

Gecko

Technical Data Sheet

RedEarth's Gecko battery energy storage systems offer Australian-made scalability, making them an excellent and enduring investment for your home.

Available in both single and three-phase configurations, Gecko provides a range of power outputs tailored to accommodate your specific needs.

Gecko is outdoor rated IP43 with a maximum capacity of 8 Troppo ULTRA batteries – 44.8 kWh capacity.



Fast Installs



One Pallet



Plug 'n' Play

Gecko Model	Single phase		Three phase	
	Gecko 5kW 2GC1-DY5-XUL	Gecko 10kW 2GC1-DY10-XUL	Gecko 12kW 2GC3-DY12-XUL	Gecko 15kW 2GC3-DY15-XUL ~ Coming soon
Battery capacity (Troppo Ultra 5.6 kWh)	2 to 8	2 to 8	3 to 8	3 to 8
Battery capacity (kWh nominal)	11.2 – 44.8 kWh	11.2 – 44.8 kWh	16.8 – 44.8 kWh	16.8 – 44.8 kWh
Inverter model	5K-SG04LP1-AU	10K-SG02LP1-AU	12K-SG04LP3-AU	~Coming soon

Battery data

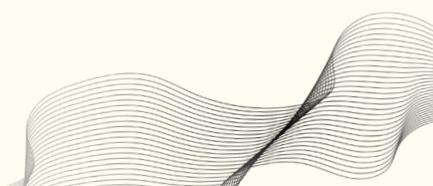
Battery type	Troppo Ultra 5156 LFP self-managed lithium			
Battery capacity (nominal)	5.6kWh per Troppo Ultra battery			
Battery operating voltage range (V)	48-57.6 V			
Maximum charging current (A)	120 A	220 A	240 A	280 A
Maximum discharging current (A)	120 A	220 A	240 A	280 A

PV string input data

Maximum allowable PV (W)	10,000 W	20,000 W	24,000 W	30,000 W
Maximum usable PV (W)	7,500 W	15,000 W	18,000 W	24,000 W
Maximum PV input voltage (V)	500 V	500V	600V	600 V
MPPT range (V)	150 to 425 V	150 to 425V	200V to 600V	160-600 V
Start-up voltage (V)	125 V	125 V	160 V	160 V
PV input current (A)	13A+13 A	26A+26A+26 A	26A+13 A	36A+36 A
Maximum. PV Isc (A)	19.5A+19.5 A	44A+44A+44 A	39A+19.5 A	54A+54 A
No. of MPPT trackers	2	3	2	2
No. of strings per MPPT tracker	1+1	2+2+2	2+1	2+2

AC output data

Rated AC input/output active power (W)	5,000 W	9999	12,000	15,000
Maximum. AC input/output apparent power (VA)	5,000 VA	9999	12,000	15,000
Peak power (off-grid)	2 times of rated power, 10 S			
Rated AC input/output current (A)	21.7 A	43.5 A	17.4 A	21.8 A
Maximum AC input/output current (A)	21.7 A	43.5 A	17.4 A	21.8 A
Maximum continuous AC passthrough (A)	35 A	50 A	45 A	50 A
Generator Total Harmonic Distortion (THDi)	<3% (of nominal power)			
Power factor	0.8 leading to 0.8 lagging			
	50 Hz; 230 V/400 V, 240 V/415 V			



Protection	Single phase		Three phase	
	Gecko 5kW 2GC1-DY5-XUL	Gecko 10kW 2GC1-DY10-XUL	Gecko 12kW 2GC3-DY12-XUL	Gecko 15kW 2GC3-DY15-XUL ~ Coming soon
Integrated	DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Insulation Impedance Detection, Arc Fault Circuit Interrupter (optional), DC Switch, Anti-islanding Protection (Active Frequency shift), Residual Current Detection			
Over voltage category	DC Type II / AC Type II			

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 system (excl. batteries) (kg)	100 kg	120 kg	125 kg	140 kg
Size of Gecko system (mm)	1060W x 1950H x 450D			
Protection degree of Gecko system	IP43			
RedEarth Warranty	10 years (AU & NZ and South Pacific region)			
Electrical connections	Grid connection, backup circuits connection and Smart Port connection (AC coupled inverter/smart load/generator). PV array			
Monitoring	Monitoring hardware included and activated via RedEarth's EMU app (subject to network availability and Optimum subscription).			
Energy trading	On-grid only			
EV charging	Yes			

* The Gecko system is designed to only use the RedEarth Troppo Ultra -5156 lithium-ion battery (LFP).

** The Nominal Energy Capacity depends on the number of Troppo Ultra-5156 batteries installed in the Gecko system. The model numbers reflect the total battery capacity installed in the system.

