

# Single-Phase Solar Inverter with Single MPPT

This single-phase solar inverter utilizes technology for photovoltaic applications with a modern industrial design. Its compact size and weight make it easy to transport and install in various environments.



## Overview

### High-Efficiency Solar Conversion

This Single-Phase Solar Inverter is designed for residential and small commercial applications, offering a reliable solution for converting DC power from solar arrays into usable AC power. Featuring a compact, fanless design that is 30% lighter than comparable models, it provides efficient energy harvest with a single MPPT controller. The unit is built for durability with IP65-rated protection against dust and water, ensuring safe operation in various environmental conditions.

## Key Features

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IP65 Waterproof, Fanless Design, Wireless Monitoring, DC Switch Included, Low Noise, Wide MPPT Range

## Performance Metrics

### System Efficiency

**97.8 %**

Max Efficiency

**99.9 %**

MPPT Adaptation

**4000 m**

Max Operating Altitude

## Technical Specifications

### DC Input Data

Parameter	Value
Max DC Voltage	450V - 580V
Starting Voltage	80V - 120V
MPPT Voltage Range	80V - 550V
Max DC Current	10A - 22A

### AC Output Data

- Output Voltage: 230Vac
- Frequency: 50/60Hz
- THDi: <3%
- Power Factor: 0.8 leading to 0.8 lagging
- Grid Connection: Single Phase

## Safety & Environment

### Safety Features

Residual Current Monitoring • Anti-islanding Protection • DC Switch • AC Over-current Protection • Insulation Monitoring

## Physical & Environmental

### Environmental Data

- Protection Degree: IP65
- Ambient Temperature: -25 to 60°C
- Relative Humidity: 0-95%
- Noise Emission: <25dB
- Cooling: Natural Convection