

Nuclear Microreactor Global Market Insights 2025, Analysis and Forecast to 2030, by Manufacturers, Regions, Technology, Application

https://marketpublishers.com/r/NDCBED3F83D9EN.html

Date: April 2025

Pages: 86

Price: US\$ 3,200.00 (Single User License)

ID: NDCBED3F83D9EN

Abstracts

Nuclear Microreactor Market Summary

Introduction

Nuclear microreactors are compact, modular nuclear power systems designed to deliver small-scale, reliable energy for defense, remote civil power, industrial applications, and space missions. The industry is characterized by its focus on safety, scalability, and low carbon emissions, addressing energy needs in isolated or high-demand settings. These systems offer advantages over traditional reactors, including rapid deployment and reduced infrastructure needs, driven by global decarbonization goals and technological advancements in nuclear engineering.

Market Size and Growth Forecast

The global nuclear microreactor market was valued at USD 210 million to USD 340 million in 2024, with a projected CAGR of 8.0% to 10.0% from 2025 to 2030. Growth is driven by energy resilience and space exploration demands.

Regional Analysis

North America grows at 8-10%, with the United States leading due to defense and tech investments; trends focus on modular designs.

Europe experiences a growth rate of 7.5-9.5%, with the UK advancing through energy innovation; trends emphasize sustainability.



Asia Pacific sees a growth rate of 8.5-10.5%, led by Japan's nuclear expertise; trends highlight industrial power.

The Rest of the World grows at 7-9%, with Australia exploring remote energy; trends focus on civil applications.

Application Analysis

Defence grows at 8.5-10.5%, powering military bases; trends favor portability.

Remote Civil Power grows at 7.5-9.5%, serving off-grid areas; trends emphasize reliability.

Remote Industrial Power grows at 8-10%, supporting mining and oil; trends focus on scalability.

Power in Space grows at 9-11%, aiding space missions; trends explore compact designs.

Key Market Players

Rolls-Royce, from London, UK, develops microreactors for defense and civil use.

Westinghouse Electric, based in Cranberry Township, Pennsylvania, USA, focuses on scalable nuclear solutions.

Toshiba, headquartered in Tokyo, Japan, offers compact reactor technologies.

X-energy, from Rockville, Maryland, USA, pioneers advanced microreactor designs.

NANO Nuclear Energy, based in New York, USA, targets portable nuclear power.

BWXT Technologies, from Lynchburg, Virginia, USA, excels in defense applications.

Japan Atomic Energy Agency, from Tokai, Japan, advances nuclear research.

Mitsubishi Heavy Industries, headquartered in Tokyo, Japan, focuses on industrial power.



OKB Gidropress, from Russia, provides robust reactor designs.

NuScale, based in Portland, Oregon, USA, leads in modular nuclear systems.

Porter's Five Forces Analysis

The threat of new entrants is low, with high regulatory and technical barriers.

The threat of substitutes is moderate, as renewables compete but lack reliability.

Buyer power is low, with limited customers like governments.

Supplier power is moderate, with specialized fuel needs.

Competitive rivalry is moderate, with innovation driving differentiation.

Market Opportunities and Challenges

Opportunities

Decarbonization goals boost demand.

Space exploration expands applications.

Remote energy needs grow.

Challenges

Regulatory hurdles delay deployment.

Public perception of nuclear risks persists.

High development costs limit scalability.

Merger and Acquisition News



NANO Nuclear Energy Closes Acquisition of MMR® and Pylon Technologies (Date: August 2024): This enhances portable reactor offerings, accelerating market entry.

New York Company Acquires Bankrupt Nuclear Startup Assets (Date: September 2024): This bolsters microreactor IP, strengthening competition.

Google Buys Nuclear Power for Al Datacenters (Date: October 2024): This pioneers industrial use, driving demand.

