

# 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

  
STC Approved  
Rebate eligible!



# BUSHCHOOK TECHNICAL SPECIFICATIONS

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
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.

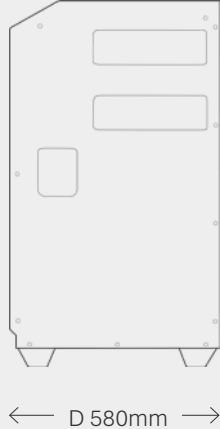
## General Data

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)

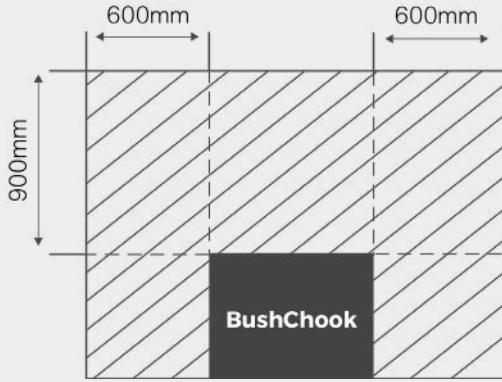
## Measurements

	<b>5kW 1-phase</b> 2BC1-DY5-xUL	<b>10kW 1-phase</b> 2BC1-DY10-xUL	<b>12kW 3-phase</b> 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

