

Standalone Single Phase PV Inverter Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 - 2032

<https://marketpublishers.com/r/S3E040744460EN.html>

Date: October 2024

Pages: 60

Price: US\$ 4,850.00 (Single User License)

ID: S3E040744460EN

Abstracts

The Global Standalone Single Phase PV Inverter Market was valued at USD 437.5 million in 2023 and is anticipated to grow at a 12% CAGR from 2024 to 2032.

Standalone single-phase PV inverters are designed to convert DC electricity generated by photovoltaic solar panels into usable AC power for residential and small commercial setups. Operating independently of the utility grid, these inverters empower users to harness solar energy for self-consumption or battery storage, making them ideal for areas with limited or no grid access. The increasing desire for energy independence and rising demand in remote or rural regions without stable grid access are significantly driving market growth. Falling prices for PV panels and inverters, combined with the potential for long-term savings on electricity costs, are further enhancing adoption, offering consumers a sustainable energy option with notable economic benefits.

Environmental awareness and the push to reduce carbon footprints are spurring the shift to off-grid PV inverters, which support clean energy production and align with global sustainability goals. Technological advancements in inverter efficiency and reliability are also making these products more attractive, paving the way for broader adoption and market expansion. On the application front, the residential sector is projected to exceed USD 900 million by 2032, driven by a growing interest in sustainable energy solutions as homeowners look to contribute to climate change mitigation. Enhanced energy storage solutions, such as affordable battery options, are also supporting adoption in this sector.

Increased focus on off-grid living, self-sufficiency, and energy security—especially in regions prone to natural disasters—further promotes the use of standalone inverters in residential applications. The market is segmented into string and micro inverters, with

the string segment expected to grow at a CAGR of over 12% through 2032. String inverters appeal to residential users for their lower upfront cost and simple installation, which makes them space-efficient and budget-friendly, particularly advantageous where installation space is limited. In the Asia Pacific region, the standalone single-phase PV inverter market is forecasted to reach USD 300 million by 2032. Homeowners in countries such as China and India are increasingly adopting solar technology to minimize their reliance on fossil fuels and reduce carbon emissions. Growing energy demands, bolstered by government initiatives like India's National Solar Mission, are creating substantial opportunities for market growth.

The presence of key industry players in the region and supportive policies aimed at expanding solar infrastructure are strengthening the business landscape, making the Asia Pacific a pivotal region in the market's expansion. With ongoing advancements and supportive environmental policies, the standalone single-phase PV inverter market is poised for substantial growth, aligning with global energy trends focused on sustainability and off-grid capabilities.

Contents

Report Content

CHAPTER 1 METHODOLOGY & SCOPE

- 1.1 Research design
- 1.2 Base estimates & calculations
- 1.3 Forecast model
- 1.4 Primary research & validation
 - 1.4.1 Primary sources
 - 1.4.2 Data mining sources
- 1.5 Market definitions

CHAPTER 2 EXECUTIVE SUMMARY

- 2.1 Industry 360° synopsis, 2021 – 2032

CHAPTER 3 INDUSTRY INSIGHTS

- 3.1 Industry ecosystem
- 3.2 Regulatory landscape
- 3.3 Industry impact forces
 - 3.3.1 Growth drivers
 - 3.3.2 Industry pitfalls & challenges
- 3.4 Growth potential analysis
- 3.5 Porter's analysis
 - 3.5.1 Bargaining power of suppliers
 - 3.5.2 Bargaining power of buyers
 - 3.5.3 Threat of new entrants
 - 3.5.4 Threat of substitutes
- 3.6 PESTEL analysis

CHAPTER 4 COMPETITIVE LANDSCAPE, 2024

- 4.1 Introduction
- 4.2 Strategic dashboard
- 4.3 Innovation & technology landscape

CHAPTER 5 MARKET SIZE AND FORECAST, BY PRODUCT, 2021 – 2032 (USD MILLION & MW)

- 5.1 Key trends
- 5.2 String
- 5.3 Micro

CHAPTER 6 MARKET SIZE AND FORECAST, BY NOMINAL OUTPUT POWER, 2021 – 2032 (USD MILLION & MW)

- 6.1 Key trends
- 6.2 ? 0.5 kW
- 6.3 0.5 - 3 kW
- 6.4 3 - 33 kW
- 6.5 33 - 110 kW

CHAPTER 7 MARKET SIZE AND FORECAST, BY APPLICATION, 2021 – 2032 (USD MILLION & MW)

- 7.1 Key trends
- 7.2 Residential
- 7.3 Commercial & industrial

CHAPTER 8 MARKET SIZE AND FORECAST, BY REGION, 2021 – 2032 (USD MILLION & MW)

- 8.1 Key trends
- 8.2 North America
 - 8.2.1 U.S.
 - 8.2.2 Canada
- 8.3 Europe
 - 8.3.1 Germany
 - 8.3.2 Italy
 - 8.3.3 Poland
 - 8.3.4 Netherlands
 - 8.3.5 Austria
 - 8.3.6 UK
 - 8.3.7 France
- 8.4 Asia Pacific

- 8.4.1 China
- 8.4.2 Australia
- 8.4.3 India
- 8.4.4 Japan
- 8.4.5 South Korea
- 8.5 Middle East & Africa
 - 8.5.1 Israel
 - 8.5.2 Saudi Arabia
 - 8.5.3 UAE
 - 8.5.4 South Africa
- 8.6 Latin America
 - 8.6.1 Brazil
 - 8.6.2 Mexico
 - 8.6.3 Chile

CHAPTER 9 COMPANY PROFILES

- 9.1 Eastman Solar
- 9.2 Growatt
- 9.3 Guangdong Prostar New Energy Technology
- 9.4 INVTSolar
- 9.5 Kirloskar Solar
- 9.6 Milesolar
- 9.7 SMA Solar Technology
- 9.8 Statcon Powtech
- 9.9 Solis Inverter
- 9.10 Sunway Solar
- 9.11 Shenzhen Huangjintai Electronics
- 9.12 Tanfon Solar

I would like to order

Product name: Standalone Single Phase PV Inverter Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 - 2032

Product link: <https://marketpublishers.com/r/S3E040744460EN.html>

Price: US\$ 4,850.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/S3E040744460EN.html>