

Automotive Engine Front Module Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034

Market Report | 2024-12-06 | 180 pages | Global Market Insights

AVAILABLE LICENSES:

- Single User \$4850.00
- Multi User \$6050.00
- Enterprise User \$8350.00

Report description:

The Global Automotive Engine Front Module Market was valued at USD 131.1 billion in 2024 and is projected to grow at a CAGR of 4.9% from 2025 to 2034. This growth is largely fueled by the rapid expansion of the electric vehicle (EV) industry, which demands specialized thermal management systems to optimize battery and critical component performance. Additionally, the increasing production of passenger and commercial vehicles continues to drive demand for advanced front-end systems, reflecting the growing need for efficiency and performance in modern automotive design.

Global urbanization and rising disposable incomes are propelling passenger car sales, especially in emerging markets. Simultaneously, the booming e-commerce and logistics sectors are increasing commercial vehicle production. These trends are creating significant demand for robust, technologically advanced engine front modules that meet the evolving needs of the automotive industry.

The market is segmented into composites, metal, and plastics, with metals dominating in 2024 at a 45% market share, generating USD 95 billion by 2034. Steel and aluminum are particularly favored due to their exceptional durability, heat resistance, and mechanical strength. Aluminum's lightweight properties not only enhance fuel efficiency but also ensure structural integrity, aligning with industry trends for improved sustainability and performance.

In terms of vehicle type, passenger vehicles commanded a 73% market share in 2024, driven by their high production and sales volumes worldwide. Factors such as urbanization, increasing disposable incomes, and growing consumer preferences for personal mobility are accelerating demand. Moreover, advancements in lightweight materials and thermal management technologies are being increasingly integrated into passenger vehicles, boosting their fuel efficiency and overall performance.

The Asia Pacific automotive engine front module market captured 40% of the global share in 2024, with projections to generate USD 85 billion by 2034. China stands out as a dominant force, expected to contribute USD 35 billion during this period, owing to

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

its position as a global hub for automotive manufacturing and consumption. The region's emphasis on electric vehicle production and strict fuel efficiency regulations is further driving the adoption of lightweight materials, enhancing demand for cutting-edge engine front modules.

In conclusion, the automotive engine front module market is poised for robust growth, underpinned by advancements in EV technology, lightweight materials, and rising global vehicle production. These trends not only cater to the evolving needs of the automotive sector but also support its goals of efficiency, performance, and sustainability.

Table of Contents:

Report Content

Chapter 1 Methodology & Scope

1.1 Research design

1.1.1 Research approach

1.1.2 Data collection methods

1.2 Base estimates and calculations

1.2.1 Base year calculation

1.2.2 Key trends for market estimates

1.3 Forecast model

1.4 Primary research & validation

1.4.1 Primary sources

1.4.2 Data mining sources

1.5 Market definition

Chapter 2 Executive Summary

2.1 Industry 360 synopsis, 2021 - 2034

Chapter 3 Industry Insights

3.1 Industry ecosystem analysis

3.2 Supplier landscape

3.2.1 Raw material suppliers

3.2.2 Component manufacturers

3.2.3 Module assemblers

3.2.4 Tier-1 suppliers

3.2.5 OEMs (Original Equipment Manufacturers)

3.3 Profit margin analysis

3.4 Cost breakdown analysis

3.5 Technology & innovation landscape

3.6 Key news & initiatives

3.7 Regulatory landscape

3.8 Impact forces

3.8.1 Growth drivers

3.8.1.1 Rising demand for lightweight and sustainable materials

3.8.1.2 The rapid expansion of the EV market

3.8.1.3 Technological integration of smart sensors, active grille shutters, and modular designs

3.8.1.4 Growth in passenger car and commercial vehicle production

3.8.1.5 Focus on crash safety and durability

3.8.2 Industry pitfalls & challenges

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

3.8.2.1 High initial investment costs

3.8.2.2 Complex supply chain

3.9 Growth potential analysis

3.10 Porter's analysis

3.11 PESTEL analysis

Chapter 4 Competitive Landscape, 2024

4.1 Introduction

4.2 Company market share analysis

4.3 Competitive positioning matrix

4.4 Strategic outlook matrix

Chapter 5 Market Estimates & Forecast, By Component, 2021 - 2034 (\$Bn, Units)

5.1 Key trends

5.2 Radiator

5.3 Cooling fan

5.4 Air conditioning condenser

5.5 Headlights and grilles

5.6 Others

Chapter 6 Market Estimates & Forecast, By Vehicle, 2021 - 2034 (\$Bn, Units)

6.1 Key trends

6.2 Passenger vehicles

6.2.1 Hatchback

6.2.2 Sedan

6.2.3 SUV

6.3 Commercial vehicles

6.3.1 Light Commercial Vehicles (LCV)

6.3.2 Heavy Commercial Vehicles (HCV)

Chapter 7 Market Estimates & Forecast, By Material, 2021 - 2034 (\$Bn, Units)

7.1 Key trends

7.2 Metal

7.3 Composites

7.4 Plastics

Chapter 8 Market Estimates & Forecast, By Sales Channel, 2021 - 2034 (\$Bn, Units)

8.1 Key trends

8.2 OEM

8.3 Aftermarket

Chapter 9 Market Estimates & Forecast, By Region, 2021 - 2034 (\$Bn, Units)

9.1 Key trends

9.2 North America

9.2.1 U.S.

9.2.2 Canada

9.3 Europe

9.3.1 UK

9.3.2 Germany

9.3.3 France

9.3.4 Spain

9.3.5 Italy

9.3.6 Russia

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

9.3.7 Nordics
9.4 Asia Pacific
9.4.1 China
9.4.2 India
9.4.3 Japan
9.4.4 South Korea
9.4.5 ANZ
9.4.6 Southeast Asia
9.5 Latin America
9.5.1 Brazil
9.5.2 Mexico
9.5.3 Argentina
9.6 MEA
9.6.1 UAE
9.6.2 South Africa
9.6.3 Saudi Arabia
Chapter 10 Company Profiles
10.1 Aisin Seiki
10.2 Calsonic Kansei
10.3 Denso
10.4 Eberspacher
10.5 Faurecia
10.6 Grupo Antolin
10.7 HBPO
10.8 Hella
10.9 HYUNDAI Mobis
10.10 Magna
10.11 Magneti Marelli
10.12 Mahle GmbH
10.13 Mitsui Mining & Smelting Co
10.14 Plastic Omnium
10.15 Robert Bosch
10.16 SAS Automotive Systems
10.17 SL
10.18 Sumitomo Riko
10.19 Tata AutoComp Systems
10.20 Valeo
□

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Automotive Engine Front Module Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034

Market Report | 2024-12-06 | 180 pages | Global Market Insights

To place an Order with Scotts International:

- ☐ - Print this form
- ☐ - Complete the relevant blank fields and sign
- ☐ - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User	\$4850.00
	Multi User	\$6050.00
	Enterprise User	\$8350.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

☐ ** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2025-05-09"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com



Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com
www.scotts-international.com