

Power Capacitor Market Forecasts to 2034 – Global Analysis By Capacitor Type (Shunt Power Capacitors, Series Power Capacitors, Power Factor Correction Capacitors, Harmonic Filter Capacitors, Coupling Capacitors, and DC Power Capacitors), Dielectric Material, Voltage Range, End-Use Industry, Application, Sales Channel, and By Geography

<https://marketpublishers.com/r/PCAB45872EF8EN.html>

Date: August 2026

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: PCAB45872EF8EN

Abstracts

According to Statistics MRC, the Global Power Capacitor Market is accounted for \$19.2 billion in 2026 and is expected to reach \$42.8 billion by 2034 growing at a CAGR of 10.5% during the forecast period. Power capacitors are passive electrical components used in power systems to store electrical energy, improve power factor, reduce transmission losses, enhance voltage stability, and filter harmonic distortions in electrical networks. These devices are essential for efficient power transmission and distribution, industrial power systems, and renewable energy integration. The market encompasses various capacitor types including shunt power capacitors, series power capacitors, power factor correction capacitors, harmonic filter capacitors, coupling capacitors, and DC power capacitors, utilizing dielectric materials such as polypropylene film, paper film, mixed dielectric, ceramic, and other materials. Growing demand for energy efficiency, increasing renewable energy integration, expanding power infrastructure investment, and rising focus on power quality improvement are key drivers of market expansion across all regions.

Market Dynamics:

Driver:

Growing demand for energy efficiency and power factor correction

The increasing focus on energy efficiency and power quality improvement in electrical systems is a primary driver for the power capacitor market. Power capacitors are essential for power factor correction, reducing reactive power consumption, lowering energy losses, and improving overall electrical system efficiency. Industrial facilities, commercial buildings, and utilities are investing in power factor correction to reduce electricity costs and comply with utility requirements. The growing adoption of power factor correction systems in manufacturing, data centers, and commercial complexes drives capacitor demand. Regulatory standards promoting energy efficiency are further supporting adoption. As energy costs rise and efficiency regulations tighten, power capacitor demand continues growing across all end-use sectors.

Restraint:

High replacement and maintenance costs

The significant costs associated with capacitor replacement and maintenance represent a major restraint for the power capacitor market. Power capacitors have limited operational life and require periodic replacement. Failure of capacitors can cause system disruptions and equipment damage. Regular testing and monitoring are required to ensure performance and reliability. Premium pricing for high-quality capacitors affects adoption in cost-sensitive applications. Developing regions may face budget constraints limiting capacitor investment. These cost and maintenance factors may affect replacement cycles and limit adoption, particularly in price-sensitive markets with constrained budgets.

Opportunity:

Growing renewable energy integration and grid modernization

The increasing integration of renewable energy sources and grid modernization initiatives present significant opportunities for power capacitor market expansion. Renewable energy systems including solar and wind require power capacitors for power quality improvement, voltage support, and harmonic filtering. The expansion of renewable energy capacity is creating demand for capacitor banks in grid connection systems. Smart grid technologies including advanced metering and automation require sophisticated power conditioning equipment. Electric vehicle charging infrastructure development requires power quality solutions. As renewable energy capacity grows and

grids modernize, power capacitors capture growing market share, enabling reliable and efficient power delivery.

Threat:

Competition from alternative power quality solutions

Competition from alternative power quality solutions including active harmonic filters, static VAR compensators, and advanced power electronics poses significant threats to the power capacitor market. Active harmonic filters offer superior harmonic mitigation capabilities. Static VAR compensators provide dynamic reactive power support. Power electronics solutions may offer more precise control. Technological advancements may reduce the cost and complexity of alternatives. This competition may limit capacitor adoption in certain applications where advanced solutions are preferred.

Covid-19 Impact:

The COVID-19 pandemic had a mixed impact on the power capacitor market. Initial disruptions included supply chain interruptions, manufacturing slowdowns, and project delays in industrial and infrastructure sectors. However, the pandemic accelerated focus on energy efficiency and grid resilience. Government stimulus packages included energy infrastructure investment. Post-pandemic, industrial production recovery and infrastructure investment have resumed, with continued focus on energy efficiency and renewable energy integration supporting capacitor demand.

