

# Grid-Tie Solar Power Inverter

This on-grid photovoltaic inverter is designed for residential and commercial solar power systems. It converts DC power generated by solar panels into AC power suitable for grid connection.



## Overview

### High-Efficiency Solar Conversion

This grid-tie solar inverter is engineered for residential and commercial solar power systems, offering a maximum efficiency of 98.0%. It utilizes advanced MPPT technology to optimize energy harvest from PV arrays while ensuring safe, reliable grid connection. With a robust IP65-rated, transformerless design, it is built to operate reliably in diverse environmental conditions.

## Performance Metrics

### Key Performance Metrics

<b>98 %</b> Max Efficiency	<b>5000 W</b> Rated AC Power	<b>600 V</b> Max Input Voltage
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## Input (PV)

### PV Input Specifications

- Max Input Current: 22A (2\*11A)
- Start/Min Operating Voltage: 90V / 70V
- MPPT Operating Voltage Range: 70V-580V
- Number of MPPTs: 2
- Max Number of PV Strings: 2

## Output (Grid)

### Grid Output Specifications

- Rated AC Active Power: 5,000W
- Max AC Apparent Power: 5,500VA
- Max AC Output Current: 23.8A
- Rated AC Voltage: 220V/230V
- THDI: <3% at Rated Power

## Environmental & Physical

### Physical Characteristics

Attribute	Value
Dimensions (W*H*D)	335 * 426 * 125mm
Weight	12.8kg
IP Rating	IP65
Cooling	Natural cooling
Operating Temp	-25 - 60

## Compliance & Protection

### Certifications & Standards

IEC62109-1 • IEC62109-2 • VDE-AR-N 4105 • VDE 0126-1-1

### Safety & Protection Features

Anti-islanding protection, AC overcurrent protection, DC reverse connection protection, Surge Arrester (AC Type III), Insulation detection, Leakage current protection