

# Global High Performance Thermoelectric Modules (TEM) Market 2023 by Manufacturers, Regions, Type and Application, Forecast to 2029

https://marketpublishers.com/r/G8BF463A0B72EN.html

Date: February 2023 Pages: 116 Price: US\$ 3,480.00 (Single User License) ID: G8BF463A0B72EN

# Abstracts

High Performance Thermoelectric Modules (TEM) are made of Bismuth Telluride alloys and are used for many different thermoelectric cooling applications where temperature difference (DTmax) requirement is above 65°C. In general these thermoelectric modules have a much higher efficiency and are being used in high-value applications.

According to our (Global Info Research) latest study, the global High Performance Thermoelectric Modules (TEM) market size was valued at USD million in 2022 and is forecast to a readjusted size of USD million by 2029 with a CAGR of % during review period. The influence of COVID-19 and the Russia-Ukraine War were considered while estimating market sizes.

This report is a detailed and comprehensive analysis for global High Performance Thermoelectric Modules (TEM) market. Both quantitative and qualitative analyses are presented by manufacturers, by region & country, by Type and by Application. As the market is constantly changing, this report explores the competition, supply and demand trends, as well as key factors that contribute to its changing demands across many markets. Company profiles and product examples of selected competitors, along with market share estimates of some of the selected leaders for the year 2023, are provided.

Key Features:

Global High Performance Thermoelectric Modules (TEM) market size and forecasts, in consumption value (\$ Million), sales quantity (K Units), and average selling prices (US\$/Unit), 2018-2029



Global High Performance Thermoelectric Modules (TEM) market size and forecasts by region and country, in consumption value (\$ Million), sales quantity (K Units), and average selling prices (US\$/Unit), 2018-2029

Global High Performance Thermoelectric Modules (TEM) market size and forecasts, by Type and by Application, in consumption value (\$ Million), sales quantity (K Units), and average selling prices (US\$/Unit), 2018-2029

Global High Performance Thermoelectric Modules (TEM) market shares of main players, shipments in revenue (\$ Million), sales quantity (K Units), and ASP (US\$/Unit), 2018-2023

The Primary Objectives in This Report Are:

To determine the size of the total market opportunity of global and key countries

To assess the growth potential for High Performance Thermoelectric Modules (TEM)

To forecast future growth in each product and end-use market

To assess competitive factors affecting the marketplace

This report profiles key players in the global High Performance Thermoelectric Modules (TEM) market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include CUI Devices, TE Technology, Crystal, WAtronix Inc. and Custom Thermoelectric, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals, COVID-19 and Russia-Ukraine War Influence.

#### Market Segmentation

High Performance Thermoelectric Modules (TEM) market is split by Type and by Application. For the period 2018-2029, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of volume and value. This analysis can help you expand your business by targeting qualified niche markets.



#### Market segment by Type

Higher Temperature Difference

More Heat Pumping Capacity

#### Market segment by Application

Medical

Aerospace & Defense

Electronics

Industrial

Automotive

Others

Major players covered

**CUI** Devices

TE Technology

Crystal

WAtronix Inc.

**Custom Thermoelectric** 

Laird

FULIANJING

ECOGEN

Global High Performance Thermoelectric Modules (TEM) Market 2023 by Manufacturers, Regions, Type and Applicati...



P&N Tech

Thermonamic Electronics

RMT Ltd

TEC Microsystems GmbH

**Yuxiang Electronics** 

EGOO

Shenzhen Tecooler technology

Market segment by region, regional analysis covers

North America (United States, Canada and Mexico)

Europe (Germany, France, United Kingdom, Russia, Italy, and Rest of Europe)

Asia-Pacific (China, Japan, Korea, India, Southeast Asia, and Australia)

South America (Brazil, Argentina, Colombia, and Rest of South America)

Middle East & Africa (Saudi Arabia, UAE, Egypt, South Africa, and Rest of Middle East & Africa)

The content of the study subjects, includes a total of 15 chapters:

Chapter 1, to describe High Performance Thermoelectric Modules (TEM) product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of High Performance Thermoelectric Modules (TEM), with price, sales, revenue and global market share of High Performance Thermoelectric Modules (TEM) from 2018 to 2023.



