

Surge Arrester Market to Reach USD 4.19 Billion by 2035, Growing at 5.8% CAGR

Since arrester procurement usually accounts for 2-4% of substation construction budgets, the surge arrester market directly benefits from these capital programs

NEW YORK, NY, UNITED STATES, July 24, 2026 /EINPresswire.com/ -- The Surge Arrester Market reached an estimated USD 2.38 billion in 2025 and is projected to grow from USD 2.52 billion in 2026 to USD 4.19 billion by 2035, registering a CAGR of 5.8% during the forecast period (2026–2035).



Market Overview

Surge arresters, also known as lightning arresters or transient voltage surge suppressors, are protective devices designed to limit overvoltage transients in electrical power systems and protect equipment from damage caused by lightning strikes, switching surges, and other transient overvoltage events. These critical components operate by providing a low-impedance path to ground for surge currents, diverting dangerous voltage spikes away from sensitive equipment and preventing insulation breakdown. Surge arresters typically utilize metal oxide varistor (MOV) technology, which exhibits high resistance at normal operating voltages but becomes highly conductive during overvoltage events. Modern surge arresters incorporate zinc oxide elements that provide superior energy handling

“

Polymeric-housed arresters dominate the Surge Arrester Market with approximately 58% revenue share, reflecting utility preference for lighter, explosion-resistant designs.”

Prashant Hake

capability, faster response times, and enhanced reliability compared to older silicon carbide designs. These devices are essential for protecting transformers, circuit breakers, switchgear, transmission lines, substations, and sensitive electronic equipment across utility and industrial applications.

The [Surge Arrester market size](#) is experiencing steady growth driven by several key factors. The increasing investment in power transmission and distribution infrastructure, particularly in developing regions, is a primary growth driver. The need to protect aging electrical infrastructure and modernize power grids is creating demand for surge protection equipment. The growing installation of renewable energy systems, including solar and wind farms, which require comprehensive surge protection, is supporting market expansion. The increasing sensitivity and value of electrical and electronic equipment in industrial and commercial facilities is driving adoption of surge protection solutions.

Key industry trends shaping the surge arrester market include the development of advanced metal oxide surge arresters with higher energy handling capacity, improved response times, and enhanced reliability. The increasing integration of surge arresters with digital monitoring and communication capabilities, enabling remote condition monitoring and predictive maintenance, is gaining momentum. The adoption of compact and lightweight surge arrester designs for pole-mounted and substation applications is growing. The development of surge arresters for high-voltage direct current (HVDC) applications is emerging as a specialized segment.

The market is also benefiting from technological advancements in metal oxide varistor materials and manufacturing processes. Innovations in zinc oxide grain structure, dopant formulations, and fabrication techniques are improving energy handling capability and reducing aging effects. The development of enhanced voltage grading and field distribution designs is improving performance and reliability. Advances in polymer housing materials and composite technologies are extending service life and improving environmental resistance.

Policy and regulatory frameworks are influencing the surge arrester market landscape. Grid reliability and power quality standards require the installation of appropriate surge protection. Renewable energy integration standards and grid interconnection requirements mandate surge protection in renewable energy systems. Industrial safety and equipment protection regulations encourage surge protection adoption. Utility procurement specifications and quality standards govern surge arrester selection.

The demand outlook for surge arresters remains positive, supported by the continued investment in power infrastructure, the modernization of power grids, and the expansion of renewable energy. The replacement of aging surge arrester installations and the upgrading of existing infrastructure will drive market growth. The development of smart grid technologies and the increasing digitization of power systems will create additional demand.

Get Free Sample Report for Detailed Market Insights:

https://www.marketresearchfuture.com/sample_request/4298

Market Segmentation

By Voltage Rating: The market is segmented into low voltage (below 1 kV), medium voltage (1 kV to 72 kV), high voltage (72 kV to 400 kV), and extra high voltage (above 400 kV). Medium voltage

arresters represent the largest segment, used in distribution systems and industrial applications. High voltage arresters serve transmission applications. Extra high voltage arresters are used in high-voltage transmission lines and major substations.

By Type: The market is categorized into metal oxide surge arresters and silicon carbide surge arresters. Metal oxide arresters dominate the market, offering superior performance, higher energy handling, and greater reliability. Silicon carbide arresters are legacy technology, gradually being replaced by metal oxide designs.

By Application: The market is segmented into transmission lines, substations, distribution networks, renewable energy systems, industrial facilities, and commercial buildings. Transmission lines require high-voltage surge arresters. Substations utilize various voltage ratings for equipment protection. Distribution networks use medium-voltage arresters. Renewable energy systems require specialized protection for inverters and transformers.

By End-User Industry: The market serves various end-user industries including utilities, industrial, commercial, and renewable energy. Utilities represent the largest end-user segment, driven by transmission and distribution infrastructure investments. Industrial applications include manufacturing, oil and gas, and mining operations.

By Region: The market is analyzed across North America, Europe, Asia-Pacific, Latin America, and the Middle East and Africa. Asia-Pacific is the largest and fastest-growing regional market, driven by rapid infrastructure development and grid expansion.

You can buy this market report at:

https://www.marketresearchfuture.com/checkout?currency=one_user-USD&report_id=4298

Regional Analysis

North America: The North American surge arrester market is characterized by mature utility infrastructure and a focus on grid modernization and reliability. The United States leads the region, driven by transmission and distribution upgrades and renewable energy integration. Canada's utility sector contributes to demand. The region's focus on grid resilience supports surge protection investment.

Europe: Europe is a significant market, driven by renewable energy integration, grid modernization, and strong power quality standards. Germany, UK, France, and Italy are key markets. The region's focus on energy transition and smart grid development supports surge arrester demand.

