

# Global Neutron Generators Market Analysis and Forecast 2024-2030

<https://marketpublishers.com/r/GEDE7650F8DCEN.html>

Date: April 2024

Pages: 129

Price: US\$ 4,950.00 (Single User License)

ID: GEDE7650F8DCEN

## Abstracts

Neutron generators are neutron source devices which contain compact linear accelerators and that produce neutrons by fusing isotopes of hydrogen together. The fusion reactions take place in these devices by accelerating either deuterium, tritium, or a mixture of these two isotopes into a metal hydride target which also contains deuterium, tritium or a mixture of these isotopes. Fusion of deuterium atoms (D + D) results in the formation of a He-3 ion and a neutron with a kinetic energy of approximately 2.5 MeV. Fusion of a deuterium and a tritium atom (D + T) results in the formation of a He-4 ion and a neutron with a kinetic energy of approximately 14.1 MeV. Neutron generators have applications in medicine, security, and materials analysis.

According to APO Research, The global Neutron Generators market is projected to grow from US\$ million in 2024 to US\$ million by 2030, at a Compound Annual Growth Rate (CAGR) of % during the forecast period.

The major manufacturers of global neutron generators include VNIIA, Adelphi Technology, Thermo Fisher Scientific, Phoenix, Gradel (NSD Fusion), etc. The top five manufacturers in the world account for more than 60% of the market share.

North America is currently the world's largest market for neutron generators with a market share of about 40%, followed by Europe with a market share of nearly 25%.

In terms of production side, this report researches the Neutron Generators production, growth rate, market share by manufacturers and by region (region level and country level), from 2019 to 2024, and forecast to 2030.

In terms of consumption side, this report focuses on the sales of Neutron Generators by

region (region level and country level), by Company, by Type and by Application. from 2019 to 2024 and forecast to 2030.

This report presents an overview of global market for Neutron Generators, capacity, output, revenue and price. Analyses of the global market trends, with historic market revenue or sales data for 2019 - 2023, estimates for 2024, and projections of CAGR through 2030.

This report researches the key producers of Neutron Generators, also provides the consumption of main regions and countries. Of the upcoming market potential for Neutron Generators, and key regions or countries of focus to forecast this market into various segments and sub-segments. Country specific data and market value analysis for the U.S., Canada, Mexico, Brazil, China, Japan, South Korea, Southeast Asia, India, Germany, the U.K., Italy, Middle East, Africa, and Other Countries.

This report focuses on the Neutron Generators sales, revenue, market share and industry ranking of main manufacturers, data from 2019 to 2024. Identification of the major stakeholders in the global Neutron Generators market, and analysis of their competitive landscape and market positioning based on recent developments and segmental revenues. This report will help stakeholders to understand the competitive landscape and gain more insights and position their businesses and market strategies in a better way.

This report analyzes the segments data by Type and by Application, sales, revenue, and price, from 2019 to 2030. Evaluation and forecast the market size for Neutron Generators sales, projected growth trends, production technology, application and end-user industry.

Descriptive company profiles of the major global players, including Phoenix, Sodern, Thermo Fisher Scientific, VNIIA, Adelphi Technology, AMETEK ORTEC and Gradel (NSD Fusion), etc.

Neutron Generators segment by Company

Phoenix

Sodern

Thermo Fisher Scientific

VNIIA

Adelphi Technology

AMETEK ORTEC

Gradel (NSD Fusion)

### Neutron Generators segment by Type

Portable Neutron Generators

Stationary Neutron Generators

### Neutron Generators segment by Application

Oil Prospecting

Security

Research

Others

### Neutron Generators segment by Region

North America

U.S.

Canada

Europe

Germany

France

U.K.

Italy

Russia

Asia-Pacific

China

Japan

South Korea

India

Australia

China Taiwan

Indonesia

Thailand

Malaysia

Latin America

Mexico

Brazil

Argentina

Middle East & Africa

Turkey

Saudi Arabia

UAE

## Study Objectives

1. To analyze and research the global status and future forecast, involving, production, value, consumption, growth rate (CAGR), market share, historical and forecast.
2. To present the key manufacturers, capacity, production, revenue, market share, and Recent Developments.
3. To split the breakdown data by regions, type, manufacturers, and Application.
4. To analyze the global and key regions market potential and advantage, opportunity and challenge, restraints, and risks.
5. To identify significant trends, drivers, influence factors in global and regions.
6. To analyze competitive developments such as expansions, agreements, new product launches, and acquisitions in the market.