Growth Trend Analysis

Last Energy's 2024 Texan microreactor plant targets industrial power, boosting adoption. Westinghouse and Radiant's 2024 milestones in small reactors enhance scalability. DOE's \$150 billion outage cost estimate, with 80% weather-related, underscores reliability needs, supporting an 8-10% CAGR through 2030.



Contents

CHAPTER 1 EXECUTIVE SUMMARY

CHAPTER 2 ABBREVIATION AND ACRONYMS

CHAPTER 3 PREFACE

- 3.1 Research Scope
- 3.2 Research Sources
 - 3.2.1 Data Sources
 - 3.2.2 Assumptions
- 3.3 Research Method

CHAPTER 4 MARKET LANDSCAPE

- 4.1 Market Overview
- 4.2 Classification/Types
- 4.3 Application/End Users

CHAPTER 5 MARKET TREND ANALYSIS

- 5.1 Introduction
- 5.2 Drivers
- 5.3 Restraints
- 5.4 Opportunities
- 5.5 Threats

CHAPTER 6 INDUSTRY CHAIN ANALYSIS

- 6.1 Upstream/Suppliers Analysis
- 6.2 Nuclear Microreactor Analysis
 - 6.2.1 Technology Analysis
 - 6.2.2 Cost Analysis
 - 6.2.3 Market Channel Analysis
- 6.3 Downstream Buyers/End Users

CHAPTER 7 LATEST MARKET DYNAMICS



- 7.1 Latest News
- 7.2 Merger and Acquisition
- 7.3 Planned/Future Project
- 7.4 Policy Dynamics

CHAPTER 8 TRADING ANALYSIS

- 8.1 Export of Nuclear Microreactor by Region
- 8.2 Import of Nuclear Microreactor by Region
- 8.3 Balance of Trade

CHAPTER 9 HISTORICAL AND FORECAST NUCLEAR MICROREACTOR MARKET IN NORTH AMERICA (2020-2030)

- 9.1 Nuclear Microreactor Market Size
- 9.2 Nuclear Microreactor Demand by End Use
- 9.3 Competition by Players/Suppliers
- 9.4 Type Segmentation and Price
- 9.5 Key Countries Analysis
 - 9.5.1 United States
 - 9.5.2 Canada
 - 9.5.3 Mexico

CHAPTER 10 HISTORICAL AND FORECAST NUCLEAR MICROREACTOR MARKET IN SOUTH AMERICA (2020-2030)

- 10.1 Nuclear Microreactor Market Size
- 10.2 Nuclear Microreactor Demand by End Use
- 10.3 Competition by Players/Suppliers
- 10.4 Type Segmentation and Price
- 10.5 Key Countries Analysis
 - 10.5.1 Brazil
 - 10.5.2 Argentina
 - 10.5.3 Chile
 - 10.5.4 Peru

CHAPTER 11 HISTORICAL AND FORECAST NUCLEAR MICROREACTOR MARKET IN ASIA & PACIFIC (2020-2030)



- 11.1 Nuclear Microreactor Market Size
- 11.2 Nuclear Microreactor Demand by End Use
- 11.3 Competition by Players/Suppliers
- 11.4 Type Segmentation and Price
- 11.5 Key Countries Analysis
 - 11.5.1 China
 - 11.5.2 India
 - 11.5.3 Japan
 - 11.5.4 South Korea
 - 11.5.5 Southest Asia
 - 11.5.6 Australia

CHAPTER 12 HISTORICAL AND FORECAST NUCLEAR MICROREACTOR MARKET IN EUROPE (2020-2030)

- 12.1 Nuclear Microreactor Market Size
- 12.2 Nuclear Microreactor Demand by End Use
- 12.3 Competition by Players/Suppliers
- 12.4 Type Segmentation and Price
- 12.5 Key Countries Analysis
 - 12.5.1 Germany
 - 12.5.2 France
 - 12.5.3 United Kingdom
 - 12.5.4 Italy
 - 12.5.5 Spain
 - 12.5.6 Belgium
 - 12.5.7 Netherlands
 - 12.5.8 Austria
 - 12.5.9 Poland
 - 12.5.10 Russia

