

PowerQub™-M



PowerQub™-M offers a battery as a service module which utilises re-lifed electric vehicle (EV) batteries to create cost effective and environmentally friendly grid-scale energy storage.

Offering a 120 kWh solution, the PowerQub™-M provides a sustainably sourced energy storage solution that is ideally suited for mobile diesel replacement and off-grid power systems.

It also provides a solution to the large number of partially used automotive EV battery units, extending their life and preventing the need for complex recycling processes.

System features



Temperature

The system is air cooled, making it suitable for operation between 0°C and 50°C.



Higher efficiency

Adopting a cluster management technology increases system efficiency.

Cell to Cell active balance ensures the consistency between cells.



Intelligent Ops & Maintenance

Smart management and real time monitoring ensures high, efficient commissioning of the system.



Safe

The system has a multi-layered safety management system that constantly monitors every battery's cell health and temperature.



Size

The system uses a compact modular design and standard 8'x5' trailer to deliver 120 kWh of storage.

Modules can be added or removed to customise the system to the required output.



Use Cases



Hydrocarbon Replacement

e.g. Diesel genset replacement.



Remote Site Power System

Battery module can be integrated with solar, wind, hydropower and diesel systems to provide a resilient micro-grid power system or be installed standalone for off-grid small power.

Benefits



Carbon footprint

Enlivens ESG performance and the pursuit of net zero emissions.



Waste reduction

Achieved through Re-use and Re-purpose of EV batteries.



Modular and temporary

Easy to deploy without the need for building permits.

Items	Parameters
Type of cell	Lithium Iron Phosphate (LFP)
Cell parameters	400 V / 176 Ah
Energy system	3 phase, 50 Hz
Max. on-grid charge power	30 kW
Max. off-grid discharge power	32 kW
Rated capacity	120 kWh
Rated voltage	400 V AC Supply
Voltage tolerance	+10% -6%
Cooling method	Passive Air Cooling
Environmental temperature	0°C to 50°C
Operating temperature	0°C to 60°C
Cell provider	Tesla
Noise level	Very quiet
IP Grade	IP54
Paint system	N/A
Enclosure Material	Galvanised Steel Bed and Aluminium Canopy
Fire systems	Battery Temperature Sensors + Fume Venting
External communication interface	4G or WiFi
Dimensions (L x W x H)	2440 x 1520 x 2100 mm
Weight	≈ 2,000 kg

