

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

	4kWh	8kWh	12kWh	16kWh	
BATTERY	Battery type and chemistry				
	First-life: Li-polymer				
	Usable capacity (AC)	4.1kWh	8.2kWh	12.3kWh	16.4kWh
	Nominal capacity (AC)	4.1kWh	8.2kWh	12.3kWh	16.4kWh
	Battery set configuration	2 x 44Ah	4 x 44Ah	6 x 44Ah	8 x 44Ah
	Battery nominal voltage	48V			
Depth of discharge	100%				
PERFORMANCE & WARRANTY	Usable Charger rating (kW)	3.3	3.3	3.3	3.3
	Usable Inverter rating (kW)	4.6	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
	Max. continuous power output (AC)	4.6kW	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.
	Peak power output (AC)	9.2kW; 1 sec.	11kW; 1 sec.	11kW; 1 sec.	11kW; 1 sec.
	MWh under warranty	31.5	62.9	94.4	125.8
	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
	Dimensions (Hcm x Wcm x Dcm)	120x98x25	120x98x25	149x98x25	177x98x25
	Weight (kg)	129	179	229	279
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	Must be present for monitoring, functionality and warranty purposes			
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			