

Global Photovoltaic Module Aluminum Alloy Frame Supply, Demand and Key Producers, 2026-2032

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Abstracts

The global Photovoltaic Module Aluminum Alloy Frame market size is expected to reach \$ 12585 million by 2032, rising at a market growth of 7.9% CAGR during the forecast period (2026-2032).

In 2025, global Photovoltaic Module Aluminum Alloy Frame in Automotive production reached approximately 2345 k tons, with an average global market price of around US\$3049 usd per ton. The production capacity for Photovoltaic Module Aluminum Alloy Frame in 2025 was approximately 2500 k tons. The typical gross profit margin for Photovoltaic Module Aluminum Alloy Frame is between 20% and 40%. A Photovoltaic (PV) Module Aluminum Alloy Frame is a structural component made from extruded aluminum alloys that surrounds and supports a solar panel, providing mechanical strength, environmental protection, and ease of installation. The frame secures the glass, encapsulant, and backsheet of the PV module, ensuring resistance to wind loads, snow loads, corrosion, and long-term outdoor exposure. Due to its lightweight, high strength, corrosion resistance, and recyclability, aluminum alloy frames are widely used in crystalline silicon solar modules for rooftop, ground-mounted, and utility-scale photovoltaic systems.

The Photovoltaic (PV) Module Aluminum Alloy Frame market is driven by the continued expansion of global solar power installations, supported by renewable energy targets, falling photovoltaic costs, and large-scale utility and distributed solar deployment. Aluminum alloy frames are widely used in PV modules to provide structural support, mechanical strength, corrosion resistance, and long-term durability under outdoor conditions. Market growth is closely linked to PV module shipments, with demand concentrated in utility-scale solar farms, commercial and industrial rooftops, and residential systems. Asia-Pacific dominates production and consumption due to its

leading PV manufacturing base, while industry trends focus on lightweight design, high-strength aluminum alloys, anodized surface treatments, and recycling to reduce carbon footprint.

This report studies the global Photovoltaic Module Aluminum Alloy Frame production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Photovoltaic Module Aluminum Alloy Frame and provides market size (US\$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of Photovoltaic Module Aluminum Alloy Frame that contribute to its increasing demand across many markets.

Highlights and key features of the study

Global Photovoltaic Module Aluminum Alloy Frame total production and demand, 2021-2032, (Kilotons)

Global Photovoltaic Module Aluminum Alloy Frame total production value, 2021-2032, (USD Million)

Global Photovoltaic Module Aluminum Alloy Frame production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (Kilotons), (based on production site)

Global Photovoltaic Module Aluminum Alloy Frame consumption by region & country, CAGR, 2021-2032 & (Kilotons)

U.S. VS China: Photovoltaic Module Aluminum Alloy Frame domestic production, consumption, key domestic manufacturers and share

Global Photovoltaic Module Aluminum Alloy Frame production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (Kilotons)

Global Photovoltaic Module Aluminum Alloy Frame production by Type, production, value, CAGR, 2021-2032, (USD Million) & (Kilotons)

Global Photovoltaic Module Aluminum Alloy Frame production by Application, production, value, CAGR, 2021-2032, (USD Million) & (Kilotons)

This report profiles key players in the global Photovoltaic Module Aluminum Alloy Frame market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Hydro, Constellium, Alom Group, Nippon Light Metal, Hulamin, Indal Aluminium Industry Tbk (Indal), Do Thanh Aluminum, Yonz Technology, Anhui Xinbo Aluminum, CITIC Bohai Aluminum

Industries, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World Photovoltaic Module Aluminum Alloy Frame market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US\$ Millions), volume (production, consumption) & (Kilotons) and average price (US\$/Ton) by manufacturer, by Type, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global Photovoltaic Module Aluminum Alloy Frame Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global Photovoltaic Module Aluminum Alloy Frame Market, Segmentation by Type:

Single-arm Frame

Double-arm Frame

Global Photovoltaic Module Aluminum Alloy Frame Market, Segmentation by Structure:

Standard Framed Modules

Half-frame

Thin-frame Modules

Global Photovoltaic Module Aluminum Alloy Frame Market, Segmentation by Alloy Materials:

6063

6005

6061

6082

Global Photovoltaic Module Aluminum Alloy Frame Market, Segmentation by Application:

Residential Roof

Commercial and Industrial Roof

Solar Power Plant

Companies Profiled:

Hydro

Constellium

Alom Group

Nippon Light Metal

Hulamin

Indal Aluminium Industry Tbk (Indal)

Do Thanh Aluminum

Yonz Technology

Anhui Xinbo Aluminum

CITIC Bohai Aluminum Industries

Yingkou Changtai Aluminum Material

JA Solar Technology

ZYF Lopsking Material Technology

Changzhou Kaihong Aluminum Industry

Jiangyin Yuansheng Aluminum

Akcome Technology

Chuzhou Ruida New Energy Materials

Key Questions Answered:

1. How big is the global Photovoltaic Module Aluminum Alloy Frame market?
2. What is the demand of the global Photovoltaic Module Aluminum Alloy Frame market?
3. What is the year over year growth of the global Photovoltaic Module Aluminum Alloy Frame market?
4. What is the production and production value of the global Photovoltaic Module

Aluminum Alloy Frame market?

5. Who are the key producers in the global Photovoltaic Module Aluminum Alloy Frame market?

6. What are the growth factors driving the market demand?

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