

DropBear

ON-GRID, OFF-GRID, HYBRID



The new DropBear includes:

- New Deye inverters (RedEarth certified)
- Built-in MPPTs
- Energy trading ready
- EV charger ready
- STC rebate eligible
- Auto Gen Start feature



DropBear 24kW 1 Phase or 3 Phase



DropBear 16kW 1 Phase

Future-proof your energy needs with RedEarth's premium all-in-one standalone power system, DropBear. **DropBear is perfect for larger on-grid and off-grid homes.**

Like all of RedEarth's products, DropBear is fully engineered, assembled, and tested to Australian standards at RedEarth's factory in Brisbane. Features include:

- ✓ **No external PV inverters required:**
Connect up to 36kW of PV panels to six built-in MPPTs.
- ✓ **Versatile Power Hub:**
The DropBear seamlessly integrates grid, generator, and load ports achieving a truly unique level of flexibility.
- ✓ **Dynamic AC-Coupled Solution:**
The DropBear 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 DropBear can start 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 DropBear keeps your power in your hands with native support for RedEarth's Private Power Plant (PPP).

Specifications		
Power output options	1 phase 16kW continuous (2 x 8kW inverters)	1 phase/3 phase 24kW continuous (3 x 8kW inverters)
Solar input	16kW Connect up to 24kW of PV panels to the four MPPTs (150-425Vdc max. 500Vdc)	24kW Connect up to 36kW of PV panels to the six MPPTs (150-425Vdc max. 500Vdc)
Dimensions	H204 x W156 x D68 cm	
Weight	16kW version 263kg + 42.5kg per battery	24kW version 295kg + 42.5kg per battery
Rating	IP40 indoor-rated. Install in a weather-protected area.	
Battery	16kW version From 6 to 14 x 4.1kWh Troppos (max. 57.4kWh) Voltage: 48Vdc (nom.) Min 6 required for full inverter power rating.	24kW version 9 to 14 x 4.1kWh Troppos (Max 57.4kWh) Voltage: 48Vdc (nom.) Min 9 required for full inverter power rating.
Electrical connections	<ul style="list-style-type: none"> • 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	Yes — On-grid only (PPP option)	
EV charger	Yes — RedEarth certified AC + DC options available	



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 Factory Acceptance Testing (FAT) 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.

DROPBEAR TECHNICAL SPECIFICATIONS

DropBear Model	16kW 1-phase	24kW 1-phase	24kW 3-phase
Battery capacity of DropBear system (Troppos)	6 to 14	9 to 14	9 to 14
Battery capacity of DropBear system (kWh nominal)	24.6 to 57.4	36.9 to 57.4	36.9 to 57.4
Inverter model	2 x 8K-SG05LP1-AU	3 x 8K-SG05LP1-AU	3 x 8K-SG05LP1-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 (Adc)	380A	570A	570A
Max. discharging current (Adc)	380A	570A	570A
PV string input data			
Max. DC input power (W)	24,000W	36,000W	36,000W
Maximum PV input voltage (V)	500V		
MPPT range (V)	150 to 425V		
Start-up voltage (V)	125V		
PV input current (A)	2 x (26A+26A)	3 x (26A+26A)	3 x (26A+26A)
Max. PV Isc (A)	2 x (39A+39A)	3 x (39A+39A)	3 x (39A+39A)
No. of MPPT trackers	4	6	6
No. of strings per MPPT tracker	2 x (2+2)	3 x (2+2)	3 x (2+2)
AC output data			
Rated AC output and UPS power (W)	16,000	24,000	24,000
Max. AC output power (W)	16,000	24,000	24,000
Peak power (off-grid)	2 times rated power for 10 secs		
Rated AC output current (A)	69.6A	104.4A	34.8A (3 phase)
Max. AC output current (A)	69.6A	104.4A	34.8A (3 phase)
Max. continuous AC passthrough (A)	100A	150A	50A (3 phase)
Power factor	0.8 leading to 0.8 lagging		
Grid connection type	Single phase L/N/E		Three phase L1/L2/L3/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 DropBear system (excl batteries) (kg)	263kg + 42.5kg p/battery	295kg + 42.5kg p/battery	295kg + 42.5kg p/battery
Size of DropBear system (mm)	1560W x 2040H x 680D		
Protection degree of DropBear system	IP40		
RedEarth Warranty	10 years (AU & NZ and South Pacific region)		