



ES250 & ES450

**Battery Energy Storage System (BESS)
for clean and sustainable energy**

TECHNICAL SPECIFICATIONS



Infinity Cube ES250 & ES450 Battery Energy Storage System (BESS)



What is the Infinity Cube?

The Infinity Cube is a rechargeable Battery Energy Storage System (BESS), designed to store and seamlessly distribute instant power to multiple commercial and industrial electrical loads. The Infinity BESS delivers the power to work anywhere, providing access to environments where there are challenges with grid availability and stability.

Maximise your renewable potential and experience the value of uninterrupted power!

What can it power?

The Infinity Cube is best suited to equipment with intermittent or high current load characteristics such as tower cranes, passenger hoists, batching machines, and welders. Other common applications include remote area communities, construction site base loads, electrified plant such as cranes and earthmoving equipment plus grid stabilisation applications.

How does it work?

There are 2 main ways of using the Infinity Cube in different applications.

1. Hybrid System

In a hybrid power system, the Infinity Cube will perform load sharing with the synchronised connection of a diesel generator, supplying extra power in critical moments. On low load, the diesel generator will automatically divert additional power to recharge the BESS.

2. Island System

When connected to a power grid or renewables with small charging current, the Infinity Cube can achieve zero emission.

Why choose the Infinity Cube?



Cost Saving

Reduces 80% of fuel costs



Eco-friendly

100% electricity, no diesel needed



Quiet

Suitable for residential and noise sensitive areas



Fast Charging

High power input of up to 250 kW



Zero Downtime

Constant uptime via ready to deliver stored energy



Plug-and-play system

Industry standard connection points



Hybrid Mode

Synchronisable with other Infinity Cubes, the Grid, and Diesel Generators for higher output