The Shunt Power Capacitors segment is expected to be the largest during the forecast period

The Shunt Power Capacitors segment is expected to account for the largest market share during the forecast period, driven by their widespread use in power factor correction, voltage support, and reactive power compensation in distribution and transmission networks. Shunt capacitors are connected in parallel with power lines to improve power factor and reduce losses, providing essential reactive power support. The segment benefits from established manufacturing infrastructure, technology maturity, and broad application across utility, industrial, and commercial sectors. Growing investment in grid modernization, power factor correction, and renewable energy integration drives shunt capacitor demand. As power systems evolve and efficiency priorities intensify, shunt power capacitors maintain the largest capacitor type segment share.

The Polypropylene Film segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the Polypropylene Film segment is predicted to witness the highest growth rate, fueled by advantages including low dielectric losses, high insulation resistance, long service life, and excellent temperature stability. Polypropylene film capacitors offer reliable performance in AC and DC applications including power factor correction, filtering, and energy storage. The segment benefits from increasing preference for high-quality, reliable capacitor technologies. Applications in renewable energy systems, electric vehicles, and power electronics are expanding. As technology advancements improve performance and cost-effectiveness, polypropylene film capacitors deliver the fastest dielectric material segment growth.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share, supported by established utility infrastructure, high industrial and commercial power quality awareness, and significant investment in grid modernization. The United States leads regional market growth with substantial investment in power quality solutions and energy efficiency. Strong regulatory frameworks drive adoption of power factor correction and harmonic filtering technologies. Industrial and commercial demand for power quality solutions supports capacitor demand. With established infrastructure and continued modernization investment, North America maintains its dominant market position.

Region with highest CAGR:

Over the forecast period, the Asia-Pacific region is anticipated to exhibit the highest CAGR, driven by rapid industrialization, urbanization, expanding power infrastructure, and increasing focus on energy efficiency and power quality improvement across countries including China, India, and Southeast Asia. The region's large and growing population and expanding economies create substantial demand for power quality solutions. Government infrastructure development programs and energy efficiency initiatives are accelerating investment. Growing renewable energy integration and industrial expansion create capacitor demand. As power demand grows and efficiency awareness increases, Asia Pacific delivers the fastest power capacitor market growth globally.

Key players in the market

Some of the key players in Power Capacitor Market include Hitachi Energy Ltd., ABB Ltd., Schneider Electric SE, Siemens Energy AG, Eaton Corporation plc, GE Vernova Inc., TDK Corporation, Vishay Intertechnology, Inc., Ducati Energia S.p.A., Circutor S.A., ICAR S.p.A., Lifasa International, Artech Group, RTR Energia S.L., Samwha Capacitor Group, and Electronicon Kondensatoren GmbH.

Key Developments:

In June 2026, Hitachi Energy initiated a major expansion at its Lenzburg, Switzerland facility as part of its global \$9 billion USD infrastructure investment program, scaling up production of power electronics and power semiconductors critical for HVDC transmission, grid stabilization, and high-voltage capacitor bank controls.

In March 2026, TDK announced the launch of its compact X1 class capacitors, designed to handle high-stress industrial power quality and automotive high-voltage environments up to 1000 V DC.

In February 2026, Artech finalized the 100% acquisition of RTR Energia, a Madrid-based manufacturer of power capacitors and power quality solutions, directly incorporating advanced capacitor technologies and expanding its Network Reliability division.

In February 2026, Vishay Intertechnology expanded its 193 PUR-SI snap-in power aluminum capacitor series with 500 V and 600 V voltage ratings, targeting high-voltage solar inverters, industrial power factor correction, and EV charging platforms.

Capacitor Types Covered:

Shunt Power Capacitors

Series Power Capacitors

Power Factor Correction Capacitors

Harmonic Filter Capacitors

Coupling Capacitors

DC Power Capacitors

Dielectric Materials Covered:

Polypropylene Film

Paper Film

Mixed Dielectric

Ceramic

Other Dielectric Materials

Voltage Ranges Covered:

Low Voltage

Medium Voltage

High Voltage

Extra High Voltage

End-Use Industries Covered:

Utilities

Industrial

Commercial

Residential

Renewable Energy

Oil & Gas

Mining

Data Centers

Transportation Infrastructure

Applications Covered:

