



DEYE

## Deye 12KW 3 Phase Hybrid Inverter

- 100% unbalanced output, each phase Max. output up to 50% rated power.
- 48V low voltage battery, transformer isolation design.
- 6 time periods for battery charging/discharging.
- Max. charging/discharging current of 240A.
- Frequency droop control.
- DC couple and AC couple to retrofit existing solar system.
- Support storing energy from diesel generator Battery Input Data
  - Battery Type: Lead-acid or Li Ion
  - Battery Voltage Range (V): 40 60V
  - Max. Charging Current (A): 240A
  - Max. Discharging Current (A): 240A
  - Charging curve: 3 Stages/Equalization
- External Temperature Sensor: Optional

**Description Includes:** Wi-Fi Dongle + BMS Communication Cable Higher yields.

- Improve self-consumption ratio up to 80%, reducing your electricity bill.
- DC/AC ratio up to 1.3, completely suitable for double-side PV modular.
- Two MPPT design, Max. efficiency of 97.6%. User-friendly.
- LCD Touch screen and buttons, easy operation.
- Compatible with lithium-ion battery and lead acid battery.
- Web browser and mobile App monitoring supported.
- Reliable.
- PV lightning protection, Anti islanding protection, Leakage current protection etc.
- Support store energy from DG when needed, ensure the system working within 7\*24H.
- IP65 protection degree, adapt to indoor and outdoor using.
- Automatically switch from on grid to off-grid mode within 5ms.
- Zero exporting function, fast reaction within 200ms in zero export mode. Smart.
- Programmable charging and discharging schedule.
- Both wind turbines and solar panels can be connected as DC input power.
- Max. 16 units can be paralleled for higher system power.
- Retrofitting of existing solar system to energy storage system.

- Charging Strategy for Lithium Battery: Self adaption to BMS PV String Input Data
- Max. DC Input Power (W): 15600W.
- PV input Voltage (V): 550V (150V 800V).
- MPPT Range (V): 200-650V.
- Start-up Voltage (V): 160V.
- PV Input Current (A): 25A + 125.5A.
- No. of MPPT Trackers: 2
- No. of Strings Per MPPT Tracker: 2+1. AC Output Data
- Rated AC Output and UPS Power (W): 12000W
- Max AC Output Power (W): 13200W
- Peak Power(off grid): 2 times of rated power, 10 S.
- AC Output Rated Current(A): 18A
- Max.AC Current(A): 27A
- Max Continuous AC Pass through(A): 50A.
- Output Frequency and Voltage: 50/60Hz; 230/400Vac (Three Phase)
- Grid Type: Three Phase
- Current Harmonic Distortion: THD<3% (Linear load<1.5%). 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
- **Certifications and Standards**
- Grid Regulation: UL1741, IEEE1547, RULE21, VDE0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IE61727
- Safety Regulation: IEC62109-1, IEC62109-2
- EMC: EN61000-6 1, EN61000-6-3, FCC 15 class B General Data
- Operating Temperature Range ( C ): -25— 60 C , >45 C Derating
- Cooling: Fan
- Noise (dB): <30
- Communication with BMS: RS485; CAN
- Weight (kg): 37
- Size (mm): 422W X 685H X 281mm
- Protection Degree: IP65
- Installation Style: Wall-mounted