



## CLEAN, QUIET, RELIABLE POWER

HYBRID, SOLAR AND BATTERY POWER FOR MINING,  
CONSTRUCTION AND MAJOR PROJECTS



QUIET  
POWER



EMISSION  
REDUCTION



UP TO 100% FUEL  
REDUCTION



QUICK  
DEPLOYMENT



24/7  
OPERATION

[makinex.com.au/makinex-renewables](http://makinex.com.au/makinex-renewables)

# THE MAKINEX RENEWABLES INNOVATION CENTRE

The Makinex Renewables Innovation Centre is a facility dedicated to advancing renewable energy technologies, with a focus on Hybrid Power Systems (HPS). The Centre serves as a hub for research, development, and increased production capabilities, contributing to a more sustainable and environmentally friendly future in the construction and mining industry.



## OUR TEAM

The Makinex Renewables Team, headquartered in Australia and helmed by CEO Rory Kennard, epitomises a dynamic blend of expertise and passion dedicated to advancing sustainable energy solutions. Comprising a talented cadre of Electrical and Mechanical Engineers, Production Managers, and Developers, the team's collective prowess extends across the entire spectrum of renewable energy technologies.



# OUR INNOVATION RANGE

POWER SOLUTIONS CLEAN, QUIET, RELIABLE

## PORTABLE POWER BOXES / PPB

The PPB is a quiet and clean power solution. Experience noise-free, fuel-free, emissions-free power, extremely suitable for indoor and confined spaces. 5kW/5kWh, 5kW/10kWh, 8kW/15kWh options available



## BATTERY ENERGY STORAGE SYSTEMS / BESS

For short term power supply or integration with existing generator and/or solar systems as part of a hybrid solution. 10kW/15kWh, 50kW/100kWh, 100kW/140kWh options available



## HYBRID POWER SYSTEMS / HPS

Fully integrated redeployable unit for clean, quiet reliable continuous power anywhere. 15kW/20kWh, 20kW/30kWh, 45kW/60kWh and 100kW/140kWh options available



## REDEPLOYABLE SOLAR ARRAY - CONTAINER TOP, GROUND AND SHELTER

Solar array for mounting on 10ft, 20ft and 40ft container, on ground or raised to provide shaded areas. Pairs with any HPS or BESS unit.



# PORTABLE POWER BOX (PPB)



NO FUEL



NO EMISSIONS



NO NOISE



PPB 5-5



PPB 5-10



PPB 8-15

SPECS	PPB 5-5	PPB 5-10	PPB 8-15
Power Output	5kW	5kW	8kW
Battery size	5kWh	10kWh	15kWh
Outlets	2 x 15 Amp 230V	2 x 15Amp 230V (20 Amp optional)	3 x 15Amp 230V (20 Amp optional)
Inlet	10Amp - 230V, and 4kW Solar	10Amp - 230V, and 4kW Solar	10Amp - 230V, and 4kW Solar
Charging Time	80% - 2.5 hr, 100% - 3 hrs	80% - 5 hrs, 100% - 6hrs	80% - 6hrs, 100% - 7.5hrs
Peak Surge	10 kW 5 seconds	10 kW 5 seconds	16kW 5 seconds
Dimensions	460mm L x 660mm W x 690mm H	600mm L x 660mm W x 690mm H	972mm L x 516mm W x 931mm H
Weight	90kg	140kg	205kg

# BATTERY ENERGY STORAGE SYSTEMS (BESS)



NO FUEL



NO EMISSIONS



NO NOISE



**BESS 10-15**



**BESS 50-100**



**BESS 100-140**

MODEL		BESS10	BESS50	BESS100
Rated Power Output		10kW / 10 kVa	50kW / 50 kVa	100kW / 100 kVa
Rated Voltage		1 Phase 230 VAC 50 Hz	3 Phase 230/400 VAC 50 Hz	3 Phase 230/400 VAC 50 Hz
Battery Capacity		15kWh (DoD 70%)	100kWh (DoD 70%)	140kWh (DoD 70%)
Dimensions (L x W x H)		1200 x 600x 1295mm	1754 x 1226 x 2091 mm	2260 x 1226 x 2091mm
Gross Mass		358kg	1752kg	2100kg
Additional Input Capacity	AC Inverter Coupled	-	21 kWp	42 kWp
	AC Load Coupled	16 kWp	50kW	100 kW
Recommended Min. Generator Size		9.0 kVA (6.5 kW) Prime	60 kVA (48 kW) Prime	120 kVA (96 kW) Prime