Built-in fire-safety system

Aerosol fire suppression system with heat, smoke, and gas detection

Diverse Applications



Passenger hoist



Tower cranes



Batching plants



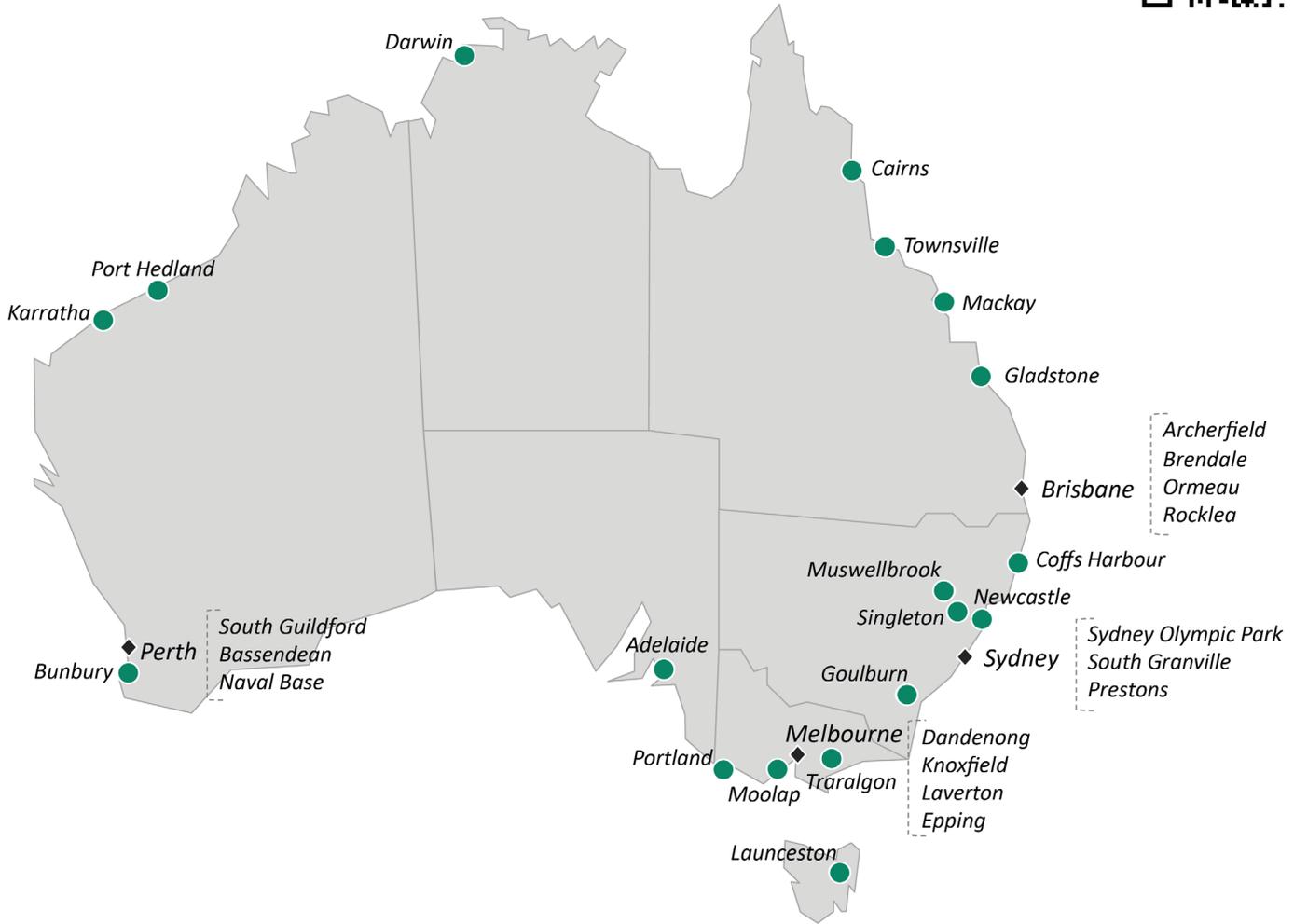
Welding



Specifications

Model	ES250 (Infinity Cube M)	ES450 (Infinity Cube L)
Nominal Rated Power	225 kW	450 kW
Nominal Energy Storage Capacity	150 kWh	300 kWh
Max. Current (A)	300 A	650 A
Ingress Protection	IP54	
Operating temperature	-20 °C ~ 50 °C	
Frequency	50 Hz	
Rated Voltage (AC)	380 V ~ 440 V	
Battery System Voltage (DC)	600 V ~ 876 V	
Battery Chemistry	Lithium Iron Phosphate (LFP) LiFePO ₄	
Fire Extinguisher System	Aerosol	
Communication mode	Ethernet, 5G wireless, RS485	
Input modes	Power Grid, Solar Energy, Generators	
Weight	5100 kg	7500 kg
Dimensions (L x W x H)	1.75 x 2.3 x 2.4m (6 ft container)	2.5 x 2.3 x 2.4m (8 ft container)
	Low Maintenance	
	Compliant to Australian Standards	
	Overvoltage & Undervoltage Protection	
Expected Lifetime	> 10 years	
Certifications	UN, UL, IEC, IEE, CE	
	Charging at off-peak reduces charging cost	
	Instant full capacity power	
	Wired into distribution board onsite	
	Easily transportable	

TUTT BRYANT POWER PRODUCTS & SERVICES LOCATIONS



NSW

SYDNEY

6-8 Ferngrove Place
 South Granville 2142
 02 9780 7200

QLD

BRISBANE

539 Boundary Road
 Archerfield 4108
 07 3373 6400

SA

ADELAIDE

908 Main North Road
 Mawson Lakes 5095
 08 8162 0900

WA

PERTH

50 Great Eastern Highway
 South Guildford 6055
 08 9478 0600

BUNBURY

6-10 Hawkins Street
 East Bunbury 6230
 08 9796 8700

VIC

DANDENONG

80-86 Frankston-Dandenong Road
 Dandenong 3175
 03 9554 0300

EPPING

1/189 O'Herns Road
 Epping 3076
 03 9554 0380

1300 658 888

tuttbryantpower.com.au | powergen@tuttbryant.com.au

