

ALL-IN-1: HYBRID

IES 50-61-A



Flexible Applications

Supports multiple application scenarios, such as on-grid, on/off-grid, or off-grid



High Efficiency

4 MPPTs photovoltaic DC bus connections, and up to 96 kW usable PV input



Smart O&M

Supports remote monitoring, troubleshooting and data analysis



Safe & Reliable

Multi-level early warning and fire suppression design



Front Maintenance & Modular Design

Facilitates easy access for equipment maintenance



Scalability

Flexible expansion from 50kW - 300kW AC and 61.4kWh - 614.4kWh DC

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IES-50-61-A Hybrid

DC SIDE PARAMETERS

Cell Technology	LFP-3.2 V / 100 Ah
Battery Module	5.12 kWh, 51.2 V
Number of Packs	12
Battery System Rated Capacity	61.44 kWh
Battery System Rated Voltage	614.4 V
Battery System Rated Current	80 A
Battery System Voltage Range	480 V - 700.8 V
Battery System Charge/Discharge Rate	0.8P

AC SIDE PARAMETERS

Rated Output Power	50 kW
Rated Grid Voltage	3L/N/PE220/380, 230/400Vac
Maximum Output Current	76 A / 72.2 A
Allowable Grid Voltage Range	3/N/PE, 220 V / 380 V, 230 V / 400 V
Rated Grid Frequency	50Hz
Output THDi	<3%
Power Factor	>0.99 (0.8 Leading - 0.8 Lagging)
Overload Capacity	110% (Long Term), 120% (1 min)
On/off Grid Switching Time	<10ms
Maximum Efficiency	97.80%

PV SIDE PARAMETERS

PV Side Voltage Range	150 V - 850 V (Full Power Above 500 V)
DC Maximum Current	4*40 A
DC Maximum Power	100 kW
MPPT Quantity	4

OTHER PARAMETERS

Dimension (W×D×H)	735 x 1045 x 2235 mm 29 x 41 x 88 inch
Weight	1170 kg (2689.6 lbs)
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) (Derating Below -15°C or Above 45°C)
Relative Humidity	0 ~ 95% (No Condensation)
Maximum Working Altitude	3000m (> 2000m Derating)
Noise	≤75 dB
Ingress Protection Rating	IP55
Heat Dissipation Method	Forced Air Cooling System (HVAC)
Firefighting	Aerosol: Module-level (Optional) + Stack-level, Water Firefighting, Combustible Gas Detection and Exhaust
Communication	CAN / RS485 / TCP
Cycle Life	6 000 Cycles (25±2°C, 0.8P/0.8P,70% SOH, 90%DOD / 10 Years, whichever comes first)

STANDARD COMPLIANCE

Compliance	UN38.3 / UN3480 / IEC62619 / IEC61000 / IEC62477-1 / CQC (More available upon request)
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