

PowerCore

C&I All-in-One Energy Storage System
50kW / 100kWh

VOLTA
ECO SYSTEMS

Your Energy Guardian,
Anytime, Anywhere. 

200%
PV Oversizing

Max. **20 A**
PV Input Current
Per String

Up to **6 pcs**
On/off Grid Parallel
Operation

< **65 dB**
Suitable for Diverse
Environments

280 Ah
Battery Cells

< **10 ms**
EPS Switching Time

100%
Unbalanced Loads

0.86 m²
Footprint



Superb

- Max. 20A PV input current per string, compatible with all PV modules.
- 4 MPPTs and 200% PV oversizing ensure maximum utilization of solar energy.
- 280Ah long-life cells with 8000 cycles.

Flexible

- Parallel connection of up to 6 PCS for on/off-grid expansion.
- < 10 ms EPS switching time for continuous power.
- Supports 100% unbalanced output, half-wave and surge loads.

User-Friendly

- High energy density, with a footprint of only 0.86m².
- No foundation required, simplifying setup.
- < 65dB, suitable for diverse environments.

Safe

- IP55 (Battery) / IP66 (Inverter) rating for dust and water resistance.
- Four-level active and passive fire protection ensures comprehensive safety.
- AFCI optional.

Applications

 Shopping Mall

 Factory

 Office Building

 Community

Contact Us

www.voltaeco.co.uk

help@voltaeco.co.uk

PowerCore

Technical Specifications

Model	IA-29.9kW/100kWh-EC10	IA-30kW/100kWh-EC10	IA-37.5kW/100kWh-EC10	IA-40kW/100kWh-EC10	IA-50kW/100kWh-EC10
PV Input					
Max. PV Input Power	59.8 kW	60 kW	75 kW	80 kW	96 kW
Max. Input Voltage	1000 V				
Rated Operating Voltage	600 V				
Start-up Voltage	180 V				
MPPT Voltage Range	150...850 V				
Max. Input Current	3×40 A		4×40 A		
Max. Short Circuit Current	3×60 A		4×60 A		
MPPT No. / Max. Input Strings No.	3/6		4/8		
Battery Parameters					
Cell Specification	280 Ah				
Pack Configuration	1P16S				
Rated Current	140 A				
Pack Number	4...7				
System Capacity	57.34...100.35 kWh				
AC Input / Output (Grid)					
Rated Output Power	29.9 kW	30 kW	37.5 kW	40 kW	50 kW
Max. Apparent Output Power	29.9 kVA	30 kVA	37.5 kVA	40 kVA	50 kVA
Rated Grid Voltage	3/N/PE, 220/380 V, 230/400 V				
Grid Voltage Range	304...460 V				
Rated Grid Frequency	50/60 Hz				
AC Grid Frequency Range	45...55/55...65 Hz				
Rated Grid Output Current	45.4/43.2 A	45.6/43.3 A	57.0/54.1 A	60.8/57.7 A	76.0/72.2 A
Max. Output Current	45.4/43.2 A	45.6/43.3 A	57.0/54.1 A	60.8/57.7 A	76.0/72.2 A
Max. AC Input Current	90.8/86.4 A	91.2/86.6 A	114/108.2 A	121.6/115.4 A	152/144.4 A
Power Factor	> 0.99 (0.8 leading...0.8 lagging)				
THDi	< 3%				
AC Output (Back-up)					
Rated Output Power	29.9 kW	30 kW	37.5 kW	40 kW	50 kW
Max. Apparent Output Power @ 2 sec	47.8 kVA	48 kVA	60 kVA	64 kVA	80 kVA
Back-up Switch Time	< 10 ms				
Rated Output Voltage	3/N/PE, 220/380 V, 230/400 V				
Rated Frequency	50/60 Hz				
Rated. Output Current	45.4/43.2 A	45.6/43.3 A	57.0/54.1 A	60.8/57.7 A	76.0/72.2 A
Max. Imbalance Power per Phase	33% rated power				
THDv (@ linear load)	< 2%				
AC Input (Generator)					
Max. Input Power	29.9 kW	30 kW	37.5 kW	40 kW	50 kW
Rated Input Current	45.4/43.2 A	45.6/43.3 A	57.0/54.1 A	60.8/57.7 A	76.0/72.2 A
Rated Input Voltage	3/N/PE, 220V/380 V, 230V/400 V				
Rated Input Frequency	50/60 Hz				
General Data					
Dimensions (W*D*H)	750*1150*2250 mm (without inverter); 1070*1150*2250 mm (with inverter)				
Weight	~113 t (without inverter); ~12 t (with inverter)				
Protection Level	Battery Cabinet IP55, Inverter IP66				
Operating Temperature Range	-20°C...55°C				
Cooling Method	Air-cooling				
Fire Suppression System	Smoke detector, Heat detector, Alarm sounder, Aersol, Sprinkler Optional: Flammable gas detector +exhaust, Vent plate				
Altitude	2000 m				
Standard ¹	IEC 62109-1/-2, IEC 61000-6-2/-4, EN 50549-1/EN 50549-10, G99, VDE-AR-N 4105 / VDE V 0124, CEI 0-21, C10/11, NRS 097-2-1, UN 38.3, IEC 62477, IEC 63056				

Order Options	IA-29.9kW/100kWh-EC10	IA-30kW/100kWh-EC10	IA-37.5kW/100kWh-EC10	IA-40kW/100kWh-EC10	IA-50kW/100kWh-EC10
Consisting of	THA-29.9kW DC-100kWh-EC00	THA-30kW DC-100kWh-EC00	THA-37.5kW DC-100kWh-EC00	THA-40kW DC-100kWh-EC00	THA-50kW DC-100kWh-EC00

¹ For all standards refer to the certificates category on the WHES website.

* All information reflects the current state of technology at the time of printing and is subject to change. Despite careful editing, no liability is assumed.