

SPECIFICATIONS

Fuelfix & Tanks2Go Containerised Energy Storage Systems (BESS)



Reliable. Efficient. Built for Grid-Tied, Off-Grid & Hybrid Power.

Fuelfix’s containerised Battery Energy Storage Systems (BESS) are purpose-designed for on-grid, off-grid and hybrid power applications, delivering reliable, low-noise energy while significantly reducing diesel generator runtime, fuel consumption, and operating costs.

By integrating high-performance lithium iron phosphate (LFP) batteries with a multifunctional bidirectional Power Conversion System (PCS), Fuelfix BESS intelligently manages energy from diesel generators, solar PV, grid connections, and site loads.

Each system can be pre-configured within defined power and battery capacity ranges, allowing the solution to be right-sized to site-specific energy and load requirements — reducing unnecessary infrastructure, simplifying installation, and lowering ongoing operating costs — while ensuring stable, efficient power in harsh and remote environments.

PARAMETER	ESU375-720 (10FT)	ESU625-1200 (20FT)	ESU1250-2400 (40FT)
AC On-Grid			
Power Range	250 - 375 kW	500 - 625 kW	750 - 1250 kW
Rated Voltage	3W+N+PE, 400V	3W+N+PE, 400V	3W+N+PE, 400V
Voltage Range	-15% ~ +10%		
Frequency	50/60 Hz		
Frequency Range	± 2 Hz		
Current Harmonics	≤ 3%		
DC Component	< 0.5% in		
Power Factor Range	-0.9 ~ + 0.9		
AC Off-Grid			
Rated Power	375 kW	625 kW	1250 kW
Max Power	413 kW	687 kW	1375 kW
Rated Voltage	3W+N+PE, 400V		
Voltage Harmonics	3% (linear load)		

Frequency	50/60 Hz		
Overload Capability	<110%: continuous 110-120%: > 10min 120%: 1 min stop		
Battery			
Cell Type	LFP		
Energy per Cabinet	241 kWh		
Number of Cabinets	3	5	10
Battery Capacity Range	480 - 720 kWh	960 - 1200 kWh	1440 - 2400 kWh
Rated Duration	2 h		
Cycle Life	≥ 6000 cycles (0.5P, 25±2°C @100%DOD @80% EOL)		
Max Efficiency	93% (0.5P)		
Physical			
Dimensions (WxDxH)	2991 x 2438 x 2591	6058 x 2438 x 2591	12192 x 2438 x 2896
Weight	12,100 kg	19,000 kg	38,000 kg
Isolation	Transformer (built-in)		
Grid/Off-Grid Switch	Static Switch	Static Switch	External Switch Cabinet
Protection Class	IP54		
Operating Temp	-20 ~ 55°C (derate > 45°C)		
Relative Humidity	0-95%, non-condensing		
Cooling	Battery: AC; PCS: Air		
Max Altitude	≤4000m (derate >2000m)		
Display	Touchscreen		
Communication	RS485 / LAN		
Protocol	Modbus RTU / Modbus TCP		

Why Fuelfix Containerised Energy Storage Systems

- ✓ Optimised for diesel-hybrid and grid-tied / off-grid applications
- ✓ Reduces generator runtime, fuel burn, and maintenance
- ✓ Improves power quality, stability, and site reliability
- ✓ Low-noise, low-emissions operation
- ✓ Containerised, plug-and-play deployment
- ✓ Designed with Australian operating conditions in mind

Key Features

- **Safety & Reliability**
 - ✓ High-quality LFP battery cells for enhanced safety and long cycle life
 - ✓ Intelligent thermal management for stable operation and extended system life
 - ✓ IP54-rated containerised design suitable for harsh and remote environments
 - ✓ String-based PCS and battery architecture to eliminate circulating currents and improve reliability
 - ✓ Multi-layer Battery Management System (BMS) protection across DC and AC circuits
 - ✓ Thermal isolation and integrated fire-safety measures at battery module level
- **Efficiency & Flexibility**
 - ✓ Modular PCS and battery design for simplified installation, servicing, and future expansion
 - ✓ Seamless integration with diesel generators, solar PV, and grid connections
 - ✓ Supports off-grid, grid-tied, and hybrid operation, including uninterrupted power supply
 - ✓ Fixed or mobile deployment options for permanent or temporary sites
 - ✓ Remote monitoring, fault diagnostics, and performance analytics
- **Cost Optimisation**
 - ✓ Generator peak-shaving, valley-filling, and load-smoothing
 - ✓ Improved generator efficiency and reduced low-load operation
 - ✓ Compact, all-in-one containerised solution reduces installation and site costs
 - ✓ Long service life with low ongoing maintenance requirements
 - ✓ Maximised utilisation of renewable energy to reduce fuel and electricity costs
- **Typical Applications**
 - ✓ Remote and off-grid mine sites
 - ✓ Construction and infrastructure projects
 - ✓ Fuel storage and pumping applications
 - ✓ Temporary and hire power solutions
 - ✓ Hybrid solar-diesel microgrids
 - ✓ Industrial and utilities power support

Designed for Real-World Operations

Fuelfix containerised BESS units are engineered to operate in demanding environments where reliability, safety, and efficiency are critical. Whether deployed alongside existing generators or as part of a new hybrid power solution, Fuelfix delivers practical energy storage.

Fuelfix | Smarter Power for Off-Grid & Hybrid Energy

Talk to us about how containerised BESS can reduce fuel costs, stabilise power, and improve site performance.