

Flexible AC Transmission Systems (FACTS) Market Size, Share & Trends Analysis Report By Technology (Series Compensation, Shunt Compensation, Combined Compensation), By End-use, By Region, And Segment Forecasts, 2025 - 2033

<https://marketpublishers.com/r/FF557D8C4D02EN.html>

Date: November 2025

Pages: 120

Price: US\$ 5,950.00 (Single User License)

ID: FF557D8C4D02EN

Abstracts

The global flexible AC transmission systems (FACTS) market size was estimated at USD 1.35 billion in 2024 and is projected to reach USD 2.32 billion by 2033, growing at a CAGR of 6.24% from 2025 to 2033. The increasing integration of renewable energy sources, coupled with the growing need to enhance grid reliability and transmission efficiency, drives the expansion of the flexible AC transmission systems (FACTS) industry.

These systems enable dynamic voltage control, improve power quality, and enhance the transfer capacity of existing transmission lines without requiring costly infrastructure upgrades. Rising electricity demand, grid congestion issues, and the global shift toward decarbonization are further promoting FACTS deployment. Moreover, advancements in power electronics, such as voltage source converters (VSCs) and smart grid technologies, enhance system flexibility and reduce overall operating costs, positioning FACTS as a vital solution for modern power networks.

In North America, market growth is primarily driven by investments in grid modernization and renewable energy integration. Federal and state-level programs encouraging smart grid development and incorporating flexible transmission systems are fostering regional adoption. The United States remains a major contributor to the market, with utilities implementing FACTS technologies to enhance grid stability amid rising renewable penetration and aging infrastructure. In addition, the growing participation of private players and independent system operators in deploying advanced grid solutions is

expected to strengthen regional market growth throughout the forecast period.

Europe represents a key growth hub for the flexible AC transmission systems (FACTS) industry, with countries such as Germany, the United Kingdom, and France leading deployment efforts supported by stringent energy transition policies and ambitious carbon reduction goals. The region's growing renewable capacity, particularly in offshore wind and solar, necessitates efficient transmission management, fueling demand for FACTS solutions in voltage stability, reactive power compensation, and congestion mitigation. Continuous innovation, supported by EU-backed research initiatives and cross-border grid integration projects, propels market development. Furthermore, collaboration among transmission system operators (TSOs), technology providers, and energy regulators continues to enhance Europe's leadership position in the global FACTS landscape.

Global Flexible AC Transmission Systems (FACTS) Market Report Segmentation

This report forecasts revenue growth at global, regional, and country levels and provides an analysis of the latest industry trends in each of the sub-segments from 2021 to 2033. For this study, Grand View Research has segmented the global flexible AC transmission systems (FACTS) market report based on the technology, end-use and region.

Technology Outlook (Revenue, USD Million, 2021 - 2033)

Series Compensation

Shunt Compensation

Combined Compensation

End-use Outlook (Revenue, USD Million, 2021 - 2033)

Transmission Lines

Distribution Networks

Industrial

Renewable Energy Integration

Regional Outlook (Revenue, USD Million, 2021 - 2033)

North America

U.S.

Canada

Mexico

Europe

Germany

UK

France

Asia Pacific

China

India

Japan

South Korea

Latin America

Brazil

Middle East & Africa

Saudi Arabia

UAE

Contents

CHAPTER 1. METHODOLOGY AND SCOPE

- 1.1. Market Segmentation & Scope
- 1.2. Market Definition
- 1.3. Information Procurement
 - 1.3.1. Information Analysis
 - 1.3.2. Market Formulation & Data Visualization
 - 1.3.3. Data Validation & Publishing
- 1.4. Research Scope and Assumptions
 - 1.4.1. List of Data Sources

