

BushChook

WHOLE HOME BACKUP POWER SOLUTION



The 2025 BushChook includes:

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

RedEarth's BushChook systems offer Australian-made scalability, making them an excellent and enduring investment for your home. **Available in both single and three-phase configurations**, the BushChook 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.

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 BushChook seamlessly integrates grid, generator, and load ports achieving a truly unique level of flexibility.
- ✓ **Dynamic AC-Coupled Solution:**
The BushChook partners effortlessly with micro-inverters and standard string PV inverters. Its micro-grid functionality allows you to power on through a blackout and provides frequency control functionality in a grid failure.
- ✓ **Reliable Backup with Generator Support:**
No grid, no worries – in the face of grid outages, the BushChook can power up your backup generator to power loads and charge the battery.
- ✓ **Smart Load Management:**
No generator or AC-coupled solar? 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.
- ✓ **Private Power Plant Ready:**
The BushChook keeps your power in your hands with native support for RedEarth's Private Power Plant.

Outdoor-rated and easy-to-install, the BushChook system comes pre-wired as a complete solution with whole house backup functionality.

Specifications	Single Phase	Three Phase
Power output options	Max. AC output power of 5000W, 8000W or 10,000W	Max. AC output power of 12,000W
Solar input	5kW option Connect up to 10kW of solar panels to the dual MPPTs 8kW option Connect up to 16kW of solar panels to the dual MPPTs 10kW option Connect up to 20kW of solar panels to the triple MPPTs (150-425Vdc max. 500Vdc)	12kW option Connect up to 24kW of solar panels to the dual MPPTs (200-650dc max. 800Vdc)
Battery	From 2 to 8 x 4.1kWh Troppos (max. 32.8kWh) Voltage: 48Vdc (nom.) Min. 2 required for full inverter power rating (Min. 2 for 5kW, min. 3 for 8kW and min. 4 for 10kW)	4 to 8 x 4.1kWh Troppos (Max 32.8kWh) Voltage: 48Vdc (nom.) Min. 5 required for full inverter power rating.
Electrical connections	Hard-wired via built-in EPS transfer switch PV cables connected directly to pre-installed MC4s. In-built support for controlling AC coupled micro inverters and solar systems, generators or smart loads via hard wired terminal block.	
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	



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.

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Power yourself.

BUSHCHOOK TECHNICAL SPECIFICATIONS

BushChook Model	5kW 1-phase BC-5-1xx	8kW 1-phase BC-8-1xx	10kW 1-phase BC-10-1xx	12kW 3-phase BC-12-3xx
Battery capacity of BushChook system (Troppos)	2 to 8	3 to 8	4 to 8	4 to 8
Battery capacity of BushChook system (kWh nominal)	8.2 to 32.8	12.3 to 32.8	16.4 to 32.8	16.4 to 32.8
Inverter model	5K-SG04LP1-AU	8K-SG05LP1-AU	10KSG02LP1-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	220A	240A
Max. discharging current (A)	120A	190A	220A	240A
PV string input data				
Maximum allowable PV (W)	10,000W	16,000W	20000W	24,000W
Maximum usable PV (W)	7,500W	12,000W	15,000W	18,000W
Maximum PV input voltage (V)	500V	500V	500V	800V
MPPT range (V)	150 to 425V	150 to 425V	150 to 425V	200V to 650V
Start-up voltage (V)	125V	125V	125V	160V
PV input current (A)	13A+13A	26A+26A	26+26+26	26A+13A
Max. PV Isc (A)	19.5A+19.5A	39A+39A	44+44+44	39A+19.5A
No. of MPPT trackers	2	2	3	2
No. of strings per MPPT tracker	1+1	2+2	2+2+2	2+1
AC output data				
Rated AC output and UPS power (W)	5,000	8,000	9999	12,000
Max. AC output power (W)	5,000	8,000	9999	12,000
Peak power (off-grid)	2 times of rated power, 10 S			
Rated AC output current (A)	21.7A	34.8A	43.5	17.4A
Max. AC output current (A)	21.7A	34.8A	43.5	17.4A
Max. three-phase unbalanced output current (A)	N/A	N/A	N/A	26.1A
Max. continuous AC passthrough (A) * When installed in the BushChook system AC passthrough is current limited to 40A	35A*	50A*	60A*	45A*
Generator Total Harmonic Distortion (THDi)	<3% (of nominal power)			
Power factor	0.8 leading to 0.8 lagging			
Output frequency and voltage	50Hz; 230V/400V, 240/415V			
Grid connection type	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 BushChook system (excl batteries) (kg)	109	115	130	136
Size of BushChook system (mm)	1180W x 1040H x 580D			
Protection degree of BushChook system	IP43			
RedEarth Warranty	10 years (AU & NZ and South Pacific region)			