

Global Solar Inverter Market: Analysis By Type
(Central, String and Micro), By Phase (Single
Phase and Three Phase), By Connection Type (On
Grid and Off Grid), By End User (Utilities,
Residential and Commercial & Industrial), By
Region Size & Forecast with Impact Analysis of
COVID-19 and Forecast up to 2029

August 2024



Global Solar Inverter Market: Coverage

Executive Summary and Scope

Introduction/Market Overview

Global Market Analysis

Regional Market Analysis

Impact Of COVID-19

Dynamics

Competitive Landscape

Company Profiling

Global Solar Inverter Market: Coverage

Scope of the Report

Attributes	Details
Title	Global Solar Inverter Market: Analysis By Type (Central, String and Micro), By Phase (Single Phase and Three Phase), By Connection Type (On Grid and Off Grid), By End User (Utilities, Residential and Commercial & Industrial), By Region Size & Forecast with Impact Analysis of COVID-19 and Forecast up to 2029
Coverage	Global and Regional
Regional Coverage	North America (The US, Mexico and Canada), Asia Pacific (China, Japan, India, South Korea, and the Rest of Asia Pacific), Europe (UK, Germany, France, Italy, Spain and the Rest of Europe), and Rest of the World
Market Influencing Variables	Growth Drivers, Challenges, Market Trends
Forecast Period of Market	2024-2029
Competition in the Market	Consolidated
Key Players	Schneider Electric SE; SolarEdge Technologies, Inc.; Delta Electronics, Inc.; Huawei Investment & Holding Co. Ltd.; GoodWe; Sineng Electric Co., Ltd.; Sungrow Power Supply Co., Ltd.; SMA Solar Technology AG; FIMER S.p.A.; Growatt; Yaskawa Solectria Solar; Ginlong (Solis) Technologies; Power Electronics; and Hitachi Hi-Rel Power Electronics Private Limited

Global Solar Inverter Market: Coverage

Executive Summary

A solar PV inverter is a power inverter that converts electricity from a photovoltaic (PV) solar panel in direct current (DC) to alternating current (AC) at utility frequency. This can be utilized for residential and business electrical grids, as well as a local off-grid electrical network like micro grids. Global solar inverter market in 2023 was valued at US\$12.81 billion. The market value is expected to reach US\$24.40 billion by 2029, growing at a CAGR of 11.34% during the forecast period of 2024-2029.

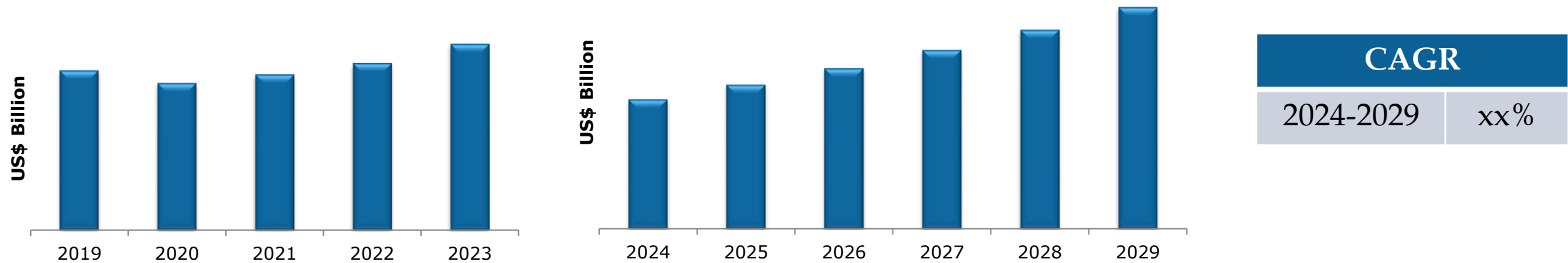
Global solar inverter market can be segmented based on type (String, Central and Micro); phase (Single Phase and Three Phase); connection type (On Grid and Off Grid) and end user (Utilities, Residential and Commercial & Industrial). String segment held majority of the market share in 2023, as the inverters are integrated with huge arrays put on field sites, industrial facilities, and buildings, transforming DC power from all PV panels into AC power and serving as a single point of distribution. Asia Pacific is leading global solar inverter market by occupying majority of the market share.

The COVID-19 pandemic has had a significant impact on solar inverter market. The solar inverter industry is based on a global supply chain, with components and materials coming from all over the world. The pandemic caused delays in the production and distribution of solar inverters by disrupting manufacturing, transportation, and logistics. International trade restrictions, border closures, and lockdown measures in several locations resulted in shortages of crucial components, affecting the availability of inverters.