## Reasons to Buy This Report

1. This report will help the readers to understand the competition within the industries and strategies for the competitive environment to enhance the potential profit. The report also focuses on the competitive landscape of the global Neutron Generators market, and introduces in detail the market share, industry ranking, competitor ecosystem, market performance, new product development, operation situation, expansion, and acquisition. etc. of the main players, which helps the readers to identify the main competitors and deeply understand the competition pattern of the market.
2. This report will help stakeholders to understand the global industry status and trends of Neutron Generators and provides them with information on key market drivers, restraints, challenges, and opportunities.

3. This report will help stakeholders to understand competitors better and gain more insights to strengthen their position in their businesses. The competitive landscape section includes the market share and rank (in volume and value), competitor ecosystem, new product development, expansion, and acquisition.
4. This report stays updated with novel technology integration, features, and the latest developments in the market.
5. This report helps stakeholders to gain insights into which regions to target globally.
6. This report helps stakeholders to gain insights into the end-user perception concerning the adoption of Neutron Generators.
7. This report helps stakeholders to identify some of the key players in the market and understand their valuable contribution.

## Chapter Outline

Chapter 1: Introduces the report scope of the report, executive summary of different market segments (by type and by application, etc), including the market size of each market segment, future development potential, and so on. It offers a high-level view of the current state of the market and its likely evolution in the short to mid-term, and long term.

Chapter 2: Introduces the market dynamics, latest developments of the market, the driving factors and restrictive factors of the market, the challenges and risks faced by manufacturers in the industry, and the analysis of relevant policies in the industry.

Chapter 3: Neutron Generators production/output of global and key producers (regions/countries). It provides a quantitative analysis of the production, and development potential of each producer in the next six years.

Chapter 4: Sales (consumption), revenue of Neutron Generators in global, regional level and country level. It provides a quantitative analysis of the market size and development potential of each region and its main countries and introduces the market development, future development prospects, market space of each country in the world.

Chapter 5: Detailed analysis of Neutron Generators manufacturers competitive landscape, price, sales, revenue, market share and industry ranking, latest development

plan, merger, and acquisition information, etc.

Chapter 6: Provides the analysis of various market segments by type, covering the sales, revenue, average price, and development potential of each market segment, to help readers find the blue ocean market in different market segments.

Chapter 7: Provides the analysis of various market segments by application, covering the sales, revenue, average price, and development potential of each market segment, to help readers find the blue ocean market in different downstream markets.

Chapter 8: Provides profiles of key manufacturers, introducing the basic situation of the main companies in the market in detail, including product descriptions and specifications, Neutron Generators sales, revenue, price, gross margin, and recent development, etc.

Chapter 9: North America (US & Canada) by type, by application and by country, sales, and revenue for each segment.

Chapter 10: Europe by type, by application and by country, sales, and revenue for each segment.

Chapter 11: China by type, by application, sales, and revenue for each segment.

Chapter 12: Asia (Excluding China) by type, by application and by region, sales, and revenue for each segment.

Chapter 13: Middle East, Africa, Latin America by type, by application and by country, sales, and revenue for each segment.

Chapter 14: Analysis of industrial chain, sales channel, key raw materials, distributors and customers.

Chapter 15: The main concluding insights of the report.

Chapter 15: The main concluding insights of the report.

## Contents

### **1 MARKET OVERVIEW**

- 1.1 Product Definition
- 1.2 Neutron Generators Market by Type
  - 1.2.1 Global Neutron Generators Market Size by Type, 2019 VS 2023 VS 2030
  - 1.2.2 Portable Neutron Generators
  - 1.2.3 Stationary Neutron Generators
- 1.3 Neutron Generators Market by Application
  - 1.3.1 Global Neutron Generators Market Size by Application, 2019 VS 2023 VS 2030
  - 1.3.2 Oil Prospecting
  - 1.3.3 Security
  - 1.3.4 Research
  - 1.3.5 Others
- 1.4 Assumptions and Limitations
- 1.5 Study Goals and Objectives

### **2 NEUTRON GENERATORS MARKET DYNAMICS**

- 2.1 Neutron Generators Industry Trends
- 2.2 Neutron Generators Industry Drivers
- 2.3 Neutron Generators Industry Opportunities and Challenges
- 2.4 Neutron Generators Industry Restraints

### **3 GLOBAL NEUTRON GENERATORS PRODUCTION OVERVIEW**

- 3.1 Global Neutron Generators Production Capacity (2019-2030)
- 3.2 Global Neutron Generators Production by Region: 2019 VS 2023 VS 2030
- 3.3 Global Neutron Generators Production by Region
  - 3.3.1 Global Neutron Generators Production by Region (2019-2024)
  - 3.3.2 Global Neutron Generators Production by Region (2025-2030)
  - 3.3.3 Global Neutron Generators Production Market Share by Region (2019-2030)
- 3.4 North America
- 3.5 Europe
- 3.6 Japan
- 3.7 Asia-Pacific

