



DEYE

## Deye 50KW 3 Phase Hybrid Inverter

### Description

Higher yields / Safe & Reliable / Smart / User-friendly  
The Deye 50kW is a three phase hybrid inverter which utilizes high voltage batteries, this ensures that system is safe and reliable. With compact design and high-power density, this series supports 1.3 DC/AC ratio, saving device investment. It supports three phase supports three phase unbalanced output, extending the application scenarios. Equipped with CAN port (x2) BMS and parallel, x1 RS485 port for BMS, x1 RS232 port .For remote control, and x1 DRM port, which makes the system smart and flexible. It is equipped with RS485 / CAN port for battery communication .

### Features:

- 100% unbalanced output, each phase;
- Max. output up to 50% rated power
- DC couple and AC couple to retrofit existing solar.system
- Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 100A
- High voltage battery, higher efficiency
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

### Battery Input Data

- Battery Type: Li-Ion
- Battery Voltage Range (V): 150-800V
- Max. Charging Current (A): 50A+50A
- Max. Discharging Current (A): 50A+50A
- Number of battery input: 2
- Charging Strategy for Lithium Battery:  
Self-adaption to BMS

### PV String Input Data

- Max. DC Input Power (W): 65000W.
- Max. DC Input Voltage (V): 1000V
- Start-up Voltage (V): 150V
- MPPT Range (V): 200-850V.
- Full Load DC Voltage Range (V):  
450-850
- Rated DC Input Voltage (V) 600
- PV Input Current (A):36A+36A+36A  
+36A
- Max. PV ISC (A): 55A+55A+55A+55A
- No. of MPPT Trackers: 4

- No. of Strings Per MPPT Tracker: 2

### AC Output Data

- Rated AC Output and UPS Power (W): 50000W
- Max AC Output Power (W): 55000W
- Peak Power(offgrid): 1.5 times of rated power, 10 S
- AC Output Rated Current(A): 75.8A
- Max.AC Current(A): 83.3A
- Max Continuous AC Pass through(A): 150A.
- Output Frequency and Voltage: 50/60Hz;3L/N/PE 220/380Vac 230/400Vac
- Grid Type: Three phase DC injection current
- (mA): <0.5% 1n Efficiency
- Max. Efficiency: 97.60%
- Euro Efficiency: 97.00%
- MPPT Efficiency: 99.90% Protection
- PV Arc Fault Detection: Integrated (Except European Type)
- PV Input Lightning Protection: Integrated
- Anti -islanding Protection: Integrated
- PV String Input Reverse Polarity Protection: Integrated
- Insulation Resistor Detection: Integrated
- Residual Current Monitoring Unit: Integrated
- Output over Current Protection: Integrated
- Output Shorted Protection: Integrated
- Output over Voltage Protection: Integrated
- Surge protection: DC Type II / AC Type II
- DC injection current (mA): <0.5% 1n

### Efficiency

- Max. Efficiency: 97.60%
- Euro Efficiency: 97.00%
- MPPT Efficiency: 99.90%

### Protection

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- PV Input Lightning Protection: Integrated
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- Output over Voltage Protection: Integrated
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### Certifications and Standards

- Grid Regulation: CEI 0 21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11 □ Safety EMC/Standard: IEC /EN 61000-6 1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
- EMC: EN61000-6 1, EN61000-6-3, FCC 15 class B General Data
- Operating Temperature Range ( C ): 40~60°C, >45°C Derating
- Cooling: Smart cooling
- Noise (dB): <45 dB
- Communication with BMS: RS485; CAN
- Weight (kg): 60
- Size (mm): 560.5W×837 H×319D
- Protection Degree: IP65
- Installation Style: Wall-mounted