Chapter 3, the High Performance Thermoelectric Modules (TEM) competitive situation, sales quantity, revenue and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the High Performance Thermoelectric Modules (TEM) breakdown data are shown at the regional level, to show the sales quantity, consumption value and growth by regions, from 2018 to 2029.

Chapter 5 and 6, to segment the sales by Type and application, with sales market share and growth rate by type, application, from 2018 to 2029.

Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value and market share for key countries in the world, from 2017 to 2022.and High Performance Thermoelectric Modules (TEM) market forecast, by regions, type and application, with sales and revenue, from 2024 to 2029.

Chapter 12, market dynamics, drivers, restraints, trends, Porters Five Forces analysis, and Influence of COVID-19 and Russia-Ukraine War.

Chapter 13, the key raw materials and key suppliers, and industry chain of High Performance Thermoelectric Modules (TEM).

Chapter 14 and 15, to describe High Performance Thermoelectric Modules (TEM) sales channel, distributors, customers, research findings and conclusion.



# Contents

# **1 MARKET OVERVIEW**

1.1 Product Overview and Scope of High Performance Thermoelectric Modules (TEM)

1.2 Market Estimation Caveats and Base Year

1.3 Market Analysis by Type

1.3.1 Overview: Global High Performance Thermoelectric Modules (TEM) Consumption Value by Type: 2018 Versus 2022 Versus 2029

- 1.3.2 Higher Temperature Difference
- 1.3.3 More Heat Pumping Capacity
- 1.4 Market Analysis by Application

1.4.1 Overview: Global High Performance Thermoelectric Modules (TEM)

Consumption Value by Application: 2018 Versus 2022 Versus 2029

- 1.4.2 Medical
- 1.4.3 Aerospace & Defense
- 1.4.4 Electronics
- 1.4.5 Industrial
- 1.4.6 Automotive
- 1.4.7 Others

1.5 Global High Performance Thermoelectric Modules (TEM) Market Size & Forecast

1.5.1 Global High Performance Thermoelectric Modules (TEM) Consumption Value (2018 & 2022 & 2029)

1.5.2 Global High Performance Thermoelectric Modules (TEM) Sales Quantity (2018-2029)

1.5.3 Global High Performance Thermoelectric Modules (TEM) Average Price (2018-2029)

# **2 MANUFACTURERS PROFILES**

- 2.1 CUI Devices
  - 2.1.1 CUI Devices Details
  - 2.1.2 CUI Devices Major Business

2.1.3 CUI Devices High Performance Thermoelectric Modules (TEM) Product and Services

2.1.4 CUI Devices High Performance Thermoelectric Modules (TEM) Sales Quantity,

Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.1.5 CUI Devices Recent Developments/Updates

2.2 TE Technology

Global High Performance Thermoelectric Modules (TEM) Market 2023 by Manufacturers, Regions, Type and Applicati...



2.2.1 TE Technology Details

2.2.2 TE Technology Major Business

2.2.3 TE Technology High Performance Thermoelectric Modules (TEM) Product and Services

2.2.4 TE Technology High Performance Thermoelectric Modules (TEM) Sales

Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.2.5 TE Technology Recent Developments/Updates

2.3 Crystal

2.3.1 Crystal Details

2.3.2 Crystal Major Business

2.3.3 Crystal High Performance Thermoelectric Modules (TEM) Product and Services

2.3.4 Crystal High Performance Thermoelectric Modules (TEM) Sales Quantity,

Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.3.5 Crystal Recent Developments/Updates

2.4 WAtronix Inc.

2.4.1 WAtronix Inc. Details

2.4.2 WAtronix Inc. Major Business

2.4.3 WAtronix Inc. High Performance Thermoelectric Modules (TEM) Product and Services

2.4.4 WAtronix Inc. High Performance Thermoelectric Modules (TEM) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.4.5 WAtronix Inc. Recent Developments/Updates

