



General Information

For over 10 years SetSolar have been providing professionally installed Solar systems to the South African market and we are proud to bring to you a new pure Sinusoidal String inverter with two MPPT trackers and 1 input per MPPT tracker. The inverter can work with or without batteries in a grid connected setup. It can be used as an On-Grid, Off-Grid or Full Hybrid setup which makes this inverter unique in this market.

The Deye inverter comes with a WIFI logger which enables the user to easily and effectively manage their plant, change operating parameters and view performance data via the Solarman APP, which can also be accessed online.

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.
- 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.
- Six programmable charging and discharging schedules.
- 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.

Battery Input Data

- Battery Type: Lead-acid or Li-Ion
- Battery Voltage Range (V): 40-60V
- Max. Charging Current (A): 120A
- Max. Discharging Current (A): 120A
- Charging curve: 3 Stages/Equalization
- External Temperature Sensor: Optional
- Charging Strategy for Lithium Battery: Self-adaption to BMS

PV String Input Data

- Max. DC Input Power (W): 6500W.
- PV input Voltage (V): 370V (100V-500V).
- MPPT Range (V): 125-425V.
- Start-up Voltage (V): 150V.
- PV Input Current (A): 11A + 11A.
- No. of MPPT Trackers: 2
- No. of Strings Per MPPT Tracker: 1+1.



AC Output Data

- Rated AC Output and UPS Power (W): 5000W
- Max AC Output Power (W): 5500W
- Peak Power(off-grid): 2 times of rated power, 10 S.
- AC Output Rated Current(A): 20.8A.
- Max.AC Current(A): 24A.
- Max Continuous AC Pass-through(A): 35A.
- Output Frequency and Voltage: 50/60Hz; 120/240Vac (split phase), 208Vac (2/3 phase), 230Vac (single phase)
- Grid Type: THD<3% (Linear load<1.5%).
- Current Harmonic Distortion: THD<3% (Linear load<1.5%).



2 MPPT



Internal SPD



IP65
Ingress Protection



High Surge
Endurance



Support Multiple
Parallel



Max. Efficiency
97.6%



RS485/CAN



Zero Export



High Power
Factor



Six Time of
Use Setting

Efficiency

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

Protection

- 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

General Data

- Operating Temperature Range (C): -25—60 C, >45 C Derating
- Cooling: Fan
- Noise (dB): <30
- Communication with BMS: RS485; CAN
- Weight (kg): 20.5
- Size (mm): 580 X 330 X 208mm
- Protection Degree: IP65
- Installation Style: Wall-mounted
- Warranty: 5 years

Test Results

DEYE SUN-5K-SG01LP1-EU Hybrid Inverter has been approved and tested by the City of Cape Town and is authorised for use in its municipal district.

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



Renewable Energy Solutions

Deye 5KW Full Hybrid Inverter

Stock code: INVR141

Limited and Extended Component Warranty

SetSolar makes every effort to assure that its products meet high quality and durability standards. SetSolar gives you a 3-year warranty plus another 2 years warranty should the installation be done by SetSolar. SetSolar warrants the components to be free from defect in workmanship and material under normal application and installation. Service conditions apply for 3 years from date of sale to the original buyer. Should the component become ineffective due to a defect in workmanship or material during the 3 years period of this warranty, SetSolar will at its option repair, replace or refund the purchase price of the component only. This warranty shall apply whilst the original user/purchaser owns the product.

Limitation of the warranty

The following will not be covered by the warranty:

- Damage during transportation of equipment
- Damage caused by improper installation or commissioning;
- Damage caused by failure to comply with operation instructions, installation instructions or maintenance instructions;
- Damage caused by negligence and misuse of equipment;
- Damage caused by trying to modify, alter, or repair products;
- Damage caused by failure to comply with applicable safety standards or regulations;
- Damage caused by natural disaster or force majeure (e.g. flood, fire, overvoltage etc.)
- Insufficient ventilation of the device;
- Failure to follow the user manual;
- Damage caused by corrosive and maritime environment.

This warranty is the maximum extent of SetSolar liability, in lieu of all other warranties expressed or implied, and is limited to the purchased price of the product.

Any warranties including those of merchantability and fitness for a particular purpose which may be implied by law, are limited in duration to 3 years or 5 years after date of sale to the original user/purchaser if installed by SetSolar.

Warranty Claim Procedure

- The product or part must be returned to SetSolar with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise.
- If any component of the returned product is missing, will refuse to accept the return or may impose additional charges against you for the replacement of the missing component
- If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot provide you with a replacement.
- Should SetSolar determine that there is no defect, or that the defect resulted due to cause that is not within the scope of our warranty the client must bear the cost of returning the product.

Severability

If a part of the term and conditions set out is held invalid, void or unenforceable due to any national or international legislation, it shall not affect other parts of the terms and conditions remaining.

