One of the most cost effective residential energy storage systems available, the 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 Lithium 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

<table>
<thead>
<tr>
<th><strong>Nominal Capacity</strong></th>
<th>4.6kW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input/Output Phases</strong></td>
<td>Single Phase</td>
</tr>
</tbody>
</table>
| **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

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

- **Battery Charging Current**: 50A

### 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