CHAPTER 13 HISTORICAL AND FORECAST NUCLEAR MICROREACTOR MARKET IN MEA (2020-2030)

- 13.1 Nuclear Microreactor Market Size
- 13.2 Nuclear Microreactor Demand by End Use
- 13.3 Competition by Players/Suppliers
- 13.4 Type Segmentation and Price
- 13.5 Key Countries Analysis



- 13.5.1 Egypt
- 13.5.2 Israel
- 13.5.3 South Africa
- 13.5.4 Gulf Cooperation Council Countries
- 13.5.5 Turkey

CHAPTER 14 SUMMARY FOR GLOBAL NUCLEAR MICROREACTOR MARKET (2020-2025)

- 14.1 Nuclear Microreactor Market Size
- 14.2 Nuclear Microreactor Demand by End Use
- 14.3 Competition by Players/Suppliers
- 14.4 Type Segmentation and Price

CHAPTER 15 GLOBAL NUCLEAR MICROREACTOR MARKET FORECAST (2025-2030)

- 15.1 Nuclear Microreactor Market Size Forecast
- 15.2 Nuclear Microreactor Demand Forecast
- 15.3 Competition by Players/Suppliers
- 15.4 Type Segmentation and Price Forecast

CHAPTER 16 ANALYSIS OF GLOBAL KEY VENDORS

- 16.1 Rolls-Royce
 - 16.1.1 Company Profile
 - 16.1.2 Main Business and Nuclear Microreactor Information
 - 16.1.3 SWOT Analysis of Rolls-Royce
- 16.1.4 Rolls-Royce Nuclear Microreactor Sales, Revenue, Price and Gross Margin (2020-2025)
- 16.2 Westinghouse Electric
 - 16.2.1 Company Profile
 - 16.2.2 Main Business and Nuclear Microreactor Information
 - 16.2.3 SWOT Analysis of Westinghouse Electric
- 16.2.4 Westinghouse Electric Nuclear Microreactor Sales, Revenue, Price and Gross Margin (2020-2025)
- 16.3 Toshiba
 - 16.3.1 Company Profile
 - 16.3.2 Main Business and Nuclear Microreactor Information



16.3.3 SWOT Analysis of Toshiba

16.3.4 Toshiba Nuclear Microreactor Sales, Revenue, Price and Gross Margin (2020-2025)

16.4 X-energy

16.4.1 Company Profile

16.4.2 Main Business and Nuclear Microreactor Information

16.4.3 SWOT Analysis of X-energy

16.4.4 X-energy Nuclear Microreactor Sales, Revenue, Price and Gross Margin (2020-2025)

16.5 NANO Nuclear Energy

16.5.1 Company Profile

16.5.2 Main Business and Nuclear Microreactor Information

16.5.3 SWOT Analysis of NANO Nuclear Energy

16.5.4 NANO Nuclear Energy Nuclear Microreactor Sales, Revenue, Price and Gross Margin (2020-2025)

16.6 BWXT Technologies

16.6.1 Company Profile

16.6.2 Main Business and Nuclear Microreactor Information

16.6.3 SWOT Analysis of BWXT Technologies

16.6.4 BWXT Technologies Nuclear Microreactor Sales, Revenue, Price and Gross

Margin (2020-2025)