CHAPTER 2. EXECUTIVE SUMMARY

- 2.1. Market Snapshot
- 2.2. Segmental Outlook
- 2.3. Competitive Outlook

CHAPTER 3. MARKET VARIABLES, TRENDS, AND SCOPE

- 3.1. Market Lineage Outlook
- 3.2. Value Chain Analysis
 - 3.2.1. Raw Material Trends
- 3.3. Manufacturing/Technology Overview
- 3.4. Regulatory Framework
 - 3.4.1. Standards & Compliance
 - 3.4.2. Regulatory Impact Analysis
- 3.5. Market Dynamics
 - 3.5.1. Market Driver Analysis
 - 3.5.2. Market Restraint Analysis
 - 3.5.3. Industry Trends
- 3.6. Porter's Five Forces Analysis
 - 3.6.1. Bargaining Power of Suppliers
 - 3.6.2. Bargaining Power of Buyers
 - 3.6.3. Threat of Substitution
 - 3.6.4. Threat of New Entrants
 - 3.6.5. Competitive Rivalry
- 3.7. PESTLE Analysis

- 3.7.1. Political
- 3.7.2. Economic
- 3.7.3. Social Landscape
- 3.7.4. Technology
- 3.7.5. Environmental
- 3.7.6. Legal

CHAPTER 4. FLEXIBLE AC TRANSMISSION SYSTEMS (FACTS) MARKET: TECHNOLOGY ESTIMATES & TREND ANALYSIS

- 4.1. Flexible AC Transmission Systems (FACTS) Market: Technology Movement Analysis, 2024 & 2033
- 4.2. Series Compensation
 - 4.2.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
- 4.3. Shunt Compensation
 - 4.3.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
- 4.4. Combined Compensation
 - 4.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)

CHAPTER 5. FLEXIBLE AC TRANSMISSION SYSTEMS (FACTS) MARKET: END USE ESTIMATES & TREND ANALYSIS

- 5.1. Flexible AC Transmission Systems (FACTS) Market: End Use Movement Analysis, 2024 & 2033
- 5.2. Transmission Lines
 - 5.2.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
- 5.3. Distribution Networks
 - 5.3.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
- 5.4. Industrial
 - 5.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
- 5.5. Renewable Energy Integration
 - 5.5.1. Market estimates and forecasts, 2021 - 2033 (USD Million)

CHAPTER 6. FLEXIBLE AC TRANSMISSION SYSTEMS (FACTS) MARKET: REGIONAL ESTIMATES & TREND ANALYSIS

- 6.1. Regional Analysis, 2024 & 2033
- 6.2. North America
 - 6.2.1. Market estimates and forecasts, 2021 - 2033 (USD Million)

- 6.2.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
- 6.2.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
- 6.2.4. U.S.
 - 6.2.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.2.4.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.2.4.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
- 6.2.5. Canada
 - 6.2.5.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.2.5.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.2.5.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
- 6.2.6. Mexico
 - 6.2.6.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.2.6.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.2.6.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
- 6.3. Europe
 - 6.3.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.3.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.3.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
 - 6.3.4. Germany
 - 6.3.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.3.4.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.3.4.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
 - 6.3.5. UK
 - 6.3.5.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.3.5.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.3.5.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
 - 6.3.6. France
 - 6.3.6.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.3.6.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.3.6.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
- 6.4. Asia Pacific
 - 6.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.4.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.4.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
 - 6.4.4. China
 - 6.4.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.4.4.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.4.4.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
 - 6.4.5. India

- 6.4.5.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
- 6.4.5.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
- 6.4.5.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
- 6.4.6. Japan
 - 6.4.6.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.4.6.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.4.6.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
- 6.4.7. South Korea
 - 6.4.7.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.4.7.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.4.7.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
- 6.5. Latin America
 - 6.5.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.5.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.5.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
 - 6.5.4. Brazil
 - 6.5.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.5.4.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.5.4.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
- 6.6. Middle East & Africa
 - 6.6.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.6.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.6.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
 - 6.6.4. Saudi Arabia
 - 6.6.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.6.4.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.6.4.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)
 - 6.6.5. UAE
 - 6.6.5.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
 - 6.6.5.2. Market estimates and forecasts, by technology, 2021 - 2033 (USD Million)
 - 6.6.5.3. Market estimates and forecasts, by End Use, 2021 - 2033 (USD Million)

CHAPTER 7. COMPETITIVE LANDSCAPE

- 7.1. Recent Developments, By Key Market Participants
- 7.2. Company Categorization
- 7.3. Company Market Share & Positioning Analysis, 2024
- 7.4. Heat Map Analysis
- 7.5. Vendor Landscape

