



Analysis of the current status of domestic solar inverters



Overview

In Q3 2025, the residential segment installed 1,088 MWdc of solar capacity, declining 4% year-over-year and quarter-over-quarter. Despite an industry rush to bring projects online this year to qualify for tax credits, equipment constraints are holding back installation growth. The US solar industry installed 11.7 gigawatts direct current (GWdc) of capacity in Q3 2025, a 20% increase from Q3 2024, a 49% increase from Q2 2025, and the third largest quarter for deployment in the industry's history. Following a low second quarter, the industry is ramping up as the end of. In 2024, between 554 GWdc and 602 GWdc of PV were added globally, bringing the cumulative installed capacity to 2. China continued to dominate the global market, representing ~60% of 2024 installs, up 52% y/y. This report explores the current state of these supply chain challenges, with a specific focus on the impact of the BABA requirements and the associated complexities in inverter manufacturing. More than 45% of new solar installations now feature smart inverter solutions, while over 30% incorporate hybrid energy systems. Additionally, more than 55% of global solar projects depend on string or central inverters, highlighting strong demand across commercial, industrial, and utility-scale. According to a recent study by Global Market Insights Inc. 6 billion in 2034, at a CAGR of 5.

Article Content

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Residential Solar PV Inverter Market | Global Market Analysis Report

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This report explores the current state of these supply chain challenges, with a specific focus on the impact of the BABA requirements and the associated complexities in inverter manufacturing and supply.

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