Global solar inverter market has increased in 2023. The projections are made that the market would rise in the next five years i.e. 2024-2029 tremendously. Global solar inverter market is expected to increase due to growing replacement demand for solar inverters, mounting home improvement, rapid urbanization, increasing power failures, rising number of solar installations attributed to government-led incentives and schemes, etc. Yet the market faces some challenges such as safety risks associated with high DC voltages, high cost of solar inverters, etc. Moreover, the market growth would succeed to various market trends like, increasing demand for smart solar inverters, inflation reduction act (IRA), expansion of companies in ESS market, sustainability, positive shift towards decentralized power generation, etc.

Solar Inverter Market: Global Analysis

Global Solar Inverter Market by Value



Global solar inverter market was valued at US\$... billion in 2023 and is anticipated to reach up to US\$... billion by 2029 from US\$... billion in 2024, with a CAGR of xx%.

Solar Inverter Market: Global Analysis

Global Solar Inverter Market by Type; 2023



Type	Share (2023)
String	xx%
Central	xx%
Micro	xx%

Solar Inverter Market: Global Analysis

Global Solar Inverter Market by Phase; 2023



Phase	Share (2023)
Single Phase	xx%
Three Phase	xx%

Solar Inverter Market: Global Analysis

Global Solar Inverter Market by Connection type; 2023



Connection Type	Share (2023)
On Grid	xx%
Off Grid	xx%

Solar Inverter Market: Global Analysis

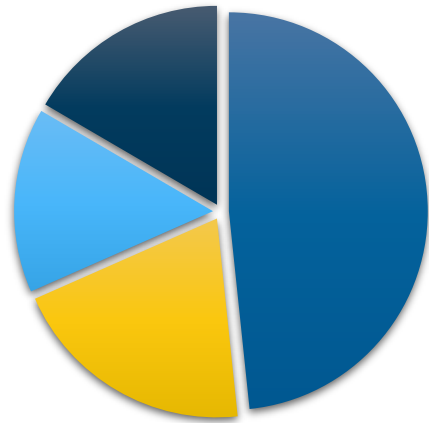
Global Solar Inverter Market by End User; 2023