- 7.5.1. List of Raw Material Suppliers
- 7.5.2. List of Distributors/Traders
- 7.5.3. List of Other Prominent Manufacturers
- 7.6. List of Prospective End Users
- 7.7. Strategy Mapping
- 7.8. Company Profiles/Listing
 - 7.8.1. Siemens Energy AG
 - 7.8.1.1. Company Overview
 - 7.8.1.2. Financial Performance
 - 7.8.1.3. Product Benchmarking
 - 7.8.2. General Electric Company (GE Grid Solutions)
 - 7.8.2.1. Company Overview
 - 7.8.2.2. Financial Performance
 - 7.8.2.3. Product Benchmarking
 - 7.8.3. Hitachi Energy Ltd.
 - 7.8.3.1. Company Overview
 - 7.8.3.2. Financial Performance
 - 7.8.3.3. Product Benchmarking
 - 7.8.4. Mitsubishi Electric Corporation
 - 7.8.4.1. Company Overview
 - 7.8.4.2. Financial Performance
 - 7.8.4.3. Product Benchmarking
 - 7.8.5. Toshiba Energy Systems & Solutions Corporation
 - 7.8.5.1. Company Overview
 - 7.8.5.2. Financial Performance
 - 7.8.5.3. Product Benchmarking
 - 7.8.6. NR Electric Co., Ltd.
 - 7.8.6.1. Company Overview
 - 7.8.6.2. Financial Performance
 - 7.8.6.3. Product Benchmarking
 - 7.8.7. Hyosung Heavy Industries Corporation
 - 7.8.7.1. Company Overview
 - 7.8.7.2. Financial Performance
 - 7.8.7.3. Product Benchmarking
 - 7.8.8. ABB Ltd.
 - 7.8.8.1. Company Overview
 - 7.8.8.2. Financial Performance
 - 7.8.8.3. Product Benchmarking
 - 7.8.9. Rongxin Power Electronic Co., Ltd. (RXPE)

- 7.8.9.1. Company Overview
- 7.8.9.2. Financial Performance
- 7.8.9.3. Product Benchmarking
- 7.8.10. American Superconductor Corporation (AMSC)
 - 7.8.10.1. Company Overview
 - 7.8.10.2. Financial Performance
 - 7.8.10.3. Product Benchmarking

List Of Tables

LIST OF TABLES

Table 1 Flexible AC transmission systems market estimates & forecasts, 2021 - 2033 (USD Million)

Table 2 Series Compensation market estimates & forecasts, 2021 - 2033 (USD Million)

Table 3 Shunt Compensation market estimates & forecasts, 2021 - 2033 (USD Million)

Table 4 Combined Compensation market estimates & forecasts, 2021 - 2033 (USD Million)

Table 5 Flexible AC transmission systems market estimates & forecasts, in Transmission Lines, 2021 - 2033 (USD Million)

Table 6 Flexible AC transmission systems market estimates & forecasts, in Distribution Networks, 2021 - 2033 (USD Million)

Table 7 Flexible AC transmission systems market estimates & forecasts, in Industrial, 2021 - 2033 (USD Million)

Table 8 Flexible AC transmission systems market estimates & forecasts, in Renewable Energy Integration, 2021 - 2033 (USD Million)

Table 9 North America flexible AC transmission systems market estimates & forecast, 2021 - 2033 (USD Million)

Table 10 North America flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 11 North America flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 12 US flexible AC transmission systems market estimates & forecasts, 2021 - 2033 (USD Million)

Table 13 US flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 14 US flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 15 Canada flexible AC transmission systems market estimates & forecasts, 2021 - 2033 (USD Million)

Table 16 Canada flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 17 Canada flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 18 Mexico flexible AC transmission systems market estimates & forecasts, 2021 - 2033 (USD Million)

Table 19 Mexico flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 20 Mexico flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 21 Europe flexible AC transmission systems market estimates & forecasts, 2021 - 2033 (USD Million)

