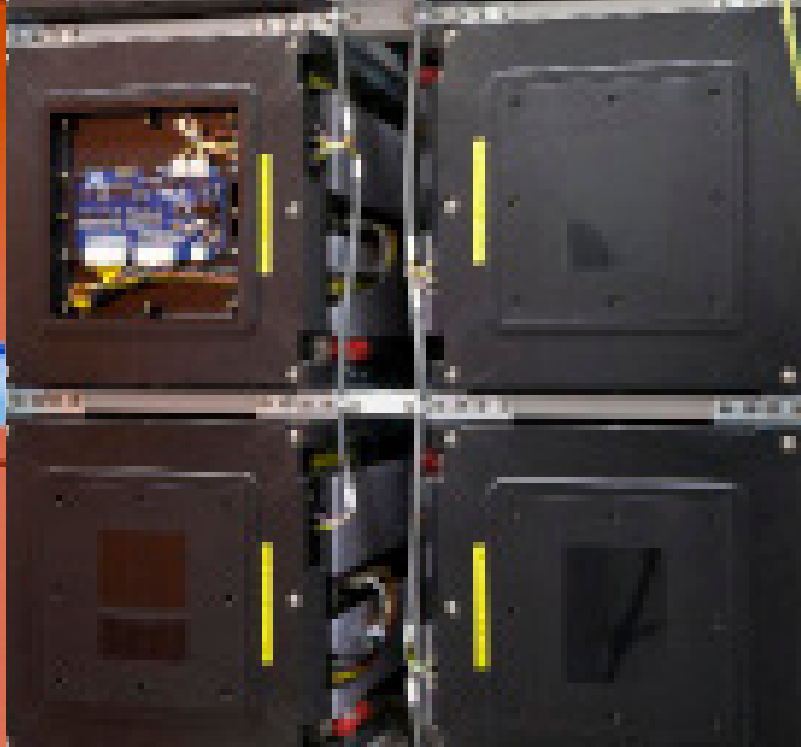
Made in Australia, The All In One Magellan Home Energy Storage System (HESS) converts sun energy into useable power and stores it in high performance lithium batteries, allowing you to use your solar power at night or on cloudy days.

This combined with a smart bi-directional energy manager takes advantage of cheap, off-peak power to recharge the batteries, substantially reducing the cost of your electricity.

### FEATURES:

- Available in 6.5 and 13kWh
- Made for Australian Conditions
- All in 1 Design
- Charges from Solar Panels & the Grid
- Control via Phone or Tablet
- Smart & Simple to Use
- Fast & Easy to Install
- Advanced Lithim Batteries
- Expandable modular battery design
- Durable Indoor/ Outdoor Enclosure
- UPS Function for Blackouts





State of the Art Battery Technology.  
Easy to Use.  
Microgrid Compatible.  
Simple & Quick Capacity Upgrade.  
Complies with Current Standards.

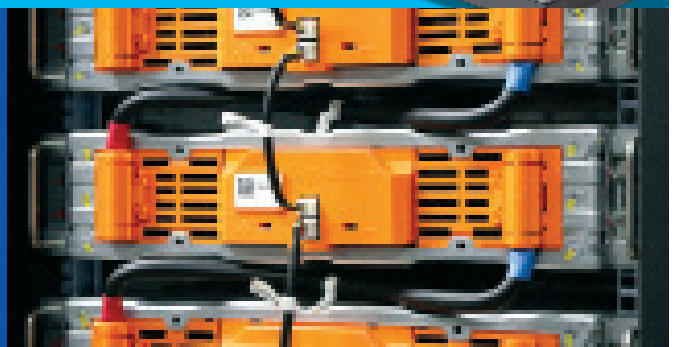
FEATURES:

- Powerful inverter 5kVA
- Energy trading ready
- Easily assembled & disassembled
- Intelligent Energy Management
- Easy to use colour touchscreen
- Easy WiFi connect
- Installation under eaves/ in garage
- Mobile App & Online Portal
- Monitoring
- High efficiency power conversion
- Internet of Things (IoT) ready
- Hybrid Design - solar & grid charging
- Compatible with existing solar installation



BATTERIES:

- High energy density
- Compact, lightweight batteries
- Expandable modular design
- LG Chem - worldwide battery supplier



SPECIFICATIONS	
Nominal Capacity	4.6kW
Input/Output Phases	Single Phase
Standards Compliance	AS4777-2/-3 AS3100/ IEC62109-1/-2 IEC62040-1 IEC61000 IEC61233/ UL164
Maximum Humidity	95% R.H, Non condensing
Cooling	Passive cooling with fan assist
Enclosure	Indoor/outdoor
Base Model Weight	Approx. 150kg (1 module configuration)
Maximum Weight	Approx. 190 kg
Material Finish	Premium grade powder coating
Dimension (WxDxH)	1350mmH x 650mmW x 450mmD
User Interface	Colour touch screen 4:3"
Remote Monitoring Interfaces	Magellan Portal Smartphone App (Android and iPhone)
Communications Interface	WIFI USB
System Setup Software	Included
Data Logging	Internal non-volatile memory and cloud storage

INVERTER SPECIFICATIONS AC	
Nominal AC Power	4.6 kW
Back Up Power	4.6kW - Overload 1.5 times for 10 seconds
Max AC Current	20A
AC Overcurrent Protection	32A
Nominal AC Output	50Hz; 230VAC
AC Input Range	45-55Hz; 180-270Vac
AC Current T.H.D	<1.5%
AC Output (Backup Option)	(Backup Option)
	230 Vac $\pm$ 2%, 50Hz $\pm$ 0.2%
AC Voltage T.H.D	<3% (Linear Load)
Power Factor	0.8 leading ~ 0.8 lagging (Control Range)
Efficiency (euro)	97%
Ambient Temperature Range	- 20°C ~ 60°C (>45°C derating)
UPS Transfer Time	<10ms

## INVERTER SPECIFICATIONS DC

Battery Charging Current	50A
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## SPECIFICATION PV

Max PV Array Size	6000W
Max PV Voltage	580V
PV Voltage Range	125V - 580V
Starting Voltage	125V
Max PV Current	11A (per string)
PV Overcurrent Protection	14A
No. of PV Connectors	2
No. of MPPTs	2
MPPT Adaption Efficiency	99.5%

## BATTERY MODULE SPECIFICATIONS

Cell Generation	JH3
Maximum Modules	2
Battery type	Advanced Lithium Ion (NMC)
Charging/ Discharging Current	63A
Battery Brand	LG Chem
Nominal Voltage	51.8 V
Voltage Range	42 - 58.8 V
Nominal Battery Capacity (per module)	6.5kWh
Battery Cycle Life	>4000 times @ 90% 6.5kWh DOD @ 25°C
Performance Warranty	10 years @ 25°C
Battery Operating Temperature Range	0°C - 45°C
Dimension (WxDxH)	110mm H x 445mmW x 587mmD
Weight	44kgs each module