

Gecko

HOME BATTERY SYSTEM



**The 2024
Gecko includes:**

- STC rebate eligible
- EV charger ready
- Energy trading ready

RedEarth's Gecko system offers Australian-made scalability, in a slim package with RedEarth-certified inverter attached to the wall, making them an excellent and enduring investment for your home. **Available with both single and three-phase inverters**, the Gecko provides a range of power outputs tailored to accommodate your specific needs. This versatility ensures effortless and effective power supply solutions for both residential and business applications.

Gecko is made of aluminium to last in Australia's harsh environment. Like all of RedEarth's products, BushChook is fully engineered, assembled, and tested to Australian standards at RedEarth's factory in Brisbane. Features include:

- ✔ **Versatile Power Hub:**
The Gecko seamlessly integrates grid, generator, and load ports achieving a truly unique level of flexibility.
- ✔ **Smart Load Management:**
In grid connected applications, the generator port can be easily converted to a smart load port, providing intelligent load management, and ensuring your solar and battery is consumed as efficiently as possible.
- ✔ **Multiple Power Options:**
Gecko is available in 5kW, 8kW (single phase) and 12kW (three phase) power output options to suit the needs of your home.
- ✔ **Private Power Plant Ready:**
The Gecko keeps your power in your hands with native support for RedEarth's Private Power Plant.

Outdoor-rated, easy-to-install and scalable, the Gecko system comes pre-wired and can be retrofitted to an existing solar system, making it the easiest slimline system for your home.

Specifications	Single Phase	Three Phase
Power output options	Max. AC output power of 5000W or 8000W	Max. AC output power of 12,000W
Solar input	5kW option Connect up to 7.5kW of solar panels to the dual MPPTs 8kW option Connect up to 12kW of solar panels to the dual MPPTs (150-425Vdc max. 500Vdc)	12kW option Connect up to 18kW of solar panels to the dual MPPTs (200-650dc max. 800Vdc)
Battery	From 2 to 6 x 4.1kWh Troppos (max. 24.6kWh) Voltage: 48Vdc (nom.) Min 2 required for full inverter power rating. (Min 2 for 5KW, minimum 3 for 8KW)	4 to 6 x 4.1kWh Troppos (Max 24.6kWh) Voltage: 48Vdc (nom.) Min 4 required for full inverter power rating.
Electrical connections	Grid connection, backup circuits connection and Smart Port connection (if used).	
Monitoring	Monitoring hardware included and activated via RedEarth's EMU app (subject to network availability and Optimum subscription).	
Energy trading	On-grid only	
EV charger	Yes – compatible	



Need support? No worries.

RedEarth is with you all the way, from technical support during installation, to ongoing monitoring and guidance for your system for years to come. Our Australian-based team is on call to make *powering yourself* as easy as possible. We also offer information sessions and training for installers at our factory in Brisbane. Give us a call today to see how you can future-proof your home with a RedEarth system.

www.redearth.energy
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15 Fienta Place, Darra, Brisbane, QLD Australia 4076

Slimline design, perfect for space-constrained installations

Available in **two colour options**,
Colorbond Monument and
Colorbond Surfmist

Power yourself.