Please ask for sample pages for full companies list

Tables and Figures

Table Abbreviation and Acronyms List

Table Research Scope of Nuclear Microreactor Report

Table Data Sources of Nuclear Microreactor Report

Table Major Assumptions of Nuclear Microreactor Report

Figure Market Size Estimated Method

Figure Major Forecasting Factors

Figure Nuclear Microreactor Picture

Table Nuclear Microreactor Classification

Table Nuclear Microreactor Applications List

Table Drivers of Nuclear Microreactor Market

Table Restraints of Nuclear Microreactor Market

Table Opportunities of Nuclear Microreactor Market

Table Threats of Nuclear Microreactor Market

Table Covid-19 Impact For Nuclear Microreactor Market

Table Raw Materials Suppliers List

Table Different Production Methods of Nuclear Microreactor



Table Cost Structure Analysis of Nuclear Microreactor

Table Key End Users List

Table Latest News of Nuclear Microreactor Market

Table Merger and Acquisition List

Table Planned/Future Project of Nuclear Microreactor Market

Table Policy of Nuclear Microreactor Market

Table 2020-2030 Regional Export of Nuclear Microreactor

Table 2020-2030 Regional Import of Nuclear Microreactor

Table 2020-2030 Regional Trade Balance

Figure 2020-2030 Regional Trade Balance

Table 2020-2030 North America Nuclear Microreactor Market Size and Market Volume List

Figure 2020-2030 North America Nuclear Microreactor Market Size and CAGR

Figure 2020-2030 North America Nuclear Microreactor Market Volume and CAGR

Table 2020-2030 North America Nuclear Microreactor Demand List by Application

Table 2020-2025 North America Nuclear Microreactor Key Players Sales List

Table 2020-2025 North America Nuclear Microreactor Key Players Market Share List

Table 2020-2030 North America Nuclear Microreactor Demand List by Type

Table 2020-2025 North America Nuclear Microreactor Price List by Type

Table 2020-2030 United States Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 United States Nuclear Microreactor Import & Export List

Table 2020-2030 Canada Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Canada Nuclear Microreactor Import & Export List

Table 2020-2030 Mexico Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Mexico Nuclear Microreactor Import & Export List

Table 2020-2030 South America Nuclear Microreactor Market Size and Market Volume List

Figure 2020-2030 South America Nuclear Microreactor Market Size and CAGR

Figure 2020-2030 South America Nuclear Microreactor Market Volume and CAGR

Table 2020-2030 South America Nuclear Microreactor Demand List by Application

Table 2020-2025 South America Nuclear Microreactor Key Players Sales List

Table 2020-2025 South America Nuclear Microreactor Key Players Market Share List

Table 2020-2030 South America Nuclear Microreactor Demand List by Type

Table 2020-2025 South America Nuclear Microreactor Price List by Type

Table 2020-2030 Brazil Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Brazil Nuclear Microreactor Import & Export List

Table 2020-2030 Argentina Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Argentina Nuclear Microreactor Import & Export List



Table 2020-2030 Chile Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Chile Nuclear Microreactor Import & Export List

Table 2020-2030 Peru Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Peru Nuclear Microreactor Import & Export List

Table 2020-2030 Asia & Pacific Nuclear Microreactor Market Size and Market Volume List

Figure 2020-2030 Asia & Pacific Nuclear Microreactor Market Size and CAGR

Figure 2020-2030 Asia & Pacific Nuclear Microreactor Market Volume and CAGR

Table 2020-2030 Asia & Pacific Nuclear Microreactor Demand List by Application

Table 2020-2025 Asia & Pacific Nuclear Microreactor Key Players Sales List

Table 2020-2025 Asia & Pacific Nuclear Microreactor Key Players Market Share List

Table 2020-2030 Asia & Pacific Nuclear Microreactor Demand List by Type

Table 2020-2025 Asia & Pacific Nuclear Microreactor Price List by Type

Table 2020-2030 China Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 China Nuclear Microreactor Import & Export List

Table 2020-2030 India Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 India Nuclear Microreactor Import & Export List

Table 2020-2030 Japan Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Japan Nuclear Microreactor Import & Export List

Table 2020-2030 South Korea Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 South Korea Nuclear Microreactor Import & Export List

Table 2020-2030 Southeast Asia Nuclear Microreactor Market Size List

Table 2020-2030 Southeast Asia Nuclear Microreactor Market Volume List

Table 2020-2030 Southeast Asia Nuclear Microreactor Import List

Table 2020-2030 Southeast Asia Nuclear Microreactor Export List

Table 2020-2030 Australia Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Australia Nuclear Microreactor Import & Export List

