



Three phase hybrid Grande system providing power to the pumps running a town's water supply in Northern Victoria.



Avantess Grande

The Grande is REA's cabinet with the Lot. This system was designed by us for users who want total control over their power. The Grande is a flexible, modular 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 innovative technology from dynamic Dutch company Victron, who have supplied quality energy products to the world for over 40 years. Best of all, the system uses Australian made Tardis batteries, specifically designed for 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** : Use full battery capacity, even when the grid is down.
2. **Compact**: Uses equipment including batteries that are reliable, light weight and compact.
3. **Power use allocation**: Can allocate power where you want it when you want it.
4. **Provides phase compensation**: Greater power efficiency and therefore lower power cost.
5. **True outdoor system**: No need for artificial cooling.
6. **Australian made**: Cabinet & Battery designed and made in Australia for harsh Australian conditions.
7. **Free online monitoring**: Monitor your system performance via your computer, phone or tablet.
8. **Colour options**: You can choose from a range of powder coated cabinet colours.
9. **Robust long-life cabinet**: Can retain its appearance even when located outside *.
10. **Simple installation**: System is easy to install using a "plug and play" approach.
11. **Low maintenance system**: Has proactive problem-solving on-line monitoring capacity.
12. **Range of cabinet types**: Choose cabinet type to suit your environment**.
13. **Plenty of power**: Batteries can be discharged to 100% capacity.
14. **Batteries are fast charge and discharge capable**.
15. **Great warranty**: 10 Year warranty on batteries or 3,000 cycles at 80% Depth of Discharge (DoD) @ 1C whichever comes first. Victron equipment all has 5 year warranty.
16. **At home in Australian environment**: Operating conditions -20°C to +60°C.
17. **Modular**: You can add further energy storage capacity when required.
18. **High safety**: 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. **Long life components**: High quality, designed for marine use and other 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), 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.

Electrical	Nominal DC Voltage	48Volts DC
	Battery String capacity	3.6 kW hrs
	Max number of strings	12
	Total Capacity	43 kWh
	Internal fuse rating per battery string	100A DC
	Single Phase output capacity	10kva -30kva
	Two Phase output capacity	20kva
	Three Phase output capacity	10kva per Phase
	Transfer Switch	50 Amps AC per Phase
	Phase compensation	Two phase and three phase modules
	Charge current	1 PH 35A / 2 PH 70A / 3 PH 105A
	Backup module	Yes
	True UPS	Yes
	Charging in backup mode	Yes in certain configurations
Manual Transfer Switch	Yes	

Enclosure	Height (With plinth)	1883 mm
	Depth	500 mm
	Width	2000 mm
	Weight	500 to 850 KG
	Weather	IP 55
	Mounting	Ground

Solar	DC Solar MPPT Charging compatible	Yes / Optional
	AC Solar Charging compatible	Yes / Any Brand
	Max DC Charging	70 Amps per string
	Max AC Charging input side	Unlimited / controlled by meter
	Max AC Charging Output Side	35 Amp / 10 kVA per PH
	Zero Export Control	Yes Fronius / Victron MPPT only

Connectivity	Online portal	Yes / Victron Remote Mon
	Connection	Yes LAN / Wi-Fi optional
	Operational mode	Victron ESS
	Solar Production monitoring	Yes
	Consumption monitoring	Yes
	Remote programming capability	Yes
	Fault Status Alarm	Yes / Email

