

Powervault 3

AN INTELLIGENT ENERGY STORAGE SYSTEM FOR THE SMART HOME



Designed to help users reduce their energy bills by storing free solar energy or low-cost electricity from the grid. **Powervault 3** is also designed to provide grid services and interact with other smart appliances in the home, which will provide additional value and benefits to the user.

Powervault 3 integrates seamlessly with the modern smart home.

All functionality is automated and can be controlled via the online portal.

For more information:
www.powervault.co.uk

Powervault 3

		4.1kWh	8.2kWh	12.3kWh	16.4kWh	20.5kWh
BATTERY	Battery type and chemistry	Lithium-polymer: Li-MNC				
	Usable capacity (AC)	4.1kWh	8.2kWh	12.3kWh	16.4kWh	20.5kWh
	Nominal capacity (AC)	4.1kWh	8.2kWh	12.3kWh	16.4kWh	20.5kWh
	Battery set configuration	2 x 44Ah	4 x 44Ah	6 x 44Ah	8 x 44Ah	10 x 44Ah
	Battery nominal voltage	48V				
	Depth of discharge	100%				
PERFORMANCE & WARRANTY	Usable Charger rating (kW)	3.3	3.3	3.3	3.3	3.3
	Usable Inverter rating (kW)	4.6	5.5	5.5	5.5	5.5
	Nominal Charger rating (kW)	5.5				
	Nominal Inverter rating (kW)	5.5				
	Max. continuous power input (AC)	3.3kW	3.3kW	3.3kW	3.3kW	3.3kW
	Max. continuous power output (AC)	4.6kW	5.5kW	5.5kW	5.5kW	5.5kW
	Peak power input (AC)	6.6kW; 1 sec.	6.6kW; 1 sec.	6.6kW; 1 sec.	6.6kW; 1 sec.	6.6kW; 1 sec.
	Peak power output (AC)	9.2kW; 1 sec.	11kW; 1 sec.	11kW; 1 sec.	11kW; 1 sec.	11kW; 1 sec.
	MWh under warranty	31.5	62.9	94.4	125.8	157.3
	Estimated equivalent cycles	>6,000				
	Warranty (years)	10				
	State of health at end of warranty	70%				
	Cooling	Internal convection				
	Maintenance	Nil				
COMMUNICATIONS & CONNECTIVITY	AC-coupled	Yes				
	DC input (charging direct from PV)	Yes; 2 DC-inputs @ 6.5kW				
	Internet connectivity	Yes; Wireless LAN, Ethernet, Powerline				
SMART FEATURES	Frequency monitoring for FFR	Yes, subscription required				
	Fleet aggregation-control via API	Yes, subscription required				
	Smart tariff controller via portal	Yes				
	smartSTOR system optimisation	Available from 06/2018				
	In-home powerline communication to enable smart appliance control	Available from 11/2018				
MECHANICAL	Enclosure	Floor or wall-mountable				
	Battery packs	2	4	6	8	10
	Dimensions (Hcm x Wcm x Dcm)	90x98x25	120x98x25	149x98x25	177x98x25	205x98x25
	Weight (kg)	129	179	229	279	329
INSTALLATION	Optimum location	Indoors and ground-level: utility room, kitchen, garage				
	Optimum operating temperature	0°C - 35°C				
	Optimum operating humidity	40% - 60% relative humidity				
	Location constraints	20cm around perimeter of unit to permit air flow				
	Wiring constraints	Current clamp; 25m				
	Additional parts not included	RCBO, associated wiring				
	Internet connectivity	Ethernet as standard; Wireless LAN and Powerline optional				
SAFETY	Anti-islanding	ER G.83/2 and ER G.59/3				
	Over-temperature protection	Hardware and software protection of inverter/charger unit and battery pack				
	Overload protection	Internal overload protection of inverter/charger and battery pack				
	Over-/under-voltage protection	Hardware and software protection				
ELECTRICITY NETWORK STANDARDS	CE Marking	Yes				
	IP Rating	IP41				
	Inverter compliance (UK)	G.83/2 and G.59/3				