# HYBRID POWER SYSTEM (HPS) PORTABLE POWER BOX (PPB)



## HPS SINGLE HPS 15/20



## HPS DOUBLE HPS 45

## HPS CONTAINER HPS 100



MODEL		HPS15	HPS20	HPS45	HPS100
Configuration		Single Skid	Single Skid	Double Skid	Containerised
Rated Power Output		15kW / 15 kVa	20kW / 25 kVa	45kW / 50 kVa	100kW / 100 kVa
Rated Voltage		1Phase 230 VAC 50 Hz	3 Phase 230/400 VAC 50 Hz	3 Phase 230/400 VAC 50 Hz	3 Phase 230/400 VAC 50 Hz
Battery		20 kWh (DoD 70%)	30 kWh (DoD 70%)	60 kWh (DoD 70%)	160 kWh (Expandable to 240kWh)
Dimensions (L x W x H)	Deployed	4376 x 5129x 2216 mm	4376 x 5129x 2216 mm	4376 x 5129x 2216 mm	6058x2438x2591
	Stowed	2366 x 1530 x 2544 mm	2366 x 1530 x 2544 mm	2366 x 1530 x 2544 mm	6058x2438x2591
Gross Mass	Dry	2076kg	2470kg	1989Kg (Skid 1), 2420kg (Skid 2)	5192kg
	Wet (Full Tank)	2456kg	2700kg	1989Kg (Skid 1), 2800Kg (Skid 2)	6030kg
Generator Fuel Tank		27 kVA (21.6 kW) Prime 400L	30 kVA (24 kW) Prime 400L	60 kVA (48 kW) Prime 500L	150 kVA (120 kW) Prime 900L
Integrated Solar		4 kWp	4 kWp	8 kWp	5 kWp
Additional Input Capacity	AC Inverter Coupled	7kWp	21 kWp	21kWp	42kWp
	AC Load Coupled	16kWp	30kWp	50kWp	100kWp

# REDEPLOYABLE SOLAR ARRAY CONTAINER, FIELD AND SHELTER



ACORDC  
COUPLED



FAST  
DEPLOYMENT



20FT OR  
40FT OPTIONS



## CONTAINER TOP SOLAR CTS5 OVERVIEW

Take advantage of your container roof space on-site. Container Solar modules drop straight onto a standard container. Output power is optional DC or AC coupled so it can be wired into anywhere on the AC bus with any Hybrid Power System or Battery Energy Storage System.

MODEL	CTS3-DC	CTS3-AC	CTS5-DC	CTS5-AC
Mounting Type	Container Corner Twist Lock			
Max Solar PV Power	3 kWp	3 kWp	5 kWp	5 kWp
Number of Strings	2 x 1.5 kW	2 x 1.5 kW	2 x 2.5 kW	2 x 2.5 kW
Rated Voltage Output	155 VDC per String	1P 230 VAC 50 Hz	259 VDC per String	1P 230 VAC 50 Hz
Rated AC Output Power	-	3 kW / 3 kVA	-	5 kW / 5 kVA
Rated AC Output Current	-	13A	-	20A
Dimensions - Packed (LxWxH)	3790 x 2410 x 360	3790 x 2410 x 360	6060 x 2410 x 360	6061 x 2410 x 360
Dimensions - Deployed (LxWxH)	3790 x 4370 x 360	3790 x 4370 x 360	6060 x 4370 x 360	6061 x 4370 x 360

## MODULAR 5kW PV SYSTEM FOR CONTAINER, GROUND OR SHELTER CONFIGURATIONS



FIELD SOLAR



SHELTER SOLAR

# SITE SHED SOLAR

## SPV3 and SPV5

The SPV3 and SPV5 are complete plug-and-play solar arrays purpose-built for site sheds. Each unit comes pre-mounted, highway-transport ready, with an integrated high-frequency inverter plug for instant connection on site.

Both models are designed for fast installation, clean operation, and compliance, eliminating the need for conduits or configuration. They retrofit easily to new or existing sheds and integrate seamlessly with the Makinex BESS10 for scalable off-grid power.



## SPECIFICATIONS

MODEL	SPV3	SPV5
Mounting Type	Site Shed Roof installation kit	
Max Solar PV Power	2.6 kWp	5 kWp
Number of Strings	1 x 2.6 kW	2 x 2.6 kW
Rated Voltage Output	1P 230 VAC 50 Hz	1P 230 VAC 50 Hz
Rated AC Output Power	2.6 kW / 2.6 kVA	5 kW / 5 kVA
Rated AC Output Current	11.3A	20A
Dimensions - Deployed (LxWxH)	6162 x 2168	12324 x 2168
Solar Array Weight	68kg	120kg
Inverter Weight	7.7kg	7.7kg
Package Weight	80.5kg	133kg