End User	Share (2023)
Utilities	xx%
Residential	xx%
Commercial & Industrial	xx%

Solar Inverter Market: Global Analysis

Global Solar Inverter Market by Region; 2023



North America, xx%

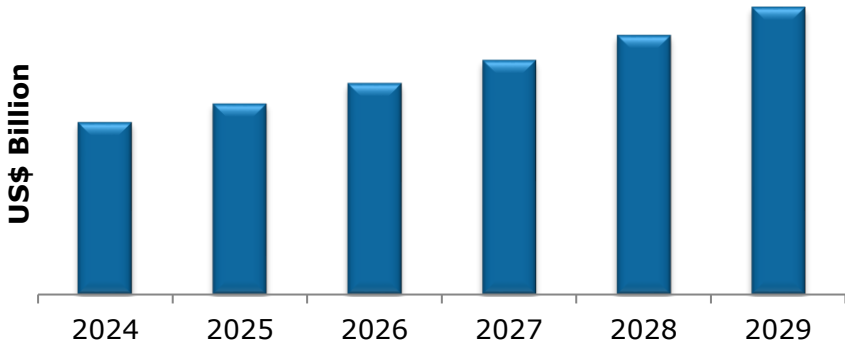
Europe, xx%

Asia Pacific, xx%

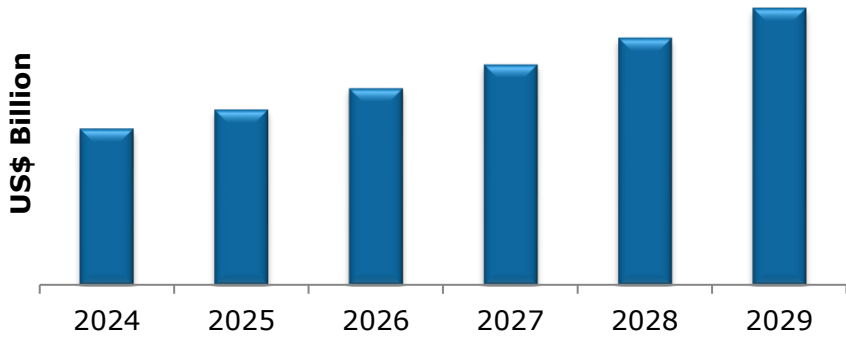
Rest of the World, xx%

Solar Inverter Market: Type Analysis

Global String Solar Inverter Market by Value



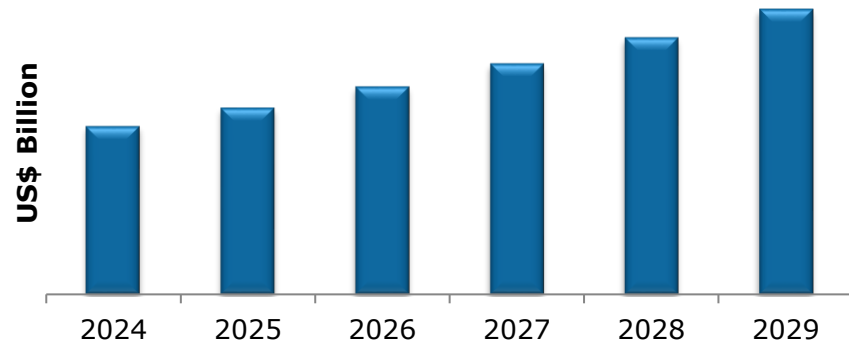
Global Central Solar Inverter Market by Value



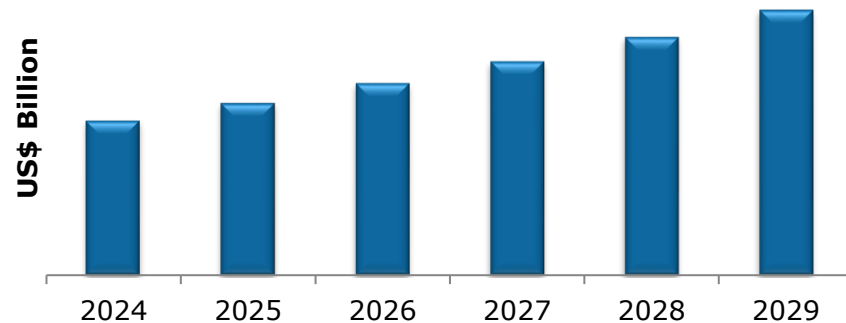
Type	CAGR (2024-2029)
String	xx%
Central	xx%
Micro	xx%

Solar Inverter Market: Phase Analysis

Global Single Phase Solar Inverter Market by Value



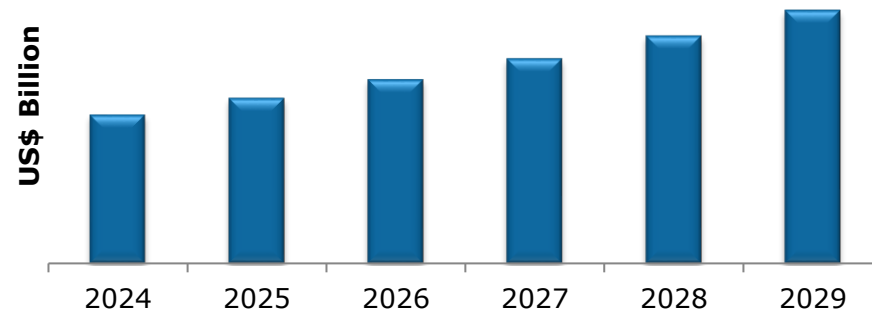
Global Three Phase Solar Inverter Market by Value



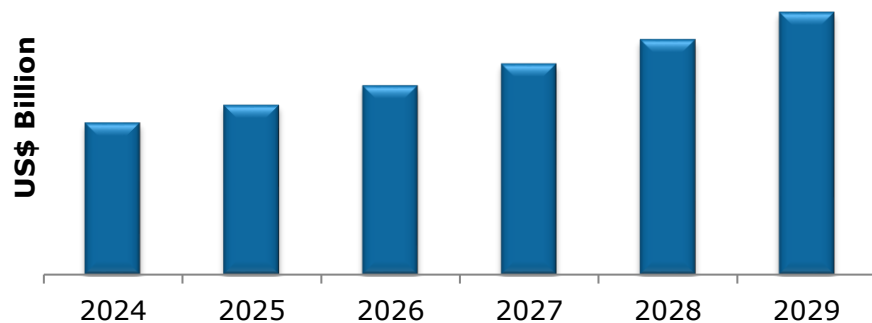
Phase	CAGR (2024-2029)
Single Phase	xx%
Three Phase	xx%