Power Factor Correction

Harmonic Filtering

Voltage Regulation

Reactive Power Compensation

Motor Starting

HVDC Systems

Renewable Energy Integration

Substation Support

Sales Channels Covered:

Direct Sales

Authorized Distributors

System Integrators

OEM Supply

Regions Covered:

North America

United States

Canada

Mexico

Europe

United Kingdom

Germany

France

Italy

Spain

Netherlands

Belgium

Sweden

Switzerland

Poland

Rest of Europe

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Thailand

Malaysia

Singapore

Vietnam

Rest of Asia Pacific

South America

Brazil

Argentina

Colombia

Chile

Peru

Rest of South America

Rest of the World (RoW)

Middle East

Saudi Arabia

United Arab Emirates

Qatar

Israel

Rest of Middle East

Africa

South Africa

Egypt

Morocco

Rest of Africa

What our report offers:

Market share assessments for the regional and country-level segments

Strategic recommendations for the new entrants

Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2032 and 2034

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

Company profiling with detailed strategies, financials, and recent developments

Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

- 1.1 Market Snapshot and Key Highlights
- 1.2 Growth Drivers, Challenges, and Opportunities
- 1.3 Competitive Landscape Overview
- 1.4 Strategic Insights and Recommendations

2 RESEARCH FRAMEWORK

- 2.1 Study Objectives and Scope
- 2.2 Stakeholder Analysis
- 2.3 Research Assumptions and Limitations
- 2.4 Research Methodology
 - 2.4.1 Data Collection (Primary and Secondary)
 - 2.4.2 Data Modeling and Estimation Techniques
 - 2.4.3 Data Validation and Triangulation
 - 2.4.4 Analytical and Forecasting Approach

3 MARKET DYNAMICS AND TREND ANALYSIS

- 3.1 Market Definition and Structure
- 3.2 Key Market Drivers
- 3.3 Market Restraints and Challenges
- 3.4 Growth Opportunities and Investment Hotspots
- 3.5 Industry Threats and Risk Assessment
- 3.6 Technology and Innovation Landscape
- 3.7 Emerging and High-Growth Markets
- 3.8 Regulatory and Policy Environment
- 3.9 Impact of COVID-19 and Recovery Outlook

4 COMPETITIVE AND STRATEGIC ASSESSMENT

- 4.1 Porter's Five Forces Analysis
 - 4.1.1 Supplier Bargaining Power
 - 4.1.2 Buyer Bargaining Power
 - 4.1.3 Threat of Substitutes
 - 4.1.4 Threat of New Entrants

- 4.1.5 Competitive Rivalry
- 4.2 Market Share Analysis of Key Players
- 4.3 Product Benchmarking and Performance Comparison

5 GLOBAL POWER CAPACITOR MARKET, BY CAPACITOR TYPE

- 5.1 Shunt Power Capacitors
- 5.2 Series Power Capacitors
- 5.3 Power Factor Correction Capacitors
- 5.4 Harmonic Filter Capacitors
- 5.5 Coupling Capacitors
- 5.6 DC Power Capacitors

6 GLOBAL POWER CAPACITOR MARKET, BY DIELECTRIC MATERIAL

- 6.1 Polypropylene Film
- 6.2 Paper Film
- 6.3 Mixed Dielectric
- 6.4 Ceramic
- 6.5 Other Dielectric Materials

7 GLOBAL POWER CAPACITOR MARKET, BY VOLTAGE RANGE

- 7.1 Low Voltage
- 7.2 Medium Voltage
- 7.3 High Voltage
- 7.4 Extra High Voltage

8 GLOBAL POWER CAPACITOR MARKET, BY END-USE INDUSTRY

- 8.1 Utilities
- 8.2 Industrial
- 8.3 Commercial
- 8.4 Residential
- 8.5 Renewable Energy
- 8.6 Oil & Gas
- 8.7 Mining
- 8.8 Data Centers
- 8.9 Transportation Infrastructure

9 GLOBAL POWER CAPACITOR MARKET, BY APPLICATION

- 9.1 Power Factor Correction
- 9.2 Harmonic Filtering
- 9.3 Voltage Regulation
- 9.4 Reactive Power Compensation
- 9.5 Motor Starting
- 9.6 HVDC Systems
- 9.7 Renewable Energy Integration
- 9.8 Substation Support

