

All-in-one Power System

Standalone Electricity Generation

Australian Flow Batteries (AFB) presents Flexible, Scalable Solar Power: 10ft All-in-One Plug & Play container with 46.4 KWP Capacity for 24/7 Energy Availability.

Key Features



Solar Energy

A solar array with a generating capacity of 46.4 KWP.



Energy Storage

An onboard battery system for storage and continuous power.



Fast Deployment

3 to 4 people can have the system up and running in 3 to 4 hours.



Flexible Operation

Modular product enabling full distributed energy plant deployments.

Australian Flow Batteries is a major distributor of energy generation and storage solutions providing a standalone solar electricity generation container and onboard battery system that enables electricity to be generated anywhere.



The system offers a large-scale modular deployment with a 46.4 KWP solar generating capacity, designed for easy integration and scalability. Key features include:

- 46.4 KWP Solar Generating Capacity.
- TRUE Plug & Play enabled by CEE fast connection plugs
- Flexible Operation: Can function independently or alongside an electrical grid.
- 24/7 Electricity Availability: Secure power even on days with minimal sunlight.
- Scalability: Can be used as a single unit or integrated into a larger system with multiple container units.

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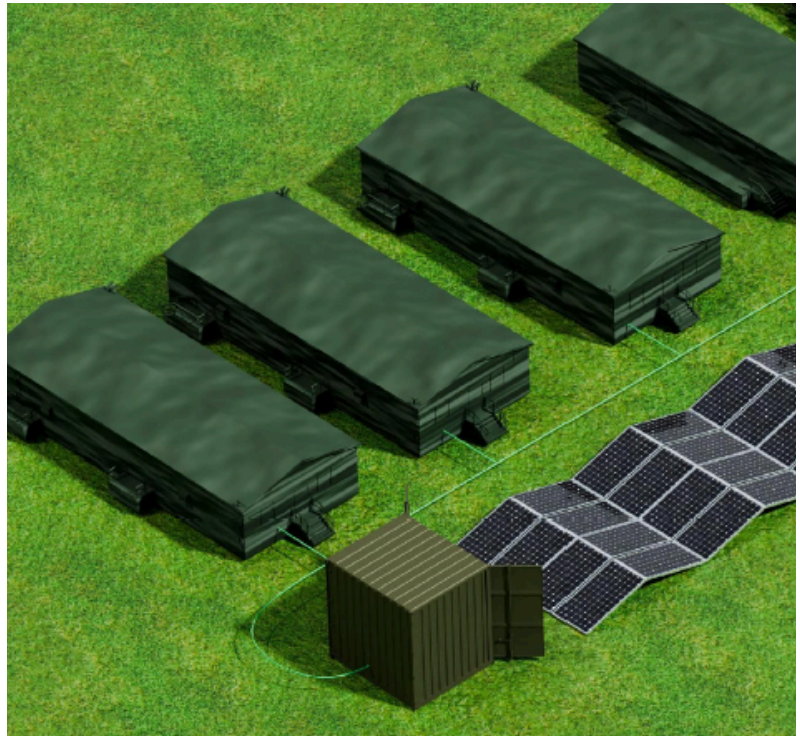
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The container comes with an RJ45/LAN-based onboard monitoring and control systems, which can be accessed remotely using communications infrastructure such as cellular or satellite and allows integration with SCADA systems.

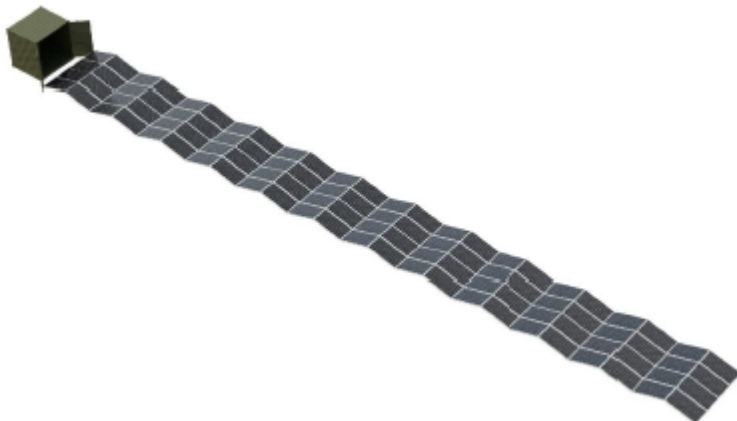
The container is available with a number of pre-installed options enabling it to operate in different environments and scenarios:

- Insulation and climate control system for hot climates.
- Insulation and climate control for cold climates.
- Alternative battery chemistry options for extreme climate conditions.
- Assisted pull out and pull in winch system.
- Additional anchoring solutions for high wind load areas.
- SMART grid trade controllers linked with utilities and/or Virtual Power Plant operators.
- GPS asset tracking and kill code option.



Fast deployment, protection and redeployment:

- Place it on the ground, place the rail feet, install the rails and pull out the solar array.
- 3-4 people can have the system up and running in 3-4 hours.
- The array can be pulled in and the doors closed in under 30 minutes for protection in case of extreme weather events.