Solar Inverter Market: Connection Type Analysis

Global On Grid Solar Inverter Market by Value



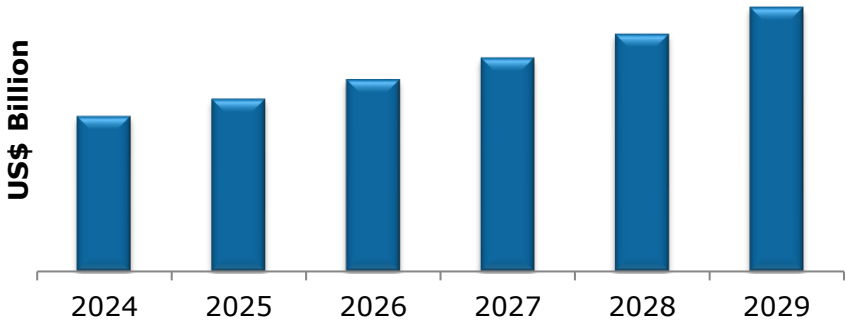
Global Off Grid Solar Inverter Market by Value



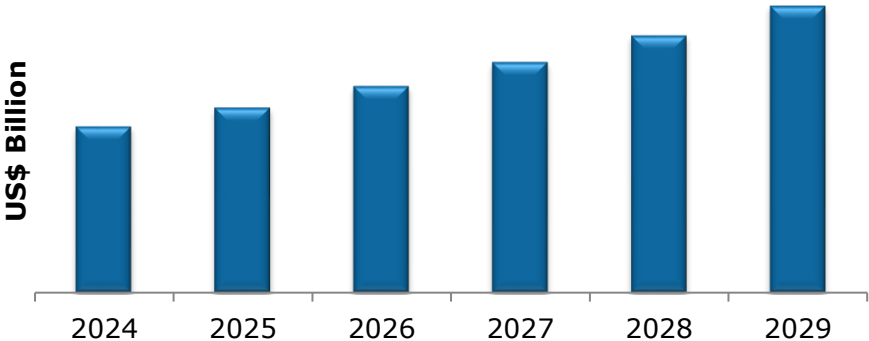
Connection Type	CAGR (2024-2029)
On Grid	xx%
Off Grid	xx%

Solar Inverter Market: End User Analysis

Global Utilities Solar Inverter Market by Value



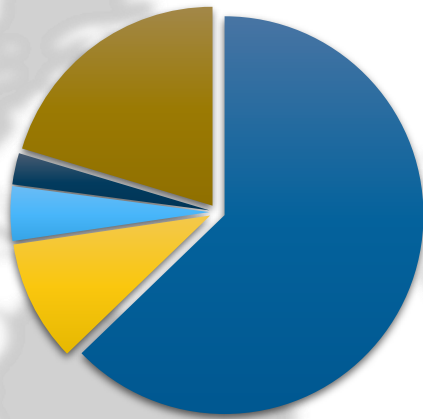
Global Residential Solar Inverter Market by Value



End User	CAGR (2024-2029)
Utilities	xx%
Residential	xx%
Commercial & Industrial	xx%

Asia Pacific Solar Inverter Market: An Analysis

Asia Pacific Solar Inverter Market by Region; 2023



Region	Share (2023)	CAGR (2024-2029)
China	xx%	xx%
India	xx%	xx%
Japan	xx%	xx%
South Korea	xx%	xx%
Rest of Asia Pacific	xx%	xx%

North America Solar Inverter Market: An Analysis

North America Solar Inverter Market by Region; 2023



Region	Share (2023)	CAGR (2024-2029)
The US	xx%	xx%
Canada	xx%	xx%
Mexico	xx%	xx%

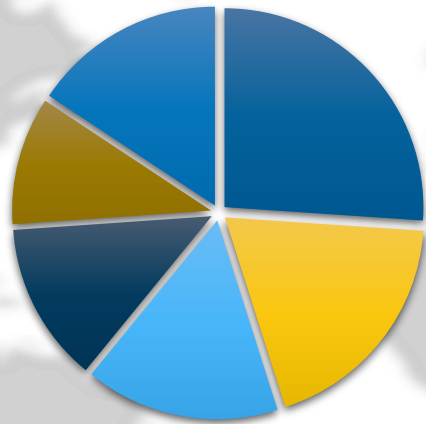
The US Solar Inverter Market by End User; 2023



End User	Share (2023)	CAGR (2024-2029)
Utilities	xx%	xx%
Commercial	xx%	xx%
Residential & Industrial	xx%	xx%

