



PRODUCT DESCRIPTION:

The RedEarth SunRise is a fully engineered & assembled Australian unit, designed for internal or external plug and play installation. The SunRise stores your excess power generated from your rooftop solar providing additional power even after the sun sets, and will power your home during blackouts*. Already have solar panels?, we can work with that! We can retrofit to your existing system. The SunRise is also designed to be scalable, so start small and build a customised battery system ideal for your home.



The SunRise is a fully integrated plug & play energy storage solution to meet today's higher home energy consumption and reduces your power bill.



Online Monitoring Available

WARRANTY

- 10-year battery warranty
- 5-year SunRise warranty

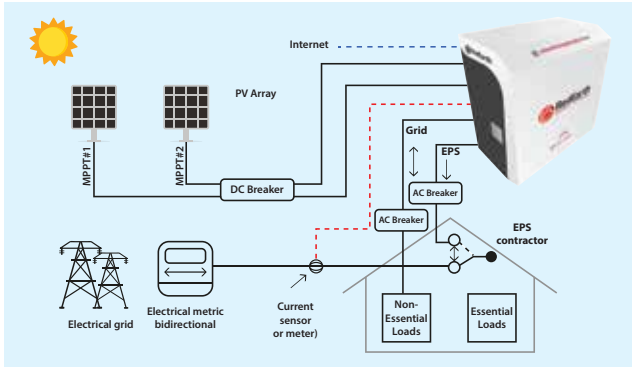
SunRise TECHNICAL SPECIFICATIONS:

Anti-islanding protection	Yes
Monitoring	PC & Mobile Depending on internet availability
Internal Cooling (fans)	3 - 4 Fans Passive and active cooling
Battery Sizing Options	0 - 24 kWh
Dimensions	1010H x 910W x 540D (mm)
Weight max	50 - 246 kgs (From 0 - 24 kWh of batteries)

SunRise ENCLOSURE

- Aluminium construction for improved weather protection.
- Forced Air cooling fans preventing heat build up
- AC/DC connection ready
- Integrated batteries, inverter & circuit protection.

* Amount of power provided depends upon the number of batteries purchased, and the user's power consumption requirements.



LITHIUM FERRO PHOSPHATE BATTERY

BATTERY MODEL

Model	RedEarth TROPICAL ECO4840P
Nominal Capacity	4.0kWh (3.994) / 78Ah
Continuous Charge/Discharge Current	39A
Charge/Discharge Cycles	2700@100% DoD / 5000@75% DoD / 10,000@50% DoD @25°C op. temp.
Battery Dimensions	635mm D x 434mm W x 88mm H
Module Weight	41kg
BMS Over-Volt cut off	58.4V
BMS Under-Volt cut off	40V
Lithium Composition	Lithium Ferro Phosphate (LiFePO4 or LFP)
Recovery / Restart Voltage	52V
Max Number of Batteries in Enclosure	6



SOLAR POWER INVERTER

PV INPUT DATA

Max. PV input power	6500 W
Max. PV input voltage	600 V
Startup voltage	125 V
Nominal input voltage	350 V
MPP voltage range	125 V - 560 V
MPP voltage range for nominal power	240 V - 520 V
No. of MPPTs	2
Max. number of PV strings per MPPT	1/1
Max. PV input current	11A / 11A
Max. current for input Terminal	12A / 12A
Short-circuit current of PV input	24A (12A / 12A)

AC INPUT DATA & OUTPUT DATA

Max. AC input power	3000 W
Nominal AC output power	4990 W
Nominal AC output current	21.6 A
Max. AC output apparent power	5000W
Max. AC output current	21.7 A
Nominal AC voltage	230 Vac
Nominal grid frequency	50 Hz
Total harmony distortion (THD)	< 3% (of nominal power)
DC current injection	< 0.5% (of nominal current)
Power factor	>0.99 at default value at nominal power adjustable 0.8 leading to 0.8 lagging

SYSTEM DATA

Max. efficiency	>97.7%
Max. charge / discharge efficiency	>94.0%
Isolation method (solar)	Transformerless
Isolation method (battery)	HF
Display	Graphic LCD
Communication	2 x RS485, Wi-Fi (optional), CAN,Ethernet
Analogue input	PT1000
Power management	1 x Digital Output
Earth alarm	1 x Digital Output, Email, Buzzer inside
DC connection type	MC4
AC connection type	Clamping yoke connector
Certification	AS4777, AS/NZS3100, IEC 62109-1,IEC62109-2, IEC 62619, IEC 62040, EN 61000-6-2/-3

BACKUP DATA

Nominal voltage	230 Vac (±2%)
Total harmonic factor output voltage	2% (full resistive load)
Frequency range	50 Hz (±0.2%)
Switch time to emergency mode	3 s
Power factor	0.8 overexcited/leading to 0.8 underexcited/lagging
Max. output power	5000W / 5000VA
Max. output power (battery)	3000W / 3000VA

* The AC voltage ranges from 180 Vac to 250 Vac when the operating ambient temperature is 500C – 600C.