





Residential Series

INVERGY
UPGRADING POWER FOR BETTER FUTURE

All IN ONE (OFF-GRID)



-  Supports 15 parallel connections
-  Fast charging
-  Easy installation (plug & play)
-  Easily moving



Toll Free No. 1800 309 7880

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| Rated Capacity | | INV-OGS-0510 | | |
|-----------------------------------|---|---|---------|----------|
| Model | | 3 KVA | | 5KVA |
| AC Input | AC input system | L+N+PE | | |
| | Rated input voltage | 220/230VAC | | |
| AC Output | Output system | L+N+PE | | |
| | Output voltage | 220/230VAC±5% | | |
| | Output frequency | 50/60Hz±0.1% | | |
| | Power Factor | 0.8 | | |
| | Wave form | Pure sine wave | | |
| | Switching period | 10ms | | |
| | Transfer efficiency | ≥95% | | |
| | Power rating | 3 kVA | 5.0kVA | |
| | Peak power | 6 kVA | 10 kVA | |
| | Battery pack | 5 kWh | 10 kWh | |
| Battery | Battery pack specifications | 51.2 V 100 Ah | | |
| | Rated operational voltage | 51.2 VDC | | |
| | Charging cut-off voltage | 58.4 VDC | | |
| | Discharge cut-off voltage | 44.0 VDC | | |
| | Maximum battery number allowed | 16 PCS | | |
| | Rated operational current | 200 A | | |
| | Peak discharge current | 250 A | | |
| Charge | PV charging method | MPPT | | |
| | PV maximum input power | 3000 Wp | 5000 Wp | 10000 Wp |
| | MPPT tracking range | 120~450 VDC | | |
| | Maximum PV input voltage | 500 VDC | | |
| | Maximum PV charging current | 40 | 80 | 100 |
| | Maximum mains charging current | 60 A | | |
| Display | LCD display | 4.0-inch LCD / 4 button | | |
| | Communication protocol | RS485/CAN | | |
| | AC input | AC230 V | | |
| | AC output | AC230 V | | |
| Environmental Parameter | Operating ambient temperature | 0°C~40°C | | |
| | Operating environment humidity | 20%~95% (no condensation) | | |
| | Storage temperature | -15°C~60°C | | |
| | Above sea level | The altitude shall not exceed 1000m, over 1000m, output less, altitude maximum 4000m | | |
| | Noise | ≤50 db | | |
| Physical Parameters | Length*Width*Height (mm) | 580*260*1320 | | |
| | Weight (for the reference) | 120 kg | | |
| | CERTIFICATION | IEC 61000-3-3 2013+AMD1 2017+AMD2 2021, IEC 61000-3-22018+AMD1 2020+AMD2 2024, IEC 61000-6-1 2019 IEC 61000-4-2 2008, IEC 61000-6-3 2020, IEC 62619 2017 | | |
| Application Environment And Value | The system application scenario of the product is shown in the following figure. A complete system consists of the following parts: Photovoltaic modules: convert the light energy into direct current, charge the battery through the reverse control all-in-one machine, or directly reverse into an AC drive load.- Mains or generator: connected to the AC input to charge the battery while supplying power to the load. If the power supply or generator is not connected, the system can also operate properly, and the load is powered by the battery and the solar module.- Battery: used to ensure the normal power supply of the system load when the solar energy is insufficient and the mains power is not connected.- Home load: can connect a variety of home and office loads, including refrigerators, lamps, TV, fans and air conditioning.- Inverse control all-in-one machine: the energy conversion equipment of the whole system. | | | |
| Functional Characteristics | -Fully digital voltage and current double closed-loop control, advanced sinusoidal pulse width modulation technology, output pure sinusoidal wave. -Two output modes: mains power bypass and inverter output, uninterrupted function.-Four charging modes are available: hybrid charging with only solar energy, mains power priority, solar energy priority and mains power solar energy.- Advanced maximum power point tracking technology, with an efficiency of 99.9%. -Have an LCD screen and 3 indicators design to dynamically display the system data and running status. With the lamp self-lock type switch control AC output.-The power-saving mode can be used to reduce the power loss.- Intelligent variable speed fan efficient heat dissipation, prolong the system life. -Lithium battery is activated by photovoltaic solar energy or mains power, and charge the lithium battery in two ways.- 360° comprehensive protection, a number of protection functions, including short circuit protection, over voltage, under voltage protection, overload protection, reverse connection protection, etc- Lithium iron phosphate battery, high energy density and power density, good safety performance.-The battery pack is separated from the inverter, which can use multiple battery packs in parallel to facilitate capacity expansion. | | | |