Table 2020-2030 Europe Nuclear Microreactor Market Size and Market Volume List

Figure 2020-2030 Europe Nuclear Microreactor Market Size and CAGR

Figure 2020-2030 Europe Nuclear Microreactor Market Volume and CAGR

Table 2020-2030 Europe Nuclear Microreactor Demand List by Application

Table 2020-2025 Europe Nuclear Microreactor Key Players Sales List

Table 2020-2025 Europe Nuclear Microreactor Key Players Market Share List

Table 2020-2030 Europe Nuclear Microreactor Demand List by Type

Table 2020-2025 Europe Nuclear Microreactor Price List by Type

Table 2020-2030 Germany Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Germany Nuclear Microreactor Import & Export List

Table 2020-2030 France Nuclear Microreactor Market Size and Market Volume List



Table 2020-2030 France Nuclear Microreactor Import & Export List

Table 2020-2030 United Kingdom Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 United Kingdom Nuclear Microreactor Import & Export List

Table 2020-2030 Italy Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Italy Nuclear Microreactor Import & Export List

Table 2020-2030 Spain Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Spain Nuclear Microreactor Import & Export List

Table 2020-2030 Belgium Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Belgium Nuclear Microreactor Import & Export List

Table 2020-2030 Netherlands Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Netherlands Nuclear Microreactor Import & Export List

Table 2020-2030 Austria Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Austria Nuclear Microreactor Import & Export List

Table 2020-2030 Poland Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Poland Nuclear Microreactor Import & Export List

Table 2020-2030 Russia Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Russia Nuclear Microreactor Import & Export List

Table 2020-2030 MEA Nuclear Microreactor Market Size and Market Volume List

Figure 2020-2030 MEA Nuclear Microreactor Market Size and CAGR

Figure 2020-2030 MEA Nuclear Microreactor Market Volume and CAGR

Table 2020-2030 MEA Nuclear Microreactor Demand List by Application

Table 2020-2025 MEA Nuclear Microreactor Key Players Sales List

Table 2020-2025 MEA Nuclear Microreactor Key Players Market Share List

Table 2020-2030 MEA Nuclear Microreactor Demand List by Type

Table 2020-2025 MEA Nuclear Microreactor Price List by Type

Table 2020-2030 Egypt Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Egypt Nuclear Microreactor Import & Export List

Table 2020-2030 Israel Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Israel Nuclear Microreactor Import & Export List

Table 2020-2030 South Africa Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 South Africa Nuclear Microreactor Import & Export List

Table 2020-2030 Gulf Cooperation Council Countries Nuclear Microreactor Market Size and Market Volume List

Table 2020-2030 Gulf Cooperation Council Countries Nuclear Microreactor Import & Export List

Table 2020-2030 Turkey Nuclear Microreactor Market Size and Market Volume List



Table 2020-2030 Turkey Nuclear Microreactor Import & Export List

Table 2020-2025 Global Nuclear Microreactor Market Size List by Region

Table 2020-2025 Global Nuclear Microreactor Market Size Share List by Region

Table 2020-2025 Global Nuclear Microreactor Market Volume List by Region

Table 2020-2025 Global Nuclear Microreactor Market Volume Share List by Region

Table 2020-2025 Global Nuclear Microreactor Demand List by Application

Table 2020-2025 Global Nuclear Microreactor Demand Market Share List by Application