### **4 GLOBAL MARKET GROWTH PROSPECTS**



- 4.1 Global Neutron Generators Revenue Estimates and Forecasts (2019-2030)
- 4.2 Global Neutron Generators Revenue by Region
  - 4.2.1 Global Neutron Generators Revenue by Region: 2019 VS 2023 VS 2030
  - 4.2.2 Global Neutron Generators Revenue by Region (2019-2024)
  - 4.2.3 Global Neutron Generators Revenue by Region (2025-2030)
  - 4.2.4 Global Neutron Generators Revenue Market Share by Region (2019-2030)
- 4.3 Global Neutron Generators Sales Estimates and Forecasts 2019-2030
- 4.4 Global Neutron Generators Sales by Region
  - 4.4.1 Global Neutron Generators Sales by Region: 2019 VS 2023 VS 2030
  - 4.4.2 Global Neutron Generators Sales by Region (2019-2024)
  - 4.4.3 Global Neutron Generators Sales by Region (2025-2030)
  - 4.4.4 Global Neutron Generators Sales Market Share by Region (2019-2030)
- 4.5 US & Canada
- 4.6 Europe
- 4.7 China
- 4.8 Asia (Excluding China)
- 4.9 Middle East, Africa and Latin America

## **5 MARKET COMPETITIVE LANDSCAPE BY MANUFACTURERS**

- 5.1 Global Neutron Generators Revenue by Manufacturers
  - 5.1.1 Global Neutron Generators Revenue by Manufacturers (2019-2024)
  - 5.1.2 Global Neutron Generators Revenue Market Share by Manufacturers (2019-2024)
  - 5.1.3 Global Neutron Generators Manufacturers Revenue Share Top 10 and Top 5 in 2023
- 5.2 Global Neutron Generators Sales by Manufacturers
  - 5.2.1 Global Neutron Generators Sales by Manufacturers (2019-2024)
  - 5.2.2 Global Neutron Generators Sales Market Share by Manufacturers (2019-2024)
  - 5.2.3 Global Neutron Generators Manufacturers Sales Share Top 10 and Top 5 in 2023
- 5.3 Global Neutron Generators Sales Price by Manufacturers (2019-2024)
- 5.4 Global Neutron Generators Key Manufacturers Ranking, 2022 VS 2023 VS 2024
- 5.5 Global Neutron Generators Key Manufacturers Manufacturing Sites & Headquarters
- 5.6 Global Neutron Generators Manufacturers, Product Type & Application
- 5.7 Global Neutron Generators Manufacturers Commercialization Time
- 5.8 Market Competitive Analysis
  - 5.8.1 Global Neutron Generators Market CR5 and HHI

5.8.2 2023 Neutron Generators Tier 1, Tier 2, and Tier

## **6 NEUTRON GENERATORS MARKET BY TYPE**

6.1 Global Neutron Generators Revenue by Type

6.1.1 Global Neutron Generators Revenue by Type (2019 VS 2023 VS 2030)

6.1.2 Global Neutron Generators Revenue by Type (2019-2030) & (US\$ Million)

6.1.3 Global Neutron Generators Revenue Market Share by Type (2019-2030)

6.2 Global Neutron Generators Sales by Type

6.2.1 Global Neutron Generators Sales by Type (2019 VS 2023 VS 2030)

6.2.2 Global Neutron Generators Sales by Type (2019-2030) & (Units)

6.2.3 Global Neutron Generators Sales Market Share by Type (2019-2030)

6.3 Global Neutron Generators Price by Type

## **7 NEUTRON GENERATORS MARKET BY APPLICATION**

7.1 Global Neutron Generators Revenue by Application

7.1.1 Global Neutron Generators Revenue by Application (2019 VS 2023 VS 2030)

7.1.2 Global Neutron Generators Revenue by Application (2019-2030) & (US\$ Million)

7.1.3 Global Neutron Generators Revenue Market Share by Application (2019-2030)

7.2 Global Neutron Generators Sales by Application

7.2.1 Global Neutron Generators Sales by Application (2019 VS 2023 VS 2030)

7.2.2 Global Neutron Generators Sales by Application (2019-2030) & (Units)

7.2.3 Global Neutron Generators Sales Market Share by Application (2019-2030)

7.3 Global Neutron Generators Price by Application

## **8 COMPANY PROFILES**

8.1 Phoenix

8.1.1 Phoenix Company Information

8.1.2 Phoenix Business Overview

8.1.3 Phoenix Neutron Generators Sales, Revenue, Price and Gross Margin (2019-2024)

8.1.4 Phoenix Neutron Generators Product Portfolio

8.1.5 Phoenix Recent Developments

8.2 Sodern

8.2.1 Sodern Company Information

8.2.2 Sodern Business Overview

8.2.3 Sodern Neutron Generators Sales, Revenue, Price and Gross Margin

(2019-2024)

