



Single phase Avantess system in marine grade aluminium with stainless steel hinges and locks

The Avantess

The Avantess name is derived from the term Avante-garde, meaning “leading edge or innovative and ahead of its time”. The Avantess Energy Storage System ([ess](#)) range is REA’s flexible, modular based energy storage system that can grow as your energy needs change. It uses cloud technology, so you can get all the information you want from wherever you are, in an easy to read and understand format. The system includes proven, marine grade components from century old Dutch company Victron, who have supplied quality energy products to the world for over 40 years (1975). Best of all, the Avantess includes Australian made Tardis batteries, specifically designed for safe energy storage and use in the tough Australian environment. This is the only battery we know that loves the Australian sun.

Benefits

1. Uninterrupted power available at full battery capacity, even when the grid is down.
2. Uses long life batteries that are safe, reliable, light weight and compact.
3. Can allocate power where you want it, when you want it.
4. Provides phase compensation for greater power efficiency and therefore lower power cost.
5. True outdoor system without the need for artificial cooling.
6. Battery designed and made in Australia for harsh Australian conditions.
7. Free online monitoring of system performance via your computer, phone or tablet.
8. You can choose from a range of powder coated cabinet colours.
9. Australian made cabinet that retains its attractive appearance even when located outside *.
10. System is easy to install using a “plug and play” approach.
11. Low maintenance system with proactive problem-solving capacity.
12. Choose cabinet type to suit your environment**.
13. Batteries can be discharged to 100% capacity.
14. Batteries are fast charge and discharge capable.
15. 10 Year warranty on batteries or 3,000 cycles whichever comes first.
16. Operating conditions -20°C to +60°C.
17. Modular so further energy storage capacity of up to 21kWh per module can be added when required.
18. Batteries are made from stainless steel, cylindrical cells using lithium iron phosphate (LFP) chemistry. This means the batteries are made for safe energy storage***.
19. Major components are quality, marine grade for rugged, long life applications.
20. The system is a AC/DC hybrid. This means it does not care where the energy comes from i.e AC (Grid) or DC (e.g. solar) nor how it is used i.e. own consumption, battery storage or back to Grid.

- * Long term appearance will depend on material chosen and placement of cabinet
- **Choose from Zinc/Steel (indoor), Aluminium or Marine Grade Aluminium (Outdoors)
- ***The cylindrical cell LFP technology used in the Tardis battery has many advantages over most other batteries on the market. It is designed to provide safe energy storage. We avoid more unstable chemistries that could cause fire or explosion. Nor do we use satchel technology with its thermal limitations.



Three phase Avantess above which can also be supplied as a single phase system with up to 32kWh of energy storage.



		AVANTESS	AVANTESS +
Electrical	Nominal DC Voltage	48Volts DC	48Volts
	Battery String capacity	3.6 kW hrs	3.6 kW hrs
	Max number of strings	3	6
	Total Capacity (Useable)	10.7 kWh	21.4 kWh (3 PH) to 32.1 kWh (1 PH)
	Internal fuse rating per battery string	100A DC	100A DC
	Single Phase output capacity	3kVA -5kVA	3kVA - 15kVA
	Two Phase output capacity	N/A	6kVA - 10kVA
	Three Phase output capacity	N/A	9kVA - 15kVA
	Transfer Switch	50 Amps AC per Phase	50 Amps AC per Phase
	Phase compensation	N/A	Two phase and three phase modules
	Charge current	1 PH 35A	1 PH 35A / 2 PH 70A / 3 PH 105A
	Backup module	Yes	Yes
	True UPS	Yes	Yes
	Charging in backup mode	Yes in certain configurations	Yes in certain configurations
Manual Transfer Switch	Yes	Yes	
Enclosure	Height (With plinth)	1400 mm	1400 mm
	Depth	415 mm	415 mm
	Width	600 mm	1200 mm
	Weight	100 to 180 KG	110 to 390 KG
	Weather	IP 55	IP 55
	Mounting	Ground	Ground
Solar	DC Solar MPPT Charging compatible	Yes / Optional	Yes / Optional
	AC Solar Charging compatible	Yes / Any Brand	Yes / Any Brand
	Max DC Charging	70 Amps per string	70 Amps per string
	Max AC Charging input side	Unlimited / controlled by meter	Unlimited / controlled by meter
	Max AC Charging Output Side	35 Amp / 3kVA 70 Amp / 5kVA	35 Amp / 3kVA per PH 70 Amp / 5kVA per PH
	Zero Export Control	Yes Fronius / Victron MPPT only	Yes Fronius / Victron MPPT only
Conductivity	Online portal	Yes / Victron Remote Monitor	Yes / Victron Remote Monitor
	Connection	Yes LAN / Wi-Fi optional	Yes LAN / Wi-Fi optional
	Operational mode	Victron ESS	Victron ESS
	Solar Production monitoring	Yes	Yes
	Consumption monitoring	Yes	Yes
	Remote programming capability	Yes	Yes
	Fault Status Alarm	Yes / Email	Yes / Email