DATASHEET

INVERGY
UPGRADING POWER FOR BETTER FUTURE

MODEL		INV-OGS-0505	INV-OGS-0510	INV-OGS-0515
AC Output	AC Input System	L+N+PE		
	Rated Input Voltage	220/230VAC		
	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	5kva		
	Peak Power	10kva		
	Battery Pack	5 kWh	10 kWh	15 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	5500wp		
	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/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)	150 kg	90 kg	208 kg
	Certification	IEC 61000-3-3 2013+AMD1 2017+AMD2 2021, IEC 61000-3-2:2018+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.		