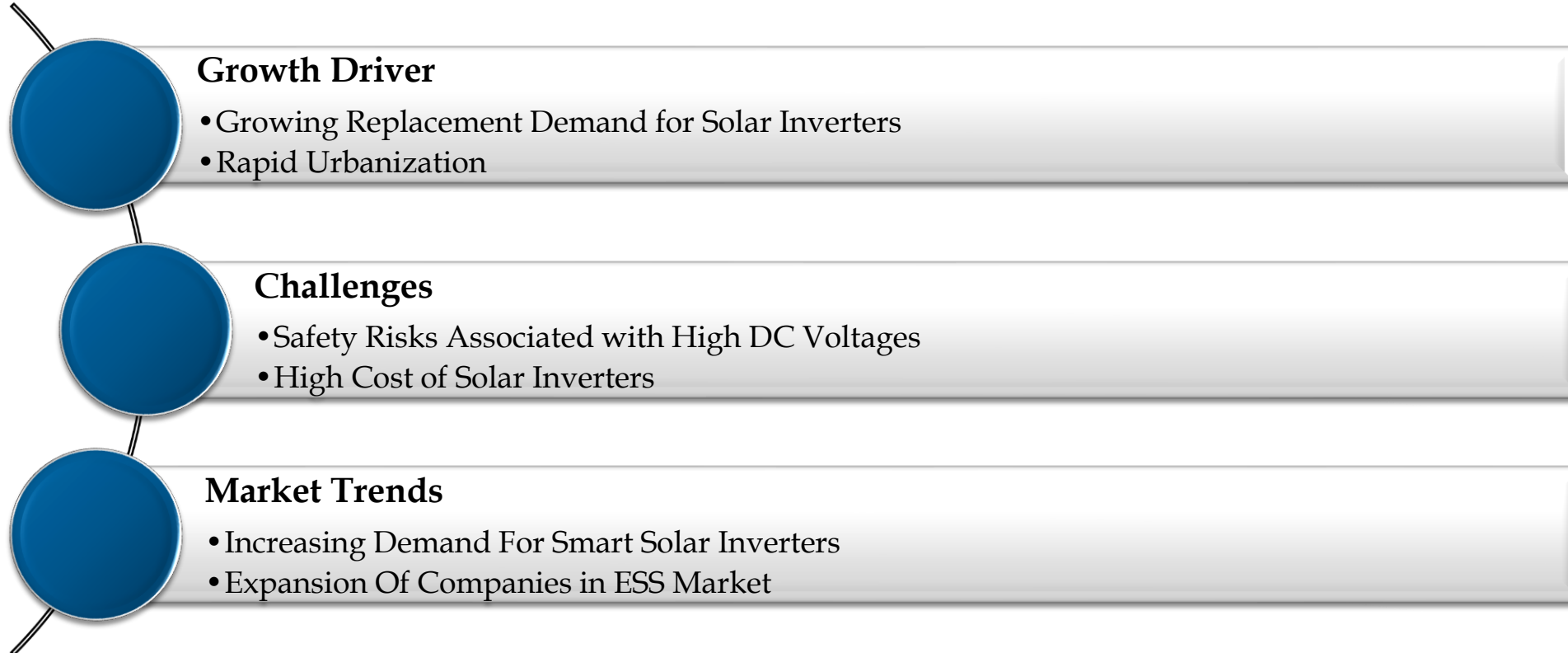
Europe Solar Inverter Market: An Analysis

Europe Solar Inverter Market by Region; 2023



Region	Share (2023)	CAGR (2024-2029)
Germany	xx%	xx%
France	xx%	xx%
UK	xx%	xx%
Italy	xx%	xx%
Spain	xx%	xx%
Rest of Europe	xx%	xx%

Global Solar Inverter Market: Dynamics



Global Solar Inverter Market: Competitive Landscape

Players Profiled

- ❑ Schneider Electric SE
- ❑ SolarEdge Technologies, Inc.
- ❑ Delta Electronics, Inc.
- ❑ Huawei Investment & Holding Co. Ltd.
- ❑ GoodWe
- ❑ Sineng Electric Co., Ltd.
- ❑ Sungrow Power Supply Co., Ltd.
- ❑ SMA Solar Technology AG
- ❑ FIMER S.p.A.
- ❑ Growatt
- ❑ Yaskawa Solectria Solar
- ❑ Ginlong (Solis) Technologies
- ❑ Power Electronics
- ❑ Hitachi Hi-Rel Power Electronics Private Limited

Global Solar Inverter Players by Market Share; 2023 (Percentage, %)

