

BushChook

WHOLE HOME BACKUP POWER SOLUTION

-  Single-phase (5kW & 10kW) and three-phase (12kW)
-  Suitable for on-grid and off-grid applications
-  EV charger and energy trading ready
-  Maximum capacity of 44.8kWh
-  Australian made and owned



BushChook Model

5kW 1-phase
2BC1-DY5-xUL

10kW 1-phase
2BC1-DY10-xUL

12kW 3-phase
2BC3-DY12-xUL

| | | | |
|------------------------------------------------------------|---------------|---------------|----------------|
| Battery capacity of BushChook system (Troppo Ultra 5.6kWh) | 2 to 8 | 2 to 8 | 3 to 8 |
| Battery capacity of BushChook system (kWh nominal) | 11.2 to 44.8 | 11.2 to 44.8 | 16.8 to 44.8 |
| Inverter model | 5K-SG04LP1-AU | 10KSG02LP1-AU | 12K-SG04LP3-AU |

Battery Specifications

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

PV String Input Data

| | | | |
|---------------------------------|-------------|-------------|--------------|
| Maximum allowable PV (W) | 10,000W | 20000W | 24,000W |
| Maximum usable PV (W) | 7,500W | 15,000W | 18,000W |
| Maximum PV input voltage (V) | 500V | 500V | 600V |
| MPPT range (V) | 150 to 425V | 150 to 425V | 200V to 650V |
| Start-up voltage (V) | 125V | 125V | 160V |
| PV input current (A) | 13+13 | 26+26+26 | 26+13 |
| Max. PV Isc (A) | 19.5A+19.5A | 44+44+44 | 39A+19.5A |
| No. of MPPT trackers | 2 | 3 | 2 |
| No. of strings per MPPT tracker | 1+1 | 2+2+2 | 2+1 |

AC Output Data

5kW 1-phase
 2BC1-DY5-xUL

10kW 1-phase
 2BC1-DY10-xUL

12kW 3-phase
 2BC3-DY12-xUL

| | 5kW 1-phase 2BC1-DY5-xUL | 10kW 1-phase 2BC1-DY10-xUL | 12kW 3-phase 2BC3-DY12-xUL |
|---------------------------------------------|------------------------------|-------------------------------|-------------------------------|
| Rated AC input/output active power (W) | 5,000 | 9999 | 12,000 |
| Maximum AC input/output apparent power (VA) | 5,000 | 9999 | 12,000 |
| Peak power (off-grid) | 2 times of rated power, 10 S | | |
| Rated AC input/output current (A) | 21.7 | 43.5 | 17.4 |
| Maximum AC input/output current (A) | 21.7 | 43.5 | 17.4 |
| Max. continuous AC passthrough (A) | 35 | 50 | 45 |
| 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 | 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 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 |

Tip! Are you looking for something bigger?

Combine BushChook with a custom **AC Combiner Box** to double continuous power output



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

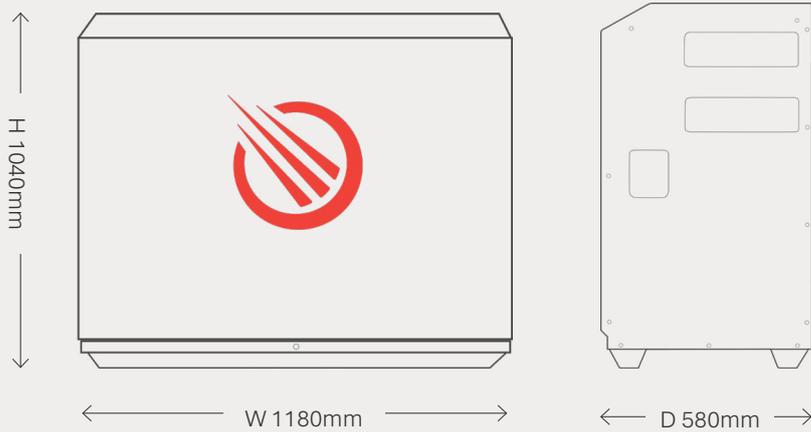
General Data

| | |
|---------------------------------------|------------------------------------------------|
| Operating temperature range (°C) | -40~60°C, >45°C derating |
| Cooling | Smart cooling with temperature-controlled fans |
| Protection degree of BushChook system | IP43 |
| RedEarth Warranty | 10 years (AU & NZ and South Pacific region) |

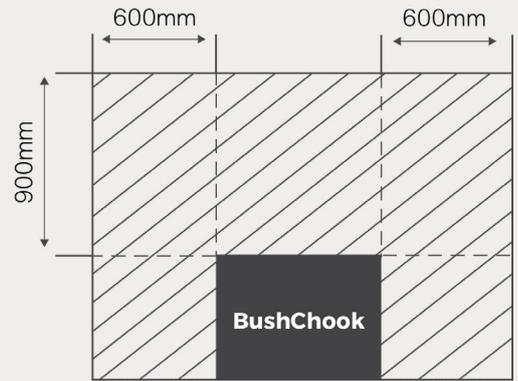
Measurements

| | 5kW 1-phase 2BC1-DY5-xUL | 10kW 1-phase 2BC1-DY10-xUL | 12kW 3-phase 2BC3-DY12-xUL |
|-------------------------------------------------------|-----------------------------|-------------------------------|-------------------------------|
| Weight of BushChook system (excluding batteries) (kg) | 109kg | 130kg | 135kg |

Dimensions



Positioning



Minimum clearance around BushChook (no windows/doors/etc are allowed). Note: if the system is >300mm off the wall this does not apply. The system should be installed in a shaded area.

Configuration