8.2.4 Sodern Neutron Generators Product Portfolio

8.2.5 Sodern Recent Developments

8.3 Thermo Fisher Scientific

8.3.1 Thermo Fisher Scientific Company Information

8.3.2 Thermo Fisher Scientific Business Overview

8.3.3 Thermo Fisher Scientific Neutron Generators Sales, Revenue, Price and Gross Margin (2019-2024)

8.3.4 Thermo Fisher Scientific Neutron Generators Product Portfolio

8.3.5 Thermo Fisher Scientific Recent Developments

8.4 VNIIA

8.4.1 VNIIA Company Information

8.4.2 VNIIA Business Overview

8.4.3 VNIIA Neutron Generators Sales, Revenue, Price and Gross Margin (2019-2024)

8.4.4 VNIIA Neutron Generators Product Portfolio

8.4.5 VNIIA Recent Developments

8.5 Adelphi Technology

8.5.1 Adelphi Technology Company Information

8.5.2 Adelphi Technology Business Overview

8.5.3 Adelphi Technology Neutron Generators Sales, Revenue, Price and Gross Margin (2019-2024)

8.5.4 Adelphi Technology Neutron Generators Product Portfolio

8.5.5 Adelphi Technology Recent Developments

8.6 AMETEK ORTEC

8.6.1 AMETEK ORTEC Company Information

8.6.2 AMETEK ORTEC Business Overview

8.6.3 AMETEK ORTEC Neutron Generators Sales, Revenue, Price and Gross Margin (2019-2024)

8.6.4 AMETEK ORTEC Neutron Generators Product Portfolio

8.6.5 AMETEK ORTEC Recent Developments

8.7 Gradel (NSD Fusion)

8.7.1 Gradel (NSD Fusion) Company Information

8.7.2 Gradel (NSD Fusion) Business Overview

8.7.3 Gradel (NSD Fusion) Neutron Generators Sales, Revenue, Price and Gross Margin (2019-2024)

8.7.4 Gradel (NSD Fusion) Neutron Generators Product Portfolio

8.7.5 Gradel (NSD Fusion) Recent Developments

## **9 NORTH AMERICA**

## 9.1 North America Neutron Generators Market Size by Type

9.1.1 North America Neutron Generators Revenue by Type (2019-2030)

9.1.2 North America Neutron Generators Sales by Type (2019-2030)

9.1.3 North America Neutron Generators Price by Type (2019-2030)

## 9.2 North America Neutron Generators Market Size by Application

9.2.1 North America Neutron Generators Revenue by Application (2019-2030)

9.2.2 North America Neutron Generators Sales by Application (2019-2030)

9.2.3 North America Neutron Generators Price by Application (2019-2030)

## 9.3 North America Neutron Generators Market Size by Country

9.3.1 North America Neutron Generators Revenue Grow Rate by Country (2019 VS 2023 VS 2030)

9.3.2 North America Neutron Generators Sales by Country (2019 VS 2023 VS 2030)

9.3.3 North America Neutron Generators Price by Country (2019-2030)

9.3.4 U.S.

9.3.5 Canada

## 10 EUROPE

### 10.1 Europe Neutron Generators Market Size by Type

10.1.1 Europe Neutron Generators Revenue by Type (2019-2030)

10.1.2 Europe Neutron Generators Sales by Type (2019-2030)

10.1.3 Europe Neutron Generators Price by Type (2019-2030)

### 10.2 Europe Neutron Generators Market Size by Application

10.2.1 Europe Neutron Generators Revenue by Application (2019-2030)

10.2.2 Europe Neutron Generators Sales by Application (2019-2030)

10.2.3 Europe Neutron Generators Price by Application (2019-2030)

### 10.3 Europe Neutron Generators Market Size by Country

10.3.1 Europe Neutron Generators Revenue Grow Rate by Country (2019 VS 2023 VS 2030)

10.3.2 Europe Neutron Generators Sales by Country (2019 VS 2023 VS 2030)

10.3.3 Europe Neutron Generators Price by Country (2019-2030)

10.3.4 Germany

10.3.5 France

10.3.6 U.K.

10.3.7 Italy

10.3.8 Russia

## 11 CHINA

## 11.1 China Neutron Generators Market Size by Type

11.1.1 China Neutron Generators Revenue by Type (2019-2030)

11.1.2 China Neutron Generators Sales by Type (2019-2030)

11.1.3 China Neutron Generators Price by Type (2019-2030)