GECKO TECHNICAL SPECIFICATIONS

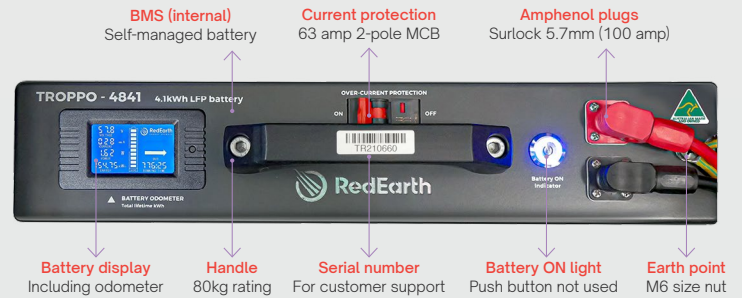
Gecko Model	5kW 1-phase GC-5-1xx	8kW 1-phase GC-8-1xx	12kW 3-phase GC-12-3xx
Battery capacity of Gecko system (Troppos)	2 to 6	3 to 6	4 to 6
Battery capacity of Gecko system (kWh nominal)	8.2 to 24.6	12.3 to 24.6	16.4 to 24.6
Inverter model	5K-SG04LP1-AU	8K-SG05LP1-AU	12K-SG04LP3-AU
Battery data			
Battery type	Troppo 4841 LFP self-managed lithium		
Battery capacity (nominal)	4.1kWh per Troppo battery		
Battery operating voltage range (V)	48-57.6V		
Max. charging current (A)	120A	190A	240A
Max. discharging current (A)	120A	190A	240A
PV string input data			
Max. DC input power (W)	7500W	12,000W	18,000W
Maximum PV input voltage (V)	500V	500V	800V
MPPT range (V)	150 to 425V	150 to 425V	200V to 650V
Start-up voltage (V)	125V	125V	160V
PV input current (A)	13A+13A	26A+26A	26A+13A
Max. PV Isc (A)	19.5A+19.5A	39A+39A	39A+19.5A
No. of MPPT trackers	2		
No. of strings per MPPT tracker	1+1	2+2	2+1
AC output data			
Rated AC output and UPS power (W)	5,000	8,000	12,000
Max. AC output power (W)	5,000	8,000	12,000
Peak power (off-grid)	2 times of rated power, 10 S		
Rated AC output current (A)	21.7A	34.8A	17.4A
Max. AC output current (A)	21.7A	34.8A	17.4A
Max. three-phase unbalanced output current (A)	N/A	N/A	26.1A
Max. continuous AC passthrough (A)	35A*	50A*	45A*
* When installed in the BushChook system AC passthrough is current limited to 40A			
Power factor	0.8 leading to 0.8 lagging		
Output frequency and voltage	50Hz; 230V/400V, 240/415V	50Hz; 230V/400V, 240/415V	50Hz; 230V/400V, 240/415V
Grid connection type	Single phase L/N/E	Single phase L/N/E	Three phase 3L/N/E
Protection			
Integrated	Anti-islanding Protection, Surge protection, Output Shorted Protection, PV String Input Reverse Polarity Protection, Output Over Current Protection, Insulation Resistor Detection, Residual Current Monitoring Unit		
Over voltage category	DC Type II / AC Type III		
Certifications and standards			
Grid regulation	AS/NZS 4777.2		
EMC / Safety regulation	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
General data			
Operating temperature range (°C)	-40~60°C, 45°C derating		
Cooling	Smart cooling with temperature-controlled fans		
Weight of Gecko battery enclosure (kg)	41		
Weight of Gecko inverter (kg)	14	24	35.6
Size of Gecko battery enclosure (mm)	800W x 1135H x 390D		
Size of Gecko inverter (mm)	333W x 11350H x 238D	330W x 580H x 232D	420W x 670H x 233D
Protection degree of Gecko system	IP43		
RedEarth Warranty	10 years (AU & NZ and South Pacific region)		

Troppo

LFP 4841
BATTERIES



User-friendly display designed to make monitoring your battery easy



RedEarth's own battery, Troppo, is the **first Australian-made and owned battery** approved and listed by the Clean Energy Council.

Troppo is a high-quality, self-managed battery that uses the safest and most durable lithium ion chemistry available, Lithium Ferro Phosphate (LFP). This is packaged in the highest quality cells available in the self-managed battery market in Australia. These cells have been tested in the National Battery Testing Centre in Brisbane.

Combined with our latest battery management system, accessible 63A DC dual-pole MCB breaker, informative display, and a usable handle, Troppo delivers safe, highly efficient, and cost-effective performance over the life of both residential and commercial systems, both on- and off-grid.

Compatible with all common battery inverters and solar MPPTs. For more details, scan the QR code on this page or visit www.redearth.energy.

Repairable and recyclable: The Troppo battery is repairable by RedEarth as it is made in Australia. At end-of-life it can be recycled in Australia. Contact RedEarth for details.

Benefits

- ✓ 10-year warranty
- ✓ Maintenance-free
- ✓ Scalable capacity—add more batteries later
- ✓ Battery voltage operates at safe ELV levels
- ✓ High temperature protection
- ✓ Low temperature protection
- ✓ Overcharge protection
- ✓ Flexible installation options available through RedEarth
- ✓ Compatible with industry-standard inverters

Specifications	
Nominal capacity	4.1kWh/79.8Ah
Nominal DC voltage	51.2V
Maximum discharge current	63A (limited by circuit breaker)
Maximum charge current	63A (limited by circuit breaker)
Maximum power of discharge (kW)	Approx 3kW
MWh delivered over battery lifetime	10.2MWh at 80% DoD
Battery mounting options	Standard 19" rack + horizontal, vertical, or on either side
Short circuit current p/battery	0.4 kA



Optimises any power source



Need an enclosure for your Troppo batteries? No worries.

RedEarth makes things as easy as possible for our installers and end-customers. We have a range of indoor and outdoor rated enclosures to suit every application. Contact our team to find out more about our **VAULT** range of fully pre-wired battery enclosures.

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SCAN ME

Power yourself.