

PC-mini

C&I Energy Storage System
29.9-50kW / 57-100kWh



Max. **2** Times
Photovoltaic
Oversizing

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

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

< **65** dB
Low-Noise Operation

280 Ah
Battery Cells

< **10** ms
EPS Switching

100 %
Unbalanced Output

0.86 m²
Footprint



Superb

- 4 MPPTs for solar optimization.
- <10 ms EPS switching.
- Supports 100% unbalanced output, half-wave and surge loads.
- 280Ah long-life cells with 8000 cycles

Flexible

- 200% PV Photovoltaic oversizing.
- Max. 20A PV input current per string.
- Parallel operation of up to 6 PCS for both on-grid and off-grid scenarios.

Safe & Reliable

- IP55 (Battery cabinet) / IP66 (Inverter) .
- Four-level¹ active and passive fire protection.
- Optional AFCI.

User-Friendly

- High energy density (0.86m² footprint).
- No foundation required.
- <65 dB low-noise operation.

Applications

Shopping Mall

Farm

Factory

Community

Contact Us

www.whes.com

info@whes.com



¹Four-level fire protection includes smoke/temperature detection, aerosol, water suppression, and pressure relief.

PC-mini

Technical Specifications

Model	IA-29.9kW/100kWh-EC10	IA-30kW/100kWh-EC10	IA-40kW/100kWh-EC10	IA-50kW/100kWh-EC10
PV Input				
Max. PV Input Power	59.8 kWp	60 kWp	80 kWp	96 kWp
Max. Input Voltage			1000 V	
Rated Input Voltage			600 V	
Start-up Voltage			180 V	
MPPT Voltage Range			150..850 V	
Max. Input Current	120 A (40 A * 3)			160 A (40 A * 4)
Max. Input Short Circuit Current	180 A (60 A * 3)			240 A (60 A * 4)
No. of MPPT	3			4
No. of PV Strings per MPPT	2			2
Battery				
Battery Type			LFP, 3.2 V / 280 Ah	
Battery Pack Configuration			1P*16S, 14.33 kWh	
Battery Capacity			57.34..100.35 kWh	
Voltage Range			150..800 V	
AC Input / Output (Grid)				
Rated Input/Output Power	29.9 kW / 29.9 kW	30 kW / 30 kW	40 kW / 40 kW	50 kW / 50 kW
Max. Apparent Input/Output Power	29.9 kVA / 29.9 kVA	30 kVA / 30 kVA	40 kVA / 40 kVA	50 kVA / 50 kVA
Rated Input / Output Current	90.8/86.4 A, 45.4/43.2 A	91.2/86.6 A, 45.6/43.3 A	121.6/115.4 A, 60.8/57.7 A	152/144.4 A, 76.0/72.2 A
Max. Input / Output Current	90.8/86.4 A, 45.4/43.2 A	91.2/86.6 A, 45.6/43.3 A	121.6/115.4 A, 60.8/57.7 A	152/144.4 A, 76.0/72.2 A
Rated Output Voltage			3/N/PE, 220 V / 380 V, 230 V / 400 V	
Voltage Range			304..460 V	
Rated Frequency			50/60 Hz	
Frequency Range			45..55 / 55..65 Hz	
Power Factor			1 (-0.8..+0.8 adjustable)	
Total Harmonic Distortion (THDi)			< 3%	
EPS Output				
Rated Output Power ¹	29.9 kW	30 kW	40 kW	50 kW
Peak Apparent Output Power			1.60 times of rated power, 2s	
Rated Output Voltage			3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated Output Current	45.4/43.2 A	45.6/43.3 A	60.8/57.7 A	76.0/72.2 A
Rated Frequency			50/60 Hz	
Back-up Switch Time			< 10 ms	
Total Harmonic Distortion (THDi)			< 2%	
Protection				
Over/Under Voltage Protection, DC Isolation Protection, DC Injection Monitoring, Residual Current Detection, Anti-islanding Protection, Over Load Protection, Battery Input Reverse Polarity Protection, PV Reverse Polarity Protection, Over Heat Protection, Surge Protection DC Type II / AC Type II, AFCI (optional)				
General Data				
Topology			Non-isolated	
Dimensions (W*D*H)			750*1150*2250 mm (without inverter) 1070*1150*2250 mm (with inverter)	
Weight			-1.13 t (without inverter) -1.2 t (with inverter)	
Operating Temperature Range			-20°C..+55°C	
Altitude			≤ 2000 m	
Cooling			Smart Air Cooling	
Noise			< 65 dB	
Ingress Protection			IP 55 (Battery) / IP 66 (Inverter)	
Corrosion			C5	
Display			LED / APP	
Firefighting			Smoke Detector, Heat Detector, Alarm Sounder, Aerosol, Sprinkler Optional: Flammable Gas Detector, Vent Plate	
Communication			RS485 / CAN / Ethernet	
Installation			Floor-standing	
Standard ²	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			

¹ Depends on the input power of the photovoltaic and batteries.

² For all standards refer to the certificates category on the WHES website.

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

* 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.