

# Sunrise

*Electricity Storage System*



## Maximize the value of your solar!

The Sunrise system is an outdoor-rated, plug-and-play battery system that stores your excess solar electricity for use after the sun goes down until sunrise. Use your own solar power at night and reduce your power bills. No more blackouts! Get back-up power in case of a power failure. Futureproof: start small and add batteries later as your needs grow, and your budget allows. Integrate new tech as it becomes available. Can be expanded up to 26 kWh of battery. Enough to keep you going for days on end without mains power. Use with your existing or new solar panels.

## Key Advantages

### High Quality

- Fully engineered, factory assembled and tested in Australia
- High quality components used
- Weatherproof enclosure
- Australian Standards compliant

### Easy Installation

- Place it outside round the back with the aircons and hot water; no need to clutter the garage or your home
- Developed for easy and quick installation – minimal onsite preparation
- Plug and play connection to your solar and the grid

### Flexibility

- Choice of battery size: from 0 to 24 kWh (high quality LG lithium-ion battery modules)
- Can install with solar panels only and upgrade to batteries later

### Low Maintenance

- Powder coated aluminium and steel enclosure
- Set and forget operation; online maintenance

### Remote monitoring

- With an internet connection the system can be remotely monitored on your computer or mobile device
- Optional remote monitoring service available from RedEarth

## About NextGen Energy

NextGen Energy is not only NZ's first, and only, **not for profit** power company.

We also provide turnkey energy solutions for:

- Residential storage systems
- Community-owned electricity schemes
- Offsite solar power generation
- Grid-scale storage technologies
- Commercial energy efficiency
- Electric vehicles & charging systems
- Off-grid subdivision development
- Lines company capacity support

## For more information:

0800 890 146

[www.nextgen.energy](http://www.nextgen.energy)

[systems@nextgen.energy](mailto:systems@nextgen.energy)

**Warranty & Support**

- Red Earth’s systems use high quality components and are backed up to 5 years' replacement warranty
- Support including monitoring, is available directly from our Brisbane factory

**Technical Specification**

**Inverter/ Battery Charger**

Specifications	SK-TL5000E Inverter
<b>Input (DC)</b>	
Max. recommended DC Power (W)	5000
Max. DC Voltage (V)	550
MPPT voltage range (V)	125-530
Max. input current (A)	12/12
Max. short circuit current (a)	15/15
No. of MPP trackers	2
Strings per MPP tracker	1
<b>Output AC</b>	
AC Nominal Power (W)	4600
Nominal AC Voltage; Range (V), Frequency (Hz)	230, 180-270; 50/60
AC Nominal Current (A)	20
Max. AC Current (A)	21.7
<b>Battery Charger (Internal)</b>	
Compatible battery type	LG M48XXXXXX
Nominal battery voltage (V)	48
Battery voltage range (V)	40-60
Max. Charging Current (A)	50 (adjustable)
Over current protection/ Over temperature protection	Yes
Communication Interfaces	Can/RS232
<b>Others</b>	
Operating temperature range (Celsius)	-10 to +50 (derating at 40)
Cooling concept	Forced airflow
Topology	III (electric supply side), II (PV SIDE) Transformer-less
Warranty (years)	5-1- (Dependent on territory)
Certification	VDE 4105/AS/NZS4777,2/C10 11/EN50438-NL/EN50438-DK/OVE/O

**LG Chem Battery Modules**

Specifications	Module (3.3 kWh)	Module (6.5 kWh)
<b>Performance</b>		
Nominal Capacity	63 Ah	126 Ah
Nominal Energy	3.26 kWh	6.52 kWh
Nominal Voltage	51.8 V	51.8 V
Operating Voltage	42-58.8 V	42-58.8 V
Floating Voltage	57.4 Vmax	57.4 Vmax
Max. Charge/Discharge Current	63 A	63 A
Max. Charge/Discharge Power	3.26 Kw	3.26 Kw
Continuous Charge/Discharge Power	3.0 Kw	3.0 Kw
Round-Trip Efficiency	>95%	>95%
Cooling	Forced air cooling	Natural convection
Number	Up to 8 batteries	Up to 4 batteries
<b>Operating Conditions</b>		
Available operating temperature	-10 to 45 C	-10 to 45 C
Optimal operating temperature	15 - 45 C	15 – 45 C
Storage temperature	-30 to 60 C	-30 to 60 C
Self-Discharge Rate During Storage	Less than 6% per year at 25 C	Less than 6% per year at 25 C
Humidity	5% - 95%	5% - 95%
Altitude	Below 2000m	Below 2000m
<b>Scalability &amp; Certification</b>		
Scalability	Up to 26.1 kWh	Up to 26.1 kWh
Transportation	UN38.3 (UNDOT)	UN38.3 (UNDOT)

FULL TECHNICAL SPECIFICATIONS AVAILABLE ON REQUEST – SPECIFICATIONS MAY CHANGE WITHOUT NOTICE