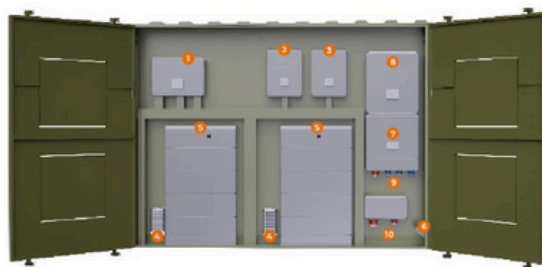
ELECTRICITY GENERATION EXAMPLE (ANNUAL)	
Australia, Perth	88366 kWh
Canada, Yellowknife	51980 kWh
Denmark, Esbjerg	48484 kWh
Malaysia, Sarawak	67758 kWh
Lebanon, Beirut	72312 kWh
New Zealand, Wellington	66424 kWh
Norway, Kristiansand	49036 kWh
Papua New Guinea, Port Moresby	77464 kWh
Philippines, Mindoro	63572 kWh
South Africa, Capetown	77188 kWh
Sweden, Skurup	48254 kWh
Ukraine, Kherson	63296 kWh
USA, Texas	67666 kWh

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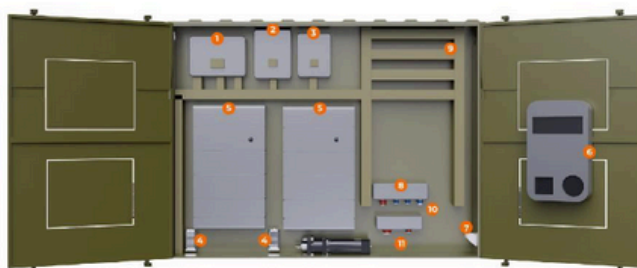
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Container Component Explainer



- | | |
|---|--|
| 1 Hybrid Inverter | 6 Cable Outlet Port |
| 2 Grid Control Box | 7 Circuit Breakers and Ground Fault |
| 3 Diesel Generator Fuel Save Control Box (optional) | 8 Communication and optional controls |
| 4 Heaters | 9 Outlets (CEE Quick connectors):
1x16A 3 Phase, 3x10A Single Phase |
| 5 Battery Banks | 10 Inlets (CEE Quick connector)
1x63A 3 Phase (grid connection)
1x32A 3 Phase (generator connection) |



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| 6 Aircondition | |

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MODEL	PV10304610	
RATED POWER	PV System nominal power	46,4kWp (80x580Wp)
	AC Output	30kW maximum daytime, 10kW maximum from battery
INVERTER SYSTEM	Hybrid Inverter Topology	Transformerless, On-grid/off-grid
BATTERY SYSTEM	Battery size options	15/35/70 kWh
	Battery charge/discharge power	10kW (max 20 kW)
DC INPUT (Inverter)	Nominal DC voltage	600 Vdc
	MPPT voltage range (Vmp)	200-1000 Vdc
	Full load voltage range	400 - 900 Vdc
	Maximum DC voltage (Voc)	1,100 Vdc
	Minimum / Start-up voltage	200 Vdc
	Number of MPPT	3
	Maximum DC current per MPPT	40A
AC OUTPUT (Inverter)	Voltage	220/380V,230V/400V340-440V
	Frequency	50 / 60 ± 5 Hz.
	Phase	Three phase WYE
	Connections	3W+N+PE 25mm2 – Optional 125A CEE Quick Connect
	Maximum output current	41.6A
	Power factor	0.8 leading – 0.8 lagging
	Total harmonic distortion	THDi < 3%
	Power consumption	1400 W
PROTECTION	DC Reverse polarity protection	Yes
	DC Switch	Yes
	DC Surge protection	Type II
	Insulation resistance monitoring	Yes
	AC Surge protection	Type II
	AC short circuit protection	Yes
	Ground fault monitoring	Yes
	Grid monitoring	Yes
	Anti island protection	Yes
	Residual current monitoring unit	Yes
	String monitoring	Optional
AFCI protection	Optional	
EFFICIENCY	Peak efficiency	98,75%
	MPPT efficiency	99.9 %
INDICATOR	LED	Operation Status
COMMUNICATION	Communication port	RS-485/RJ45 (Internet) + USB (Local)
INTERFACE	Protocol	MODBUS
ENVIRONMENT	Temperature	0 to 60°C (Power draining above 50°C)
	Relative humidity	0 - 90 % (non - condensing)
	Maximum operating altitude	2,000 m
STANDARDS	Electrical	CE, VDE0126, EN50549, IEC10/C11, UTE C 15-712, IEC62116,IEC61727, IEC 60068, IEC 61683, CEI0-21, CEI0-16, N4105,TDR Erzeuger, G98/G99, G100, AS/NZS 3100, AS4777, UNE217001, UNE206007, PO12.2, KSC8565, IEC 61215, IEC 61730, IEC 62941
	Container type	10'HQ Shipping container
	Container dimension (W x L x H) in cm	244x299x292
	System weight in kgs	Approx. 9.900 kgs
	Deployed system footprint (W x L) in meters	5x6.6 meters