## 11.2 China Neutron Generators Market Size by Application

11.2.1 China Neutron Generators Revenue by Application (2019-2030)

11.2.2 China Neutron Generators Sales by Application (2019-2030)

11.2.3 China Neutron Generators Price by Application (2019-2030)

## **12 ASIA (EXCLUDING CHINA)**

### 12.1 Asia Neutron Generators Market Size by Type

12.1.1 Asia Neutron Generators Revenue by Type (2019-2030)

12.1.2 Asia Neutron Generators Sales by Type (2019-2030)

12.1.3 Asia Neutron Generators Price by Type (2019-2030)

### 12.2 Asia Neutron Generators Market Size by Application

12.2.1 Asia Neutron Generators Revenue by Application (2019-2030)

12.2.2 Asia Neutron Generators Sales by Application (2019-2030)

12.2.3 Asia Neutron Generators Price by Application (2019-2030)

### 12.3 Asia Neutron Generators Market Size by Country

12.3.1 Asia Neutron Generators Revenue Grow Rate by Country (2019 VS 2023 VS 2030)

12.3.2 Asia Neutron Generators Sales by Country (2019 VS 2023 VS 2030)

12.3.3 Asia Neutron Generators Price by Country (2019-2030)

12.3.4 Japan

12.3.5 South Korea

12.3.6 India

12.3.7 Australia

12.3.8 China Taiwan

12.3.9 Southeast Asia

## **13 MIDDLE EAST, AFRICA AND LATIN AMERICA**

### 13.1 Middle East, Africa and Latin America Neutron Generators Market Size by Type

13.1.1 Middle East, Africa and Latin America Neutron Generators Revenue by Type (2019-2030)

13.1.2 Middle East, Africa and Latin America Neutron Generators Sales by Type (2019-2030)

13.1.3 Middle East, Africa and Latin America Neutron Generators Price by Type (2019-2030)

13.2 Middle East, Africa and Latin America Neutron Generators Market Size by Application

13.2.1 Middle East, Africa and Latin America Neutron Generators Revenue by Application (2019-2030)

13.2.2 Middle East, Africa and Latin America Neutron Generators Sales by Application (2019-2030)

13.2.3 Middle East, Africa and Latin America Neutron Generators Price by Application (2019-2030)

13.3 Middle East, Africa and Latin America Neutron Generators Market Size by Country

13.3.1 Middle East, Africa and Latin America Neutron Generators Revenue Growth Rate by Country (2019 VS 2023 VS 2030)

13.3.2 Middle East, Africa and Latin America Neutron Generators Sales by Country (2019 VS 2023 VS 2030)

13.3.3 Middle East, Africa and Latin America Neutron Generators Price by Country (2019-2030)

13.3.4 Mexico

13.3.5 Brazil

13.3.6 Israel

13.3.7 Argentina

13.3.8 Colombia

13.3.9 Turkey

13.3.10 Saudi Arabia

13.3.11 UAE

## **14 VALUE CHAIN AND SALES CHANNELS ANALYSIS**

14.1 Neutron Generators Value Chain Analysis

14.1.1 Neutron Generators Key Raw Materials

14.1.2 Raw Materials Key Suppliers

14.1.3 Manufacturing Cost Structure

14.1.4 Neutron Generators Production Mode & Process

14.2 Neutron Generators Sales Channels Analysis

14.2.1 Direct Comparison with Distribution Share

14.2.2 Neutron Generators Distributors

14.2.3 Neutron Generators Customers

## **15 CONCLUDING INSIGHTS**

## **16 APPENDIX**

16.1 Reasons for Doing This Study

16.2 Research Methodology

16.3 Research Process

16.4 Authors List of This Report

16.5 Data Source

16.5.1 Secondary Sources

16.5.2 Primary Sources

16.6 Disclaimer



## I would like to order

Product name: Global Neutron Generators Market Analysis and Forecast 2024-2030

Product link: <https://marketpublishers.com/r/GEDE7650F8DCEN.html>

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GEDE7650F8DCEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:  
Last name:  
Email:  
Company:  
Address:  
City:  
Zip code:  
Country:  
Tel:  
Fax:  
Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970