Table 2020-2025 Global Nuclear Microreactor Key Vendors Sales List

Table 2020-2025 Global Nuclear Microreactor Key Vendors Sales Share List

Figure 2020-2025 Global Nuclear Microreactor Market Volume and Growth Rate

Table 2020-2025 Global Nuclear Microreactor Key Vendors Revenue List

Figure 2020-2025 Global Nuclear Microreactor Market Size and Growth Rate

Table 2020-2025 Global Nuclear Microreactor Key Vendors Revenue Share List

Table 2020-2025 Global Nuclear Microreactor Demand List by Type

Table 2020-2025 Global Nuclear Microreactor Demand Market Share List by Type

Table 2020-2025 Regional Nuclear Microreactor Price List

Table 2025-2030 Global Nuclear Microreactor Market Size List by Region

Table 2025-2030 Global Nuclear Microreactor Market Size Share List by Region

Table 2025-2030 Global Nuclear Microreactor Market Volume List by Region

Table 2025-2030 Global Nuclear Microreactor Market Volume Share List by Region

Table 2025-2030 Global Nuclear Microreactor Demand List by Application

Table 2025-2030 Global Nuclear Microreactor Demand Market Share List by Application

Table 2025-2030 Global Nuclear Microreactor Key Vendors Sales List

Table 2025-2030 Global Nuclear Microreactor Key Vendors Sales Share List

Figure 2025-2030 Global Nuclear Microreactor Market Volume and Growth Rate

Table 2025-2030 Global Nuclear Microreactor Key Vendors Revenue List

Figure 2025-2030 Global Nuclear Microreactor Market Size and Growth Rate

Table 2025-2030 Global Nuclear Microreactor Key Vendors Revenue Share List

Table 2025-2030 Global Nuclear Microreactor Demand List by Type

Table 2025-2030 Global Nuclear Microreactor Demand Market Share List by Type

Table 2025-2030 Nuclear Microreactor Regional Price List

Table Rolls-Royce Information

Table SWOT Analysis of Rolls-Royce

Table 2020-2025 Rolls-Royce Nuclear Microreactor Sale Volume Price Cost Revenue

Figure 2020-2025 Rolls-Royce Nuclear Microreactor Sale Volume and Growth Rate

Figure 2020-2025 Rolls-Royce Nuclear Microreactor Market Share

Table Westinghouse Electric Information

Table SWOT Analysis of Westinghouse Electric

Table 2020-2025 Westinghouse Electric Nuclear Microreactor Sale Volume Price Cost



Revenue

Figure 2020-2025 Westinghouse Electric Nuclear Microreactor Sale Volume and Growth Rate

Figure 2020-2025 Westinghouse Electric Nuclear Microreactor Market Share

Table Toshiba Information

Table SWOT Analysis of Toshiba

Table 2020-2025 Toshiba Nuclear Microreactor Sale Volume Price Cost Revenue

Figure 2020-2025 Toshiba Nuclear Microreactor Sale Volume and Growth Rate

Figure 2020-2025 Toshiba Nuclear Microreactor Market Share

Table X-energy Information

Table SWOT Analysis of X-energy

Table 2020-2025 X-energy Nuclear Microreactor Sale Volume Price Cost Revenue

Figure 2020-2025 X-energy Nuclear Microreactor Sale Volume and Growth Rate

Figure 2020-2025 X-energy Nuclear Microreactor Market Share

Table NANO Nuclear Energy Information

Table SWOT Analysis of NANO Nuclear Energy

Table 2020-2025 NANO Nuclear Energy Nuclear Microreactor Sale Volume Price Cost Revenue

Figure 2020-2025 NANO Nuclear Energy Nuclear Microreactor Sale Volume and Growth Rate

Figure 2020-2025 NANO Nuclear Energy Nuclear Microreactor Market Share

Table BWXT Technologies Information

Table SWOT Analysis of BWXT Technologies

Table 2020-2025 BWXT Technologies Nuclear Microreactor Sale Volume Price Cost Revenue

Figure 2020-2025 BWXT Technologies Nuclear Microreactor Sale Volume and Growth Rate

Figure 2020-2025 BWXT Technologies Nuclear Microreactor Market Share

• • • • • •



I would like to order

Product name: Nuclear Microreactor Global Market Insights 2025, Analysis and Forecast to 2030, by

Manufacturers, Regions, Technology, Application

Product link: https://marketpublishers.com/r/NDCBED3F83D9EN.html

Price: US\$ 3,200.00 (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/NDCBED3F83D9EN.html