Asia-Pacific: Asia-Pacific is the largest and fastest-growing surge arrester market, driven by rapid infrastructure development, grid expansion, and urbanization. China leads the market, followed by India, Japan, and Southeast Asian countries. The region's substantial investment in power transmission and distribution supports significant demand.

Latin America: The Latin American market is developing, with Brazil and Mexico as key markets. Grid expansion, modernization projects, and renewable energy development drive demand. Infrastructure investment supports market growth.

Middle East and Africa: The region presents growing opportunities, with investments in power infrastructure and grid development. UAE, Saudi Arabia, and South Africa are key markets. Urban development and industrial expansion support demand.

Competitive Landscape / Key Players

The global surge arrester market is characterized by a mix of established electrical equipment manufacturers and specialized surge protection companies. Key companies operating in the market include:

ABB Ltd.: A global leader in electrical equipment, offering comprehensive surge arrester solutions for utility, industrial, and commercial applications. ABB's broad portfolio and global presence support its market leadership.

Siemens Energy AG: A leading provider of electrical equipment, including surge arresters for power transmission and distribution applications. Siemens' expertise in grid technology supports its market position.

Hubbell Incorporated: A major manufacturer of electrical equipment, providing surge arresters for utility and industrial applications. Hubbell's extensive product line and market presence support its position.

Eaton Corporation plc: A global power management company offering surge arresters for industrial, commercial, and utility applications. Eaton's electrical protection portfolio supports its market presence.

Schneider Electric SE: A global energy management company providing surge protection solutions for various applications. Schneider's focus on power quality and reliability supports its market position.

Other notable players include TE Connectivity, Phoenix Contact, Leviton Manufacturing, and numerous regional manufacturers. Strategic developments include product innovations, technological partnerships, and expansion into emerging markets.

Latest Industry News & Developments

December 2025: ABB announced a new generation of surge arresters featuring enhanced energy handling capability and integrated monitoring for condition-based maintenance. The new arresters target transmission and substation applications.

November 2025: Siemens Energy secured a contract to supply surge arresters for a major transmission line project in Asia, supporting grid expansion and reliability improvement initiatives.

October 2025: Hubbell introduced a new line of compact surge arresters for pole-mounted distribution applications, featuring enhanced environmental resistance and reduced weight.

Market Challenges & Opportunities

Key Restraints: The surge arrester market faces challenges including competition from alternative protection technologies and devices. Price sensitivity in some markets and regions affects profitability and investment in advanced technologies. The long product lifecycle and replacement cycles affect market growth rates. Environmental regulations regarding materials, particularly for polymer housings, create compliance requirements. Technical challenges in ultra-high voltage and HVDC applications require specialized solutions.

Emerging Opportunities: The surge arrester market presents opportunities in the growing renewable energy sector, requiring comprehensive surge protection for solar, wind, and energy storage systems. Grid modernization and smart grid initiatives create demand for advanced surge protection with monitoring capabilities. The expansion of transmission infrastructure in developing regions offers substantial growth. The development of HVDC transmission creates demand for specialized surge arresters.

Future Potential: The long-term potential of the surge arrester market is supported by continued investment in power infrastructure, grid modernization, and renewable energy expansion. Technological advancements in MOV materials and monitoring capabilities will enhance performance. The essential role of surge arresters in protecting critical power infrastructure ensures sustained market demand and long-term growth potential.

To explore more market insights, visit us at:

<https://www.marketresearchfuture.com/reports/surge-arrester-market-4298>

Final Market Summary

The global Surge Arrester market is poised for steady growth, with projections indicating an expansion from USD 2.52 billion in 2026 to USD 4.19 billion by 2035, at a CAGR of 5.8%. This growth is driven by increasing investment in power infrastructure, grid modernization, renewable energy expansion, and the need to protect sensitive electrical equipment. Asia-Pacific leads as the largest and fastest-growing market, supported by rapid infrastructure development and grid expansion. Technological advancements in metal oxide materials, monitoring capabilities, and compact designs are enhancing performance and functionality. Despite challenges including competition and price sensitivity, the essential role of surge arresters in protecting critical power infrastructure ensures sustained market demand and long-term growth potential throughout the forecast period.

More Related Reports from MRFR Library:

Glove Box Market <https://www.marketresearchfuture.com/reports/glove-box-market-7827>

Handheld Blower Market <https://www.marketresearchfuture.com/reports/handheld-blower-market-11429>

Portable Water Purifier Market <https://www.marketresearchfuture.com/reports/portable-water-purifier-market-11601>

Diamond Mining Market <https://www.marketresearchfuture.com/reports/diamond-mining-market-11617>

Vacuum Pumps Market <https://www.marketresearchfuture.com/reports/vacuum-pumps-market-11708>

Cutting Equipment Market <https://www.marketresearchfuture.com/reports/cutting-equipment-market-11728>

Sleeving Machines Market <https://www.marketresearchfuture.com/reports/sleeving-machines-market-11858>

Cryogenic Capsules Market <https://www.marketresearchfuture.com/reports/cryogenic-capsules-market-11862>

Textile Recycling Market <https://www.marketresearchfuture.com/reports/textile-recycling-market-11863>

3D Food Printing Market <https://www.marketresearchfuture.com/reports/3d-food-printing-market-11953>

Larry Wilson

WantStats Research And Media Pvt. Ltd.

+1 855-661-4441

[email us here](#)

Visit us on social media:

[LinkedIn](#)

[Facebook](#)

[YouTube](#)

[X](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/928823132>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors

try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2026 Newsmatics Inc. All Right Reserved.