

# Engley Energy 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** m<sup>2</sup>  
Footprint



## Features

### Superb

- 4 MPPTs for solar optimization.
- <10ms 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)/ IP66(Inverter).
- Four-level active and passive fire protection.
- Optional AFCI.

### User-Friendly

- High energy density (0.86m<sup>2</sup> footprint).
- No foundation required.
- <65 dB low-noise operation.

### Applications

 Factory    Farm    Shopping Mall    Community



www.cness.engley.com  
mikewei@yizheng.engley.net



Contact Me By Whatsapp

# Technical specification

Model	IA-29.9kw/100kwh-EC10	IA-30kw/100kwh-EC10	IA-40kw/100kwh-EC10	IA-50kw/100kwh-EC10
<b>PV Input</b>				
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	150-850V			
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	
<b>Battery</b>				
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	150-800V			
<b>AC Input / Output (Grid)</b>				
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	304-460V			
Rated Frequency	50/60 Hz			
Frequency Range	45-55/55..65HZ			
Power Factor	1(-0.8--+0.8 adjustable)			
Total Harmonic Distortion (THDi)	< 3%			
<b>EPS Output</b>				
Rated Output Power <sup>1</sup>	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%			
<b>Protection</b>				
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)				
<b>General Data</b>				
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	IP55(Battery)/IP 66(Inverter)			
Corrosion	C5			
Display	LED / APP			
Firefighting	Smoke Detector, Heat Detector, Alarm Sounder, Aersol, Sprinkler Optional: Flammable Gas Detector, Vent Plate			
Communication	RS485 / CAN / Ethernet			
Installation	Floor-standing			
Standard <sup>2</sup>	IEC 62109-1/-2 , IEC 61000-6-2/-4 , EN 50549-1/EN 50549-10 , G99 , VDE-AR-N 4105/VDE V 0124 , CEI0-21 , C10/11 NRS 097-2-1 , UN 38.3 , IEC 62477 , IEC63056			
<sup>1</sup> Depends on the input power of the photovoltaic and batteries. <sup>2</sup> For all standards refer to the certificates category on the our 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.

Add: No 31 Lianzhong Road,  
Yizheng Yangzhou city.  
Jiangsu Province.China

Mobile: 008618019494283  
Whatsapp: 008613301617356