10 GLOBAL POWER CAPACITOR MARKET, BY SALES CHANNEL

- 10.1 Direct Sales
- 10.2 Authorized Distributors
- 10.3 System Integrators
- 10.4 OEM Supply

11 GLOBAL POWER CAPACITOR MARKET, BY GEOGRAPHY

- 11.1 North America
 - 11.1.1 United States
 - 11.1.2 Canada
 - 11.1.3 Mexico
- 11.2 Europe
 - 11.2.1 United Kingdom
 - 11.2.2 Germany
 - 11.2.3 France
 - 11.2.4 Italy
 - 11.2.5 Spain
 - 11.2.6 Netherlands
 - 11.2.7 Belgium
 - 11.2.8 Sweden
 - 11.2.9 Switzerland
 - 11.2.10 Poland
 - 11.2.11 Rest of Europe
- 11.3 Asia Pacific
 - 11.3.1 China

- 11.3.2 Japan
- 11.3.3 India
- 11.3.4 South Korea
- 11.3.5 Australia
- 11.3.6 Indonesia
- 11.3.7 Thailand
- 11.3.8 Malaysia
- 11.3.9 Singapore
- 11.3.10 Vietnam
- 11.3.11 Rest of Asia Pacific
- 11.4 South America
 - 11.4.1 Brazil
 - 11.4.2 Argentina
 - 11.4.3 Colombia
 - 11.4.4 Chile
 - 11.4.5 Peru
 - 11.4.6 Rest of South America
- 11.5 Rest of the World (RoW)
 - 11.5.1 Middle East
 - 11.5.1.1 Saudi Arabia
 - 11.5.1.2 United Arab Emirates
 - 11.5.1.3 Qatar
 - 11.5.1.4 Israel
 - 11.5.1.5 Rest of Middle East
 - 11.5.2 Africa
 - 11.5.2.1 South Africa
 - 11.5.2.2 Egypt
 - 11.5.2.3 Morocco
 - 11.5.2.4 Rest of Africa

12 STRATEGIC MARKET INTELLIGENCE

- 12.1 Industry Value Network and Supply Chain Assessment
- 12.2 White-Space and Opportunity Mapping
- 12.3 Product Evolution and Market Life Cycle Analysis
- 12.4 Channel, Distributor, and Go-to-Market Assessment

13 INDUSTRY DEVELOPMENTS AND STRATEGIC INITIATIVES

- 13.1 Mergers and Acquisitions
- 13.2 Partnerships, Alliances, and Joint Ventures
- 13.3 New Product Launches and Certifications
- 13.4 Capacity Expansion and Investments
- 13.5 Other Strategic Initiatives

14 COMPANY PROFILES

- 14.1 Hitachi Energy Ltd.
- 14.2 ABB Ltd.
- 14.3 Schneider Electric SE
- 14.4 Siemens Energy AG
- 14.5 Eaton Corporation plc
- 14.6 GE Vernova Inc.
- 14.7 TDK Corporation
- 14.8 Vishay Intertechnology, Inc.
- 14.9 Ducati Energia S.p.A.
- 14.10 Circutor S.A.
- 14.11 ICAR S.p.A.
- 14.12 Lifasa International
- 14.13 Artech Group
- 14.14 RTR Energia S.L.
- 14.15 Samwha Capacitor Group
- 14.16 Electronicon Kondensatoren GmbH

