



# Mark 1 Product Overview



M J K 1®





# System Overview



## MARK 1

A fully integrated battery energy storage solution designed to provide critical backup functionality and smooth switchover during outages, with intelligent charging and discharge managed automatically through Aotea's control platform.

- Seamless transition from grid to battery power (integrated Automatic Transfer Switch equivalent)
- Real-time monitoring through our mobile and web-based app
- Remote diagnostics & performance tracking for council-level fleet oversight
- Remote firmware updates and smart control logic
- Capability for future grid export, P2P trading, or fast reserve services (if desired)



	Trait	Aotea Mark 1 Smart Battery (15kWh)
01	Energy Output	5kVA Inverter
02	Energy Capacity (kWh)	15 kWh usable
03	Runtime (Autonomy)	12–16 hours typical use (load dependent)
04	Fuel Source	Grid + Stored Energy
05	Start-up Time	Instantaneous
06	Noise/Emissions	Silent / Zero emissions
07	Maintenance Requirements	Low; annual service + remote diagnostics
08	Capital Cost	NZ \$8000 plus install
09	Operational Cost (10 years)	None (Included)
10	Lifecycle (Years)	20 - 25 years (1 cycle per day. 10,000 cycles to 70% capacity)
11	Monitoring Capability	Real-time via app + dashboard
12	Scalability/Integration	Modular; supports expansion + solar
13	Indicative \$/kWh (lifecycle basis)	NZ \$0.12/kWh
14	Physical Footprint	~1.5 – 2.0m <sup>2</sup>
15	Remote Start Capability	Yes (via app/software)
16	Remote Start Cost (NZD)	Included
17	Automatic Transfer Switch (ATS)	Integrated



# Mark 1

## Specifications list

Mechanical Properties	01	Dimensions	792 x 465 x 262 mm
	02	Weight	120kg
	03	Housing Material	Stainless Steel (304)
	04	Terminals	Two sets of parallel M10
	05	IP Rating	IP30
Electrical Characteristics	01	Nominal Voltage	51.2V
	02	Rated Capacity (0.5C)	300A/h
	03	Energy	15kWh
	04	Self Discharge	< 3 % per month
Charging and Discharging	01	Max Continuous Charge Current	150A
	02	Maximum Charge Voltage	58.0V
	03	BMS Charge Voltage Current Cut Off	58.4V
	04	Max Continuous Discharge Current	150A
	05	BMS Discharge Voltage Current Cut Off	<40V
Environmental Specifications	01	Charging Temperature (ambient)	0 to 40°C
	02	Discharging Temperature (ambient)	-10 to 40°C
	03	Storage Temperature (ambient)	0 to 35°C
Configurations	01	Construction / Chemistry	16S 1P 3.2V LiFePO4
	02	Shopping Classification	UN38.3
	03	Safety	IEC 62619

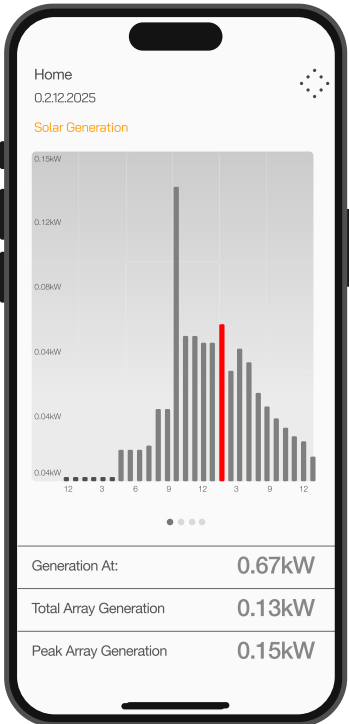
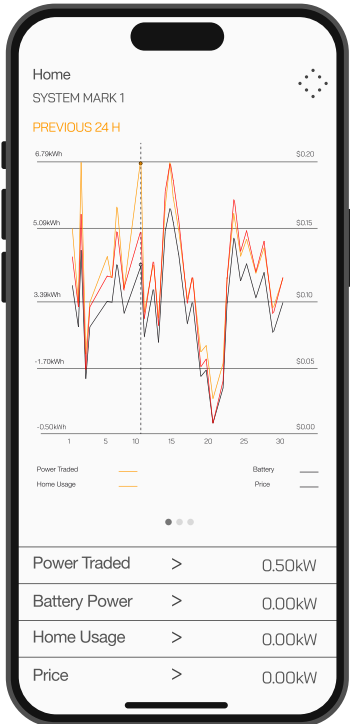
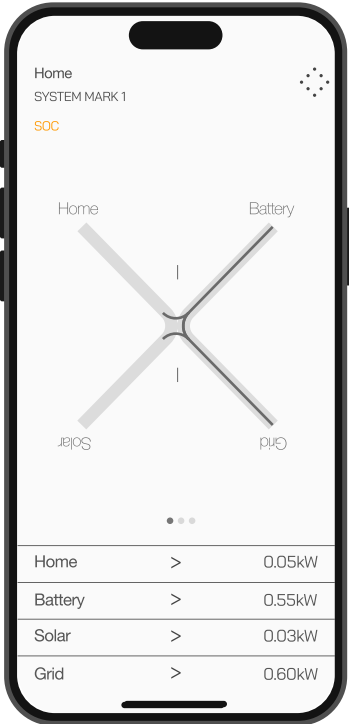
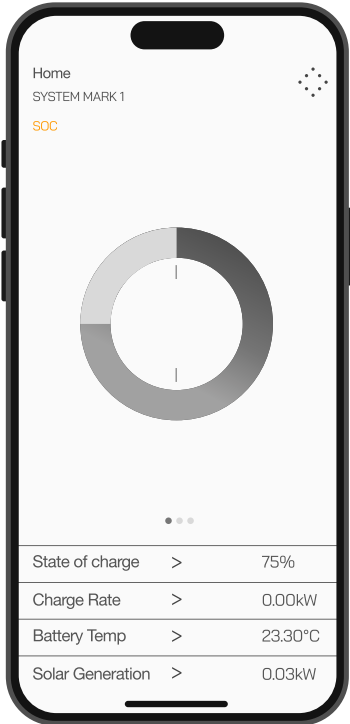
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# App Overview

The **Aotea Energy app** puts the power of smart energy management in your hands. It learns your home's rhythm, tracks real-time prices, and automatically finds the best moments to buy, use, or sell electricity; so you save more without thinking about it.

Paired with our locally designed and assembled battery, the app unlocks true energy sovereignty: lower bills, smarter trading, and full visibility over how your home is powered. Simple, intuitive, and built for New Zealand homes: this is what the future of energy feels like.



(App Version 0.02)



# The Aotea Energy System

## How it works

The Aotea Energy Smart Battery turns your home into a smart energy system. It automatically stores low-cost electricity and uses it when prices are high.

## Wholesale Electricity Pricing

Traditional plans lock households into one rate plan. Aotea instead gives homes access to wholesale pricing, where electricity costs vary throughout the day.

## Smart Control Software

The Aotea Energy Smart Battery turns your home into a smart energy system. It automatically stores low-cost electricity and uses it when prices are high.

## What This Means for Your Bill

Most households save around \$1,200 per year simply by avoiding peak prices and without changing how they live.

## Payback & Lifetime Impact

Most customers see payback within 6–8 years. After that, the savings give you freedom to use that money elsewhere.





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**For the most current information, please ensure you are referring to the latest version of this document.** Product details and pricing are subject to change without notice.

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