Table 22 Europe flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 23 Europe flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 24 Germany flexible AC transmission systems market estimates & forecasts, 2021 - 2033 (USD Million)

Table 25 Germany flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 26 Germany flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 27 France flexible AC transmission systems market estimates & forecasts, 2021 - 2033 (USD Million)

Table 28 France flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 29 France flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 30 UK flexible AC transmission systems market estimates & forecast, 2021 - 2033 (USD Million)

Table 31 UK flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 32 UK flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 33 Asia Pacific flexible AC transmission systems market estimates & forecast, 2021 - 2033 (USD Million)

Table 34 Asia Pacific flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 35 Asia Pacific flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 36 China flexible AC transmission systems market estimates & forecast, 2021 - 2033 (USD Million)

Table 37 China flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 38 China flexible AC transmission systems market estimates & forecasts by End

Use, 2021 - 2033 (USD Million)

Table 39 Japan flexible AC transmission systems market estimates & forecast, 2021 - 2033 (USD Million)

Table 40 Japan flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 41 Japan flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 42 South Korea flexible AC transmission systems market estimates & forecast, 2021 - 2033 (USD Million)

Table 43 South Korea flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 44 South Korea flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 45 India flexible AC transmission systems market estimates & forecast, 2021 - 2033 (USD Million)

Table 46 India flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 47 India flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 48 Latin America flexible AC transmission systems Market Estimates & forecasts, 2021 - 2033 (USD Million)

Table 49 Latin America flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 50 Latin America flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 51 Brazil flexible AC transmission systems market estimates & forecasts, 2021 - 2033 (USD Million)

Table 52 Brazil flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 53 Brazil flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 54 Middle East & Africa flexible AC transmission systems market estimates & forecast, 2021 - 2033 (USD Million)

Table 55 Middle East & Africa flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 56 Middle East & Africa flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 57 Saudi Arabia flexible AC transmission systems market estimates & forecasts, 2021 - 2033 (USD Million)

Table 58 Saudi Arabia flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 59 Saudi Arabia flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

Table 60 UAE flexible AC transmission systems market estimates & forecast, 2021 - 2033 (USD Million)

Table 61 UAE flexible AC transmission systems market estimates & forecasts by technology, 2021 - 2033 (USD Million)

Table 62 UAE flexible AC transmission systems market estimates & forecasts by End Use, 2021 - 2033 (USD Million)

List Of Figures

LIST OF FIGURES

Fig. 1 Market Segmentation

Fig. 2 Information Procurement

Fig. 3 Data Analysis Models

Fig. 4 Market Formulation And Validation

Fig. 5 Data Validating & Publishing

Fig. 6 Market Snapshot

Fig. 7 Segmental Outlook -Technology & End Use

Fig. 8 Competitive Outlook

Fig. 9 Flexible AC Transmission Systems (FACTS) market outlook, 2021 - 2033 (USD Million)

Fig. 10 Value Chain Analysis

Fig. 11 Market Dynamics

Fig. 12 Porter's Analysis

Fig. 13 PESTEL Analysis

Fig. 14 Flexible AC Transmission Systems (FACTS) Market, By Technology: Key Takeaways

Fig. 15 Flexible AC Transmission Systems (FACTS) Market, By Technology: Market Share, 2024 & 2033

Fig. 16 Flexible AC Transmission Systems (FACTS) Market, By End Use: Key Takeaways

Fig. 17 Flexible AC Transmission Systems (FACTS) Market, By End Use: Market Share, 2024 & 2033

Fig. 18 Flexible AC Transmission Systems (FACTS) Market: Regional Analysis, 2024 & 2033

Fig. 19 Flexible AC Transmission Systems (FACTS) Market, By Region: Key Takeaways

I would like to order

Product name: Flexible AC Transmission Systems (FACTS) Market Size, Share & Trends Analysis Report By Technology (Series Compensation, Shunt Compensation, Combined Compensation), By End-use, By Region, And Segment Forecasts, 2025 - 2033

Product link: <https://marketpublishers.com/r/FF557D8C4D02EN.html>

Price: US\$ 5,950.00 (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/FF557D8C4D02EN.html>