List Of Tables

LIST OF TABLES

Table 1 Global Power Capacitor Market Outlook, By Region (2023–2034) (\$MN)
Table 2 Global Power Capacitor Market Outlook, By Capacitor Type (2023–2034) (\$MN)
Table 3 Global Power Capacitor Market Outlook, By Shunt Power Capacitors (2023–2034) (\$MN)
Table 4 Global Power Capacitor Market Outlook, By Series Power Capacitors (2023–2034) (\$MN)
Table 5 Global Power Capacitor Market Outlook, By Power Factor Correction Capacitors (2023–2034) (\$MN)
Table 6 Global Power Capacitor Market Outlook, By Harmonic Filter Capacitors (2023–2034) (\$MN)
Table 7 Global Power Capacitor Market Outlook, By Coupling Capacitors (2023–2034) (\$MN)
Table 8 Global Power Capacitor Market Outlook, By DC Power Capacitors (2023–2034) (\$MN)
Table 9 Global Power Capacitor Market Outlook, By Dielectric Material (2023–2034) (\$MN)
Table 10 Global Power Capacitor Market Outlook, By Polypropylene Film (2023–2034) (\$MN)
Table 11 Global Power Capacitor Market Outlook, By Paper Film (2023–2034) (\$MN)
Table 12 Global Power Capacitor Market Outlook, By Mixed Dielectric (2023–2034) (\$MN)
Table 13 Global Power Capacitor Market Outlook, By Ceramic (2023–2034) (\$MN)
Table 14 Global Power Capacitor Market Outlook, By Other Dielectric Materials (2023–2034) (\$MN)
Table 15 Global Power Capacitor Market Outlook, By Voltage Range (2023–2034) (\$MN)
Table 16 Global Power Capacitor Market Outlook, By Low Voltage (2023–2034) (\$MN)
Table 17 Global Power Capacitor Market Outlook, By Medium Voltage (2023–2034) (\$MN)
Table 18 Global Power Capacitor Market Outlook, By High Voltage (2023–2034) (\$MN)
Table 19 Global Power Capacitor Market Outlook, By Extra High Voltage (2023–2034) (\$MN)
Table 20 Global Power Capacitor Market Outlook, By End-Use Industry (2023–2034) (\$MN)
Table 21 Global Power Capacitor Market Outlook, By Utilities (2023–2034) (\$MN)

Table 22 Global Power Capacitor Market Outlook, By Industrial (2023–2034) (\$MN)

Table 23 Global Power Capacitor Market Outlook, By Commercial (2023–2034) (\$MN)

Table 24 Global Power Capacitor Market Outlook, By Residential (2023–2034) (\$MN)

Table 25 Global Power Capacitor Market Outlook, By Renewable Energy (2023–2034) (\$MN)

Table 26 Global Power Capacitor Market Outlook, By Oil & Gas (2023–2034) (\$MN)

Table 27 Global Power Capacitor Market Outlook, By Mining (2023–2034) (\$MN)

Table 28 Global Power Capacitor Market Outlook, By Data Centers (2023–2034) (\$MN)

Table 29 Global Power Capacitor Market Outlook, By Transportation Infrastructure (2023–2034) (\$MN)

Table 30 Global Power Capacitor Market Outlook, By Application (2023–2034) (\$MN)

Table 31 Global Power Capacitor Market Outlook, By Power Factor Correction (2023–2034) (\$MN)

Table 32 Global Power Capacitor Market Outlook, By Harmonic Filtering (2023–2034) (\$MN)

Table 33 Global Power Capacitor Market Outlook, By Voltage Regulation (2023–2034) (\$MN)

Table 34 Global Power Capacitor Market Outlook, By Reactive Power Compensation (2023–2034) (\$MN)

Table 35 Global Power Capacitor Market Outlook, By Motor Starting (2023–2034) (\$MN)

Table 36 Global Power Capacitor Market Outlook, By HVDC Systems (2023–2034) (\$MN)

Table 37 Global Power Capacitor Market Outlook, By Renewable Energy Integration (2023–2034) (\$MN)

Table 38 Global Power Capacitor Market Outlook, By Substation Support (2023–2034) (\$MN)

Table 39 Global Power Capacitor Market Outlook, By Sales Channel (2023–2034) (\$MN)

Table 40 Global Power Capacitor Market Outlook, By Direct Sales (2023–2034) (\$MN)

Table 41 Global Power Capacitor Market Outlook, By Authorized Distributors (2023–2034) (\$MN)

Table 42 Global Power Capacitor Market Outlook, By System Integrators (2023–2034) (\$MN)

Table 43 Global Power Capacitor Market Outlook, By OEM Supply (2023–2034) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Rest of the World (RoW) Regions are also represented in the same manner as above.

I would like to order

Product name: Power Capacitor Market Forecasts to 2034 – Global Analysis By Capacitor Type (Shunt Power Capacitors, Series Power Capacitors, Power Factor Correction Capacitors, Harmonic Filter Capacitors, Coupling Capacitors, and DC Power Capacitors), Dielectric Material, Voltage Range, End-Use Industry, Application, Sales Channel, and By Geography

Product link: <https://marketpublishers.com/r/PCAB45872EF8EN.html>

Price: US\$ 4,150.00 (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/PCAB45872EF8EN.html>