2.5 Custom Thermoelectric

2.5.1 Custom Thermoelectric Details

2.5.2 Custom Thermoelectric Major Business

2.5.3 Custom Thermoelectric High Performance Thermoelectric Modules (TEM) Product and Services

2.5.4 Custom Thermoelectric High Performance Thermoelectric Modules (TEM) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.5.5 Custom Thermoelectric Recent Developments/Updates

2.6 Laird

2.6.1 Laird Details

2.6.2 Laird Major Business

2.6.3 Laird High Performance Thermoelectric Modules (TEM) Product and Services

2.6.4 Laird High Performance Thermoelectric Modules (TEM) Sales Quantity, Average

Price, Revenue, Gross Margin and Market Share (2018-2023)

2.6.5 Laird Recent Developments/Updates

2.7 FULIANJING

2.7.1 FULIANJING Details



2.7.2 FULIANJING Major Business

2.7.3 FULIANJING High Performance Thermoelectric Modules (TEM) Product and Services

2.7.4 FULIANJING High Performance Thermoelectric Modules (TEM) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.7.5 FULIANJING Recent Developments/Updates

2.8 ECOGEN

2.8.1 ECOGEN Details

2.8.2 ECOGEN Major Business

2.8.3 ECOGEN High Performance Thermoelectric Modules (TEM) Product and Services

2.8.4 ECOGEN High Performance Thermoelectric Modules (TEM) Sales Quantity,

Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.8.5 ECOGEN Recent Developments/Updates

2.9 P&N Tech

2.9.1 P&N Tech Details

2.9.2 P&N Tech Major Business

2.9.3 P&N Tech High Performance Thermoelectric Modules (TEM) Product and Services

2.9.4 P&N Tech High Performance Thermoelectric Modules (TEM) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.9.5 P&N Tech Recent Developments/Updates

2.10 Thermonamic Electronics

2.10.1 Thermonamic Electronics Details

2.10.2 Thermonamic Electronics Major Business

2.10.3 Thermonamic Electronics High Performance Thermoelectric Modules (TEM) Product and Services

2.10.4 Thermonamic Electronics High Performance Thermoelectric Modules (TEM) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.10.5 Thermonamic Electronics Recent Developments/Updates

2.11 RMT Ltd

2.11.1 RMT Ltd Details

2.11.2 RMT Ltd Major Business

2.11.3 RMT Ltd High Performance Thermoelectric Modules (TEM) Product and Services

2.11.4 RMT Ltd High Performance Thermoelectric Modules (TEM) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.11.5 RMT Ltd Recent Developments/Updates

2.12 TEC Microsystems GmbH



2.12.1 TEC Microsystems GmbH Details

2.12.2 TEC Microsystems GmbH Major Business

2.12.3 TEC Microsystems GmbH High Performance Thermoelectric Modules (TEM) Product and Services

2.12.4 TEC Microsystems GmbH High Performance Thermoelectric Modules (TEM) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.12.5 TEC Microsystems GmbH Recent Developments/Updates

2.13 Yuxiang Electronics

2.13.1 Yuxiang Electronics Details

2.13.2 Yuxiang Electronics Major Business

2.13.3 Yuxiang Electronics High Performance Thermoelectric Modules (TEM) Product and Services

2.13.4 Yuxiang Electronics High Performance Thermoelectric Modules (TEM) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.13.5 Yuxiang Electronics Recent Developments/Updates

2.14 EGOO

2.14.1 EGOO Details

2.14.2 EGOO Major Business

2.14.3 EGOO High Performance Thermoelectric Modules (TEM) Product and Services

2.14.4 EGOO High Performance Thermoelectric Modules (TEM) Sales Quantity,

Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.14.5 EGOO Recent Developments/Updates

2.15 Shenzhen Tecooler technology

2.15.1 Shenzhen Tecooler technology Details

2.15.2 Shenzhen Tecooler technology Major Business

2.15.3 Shenzhen Tecooler technology High Performance Thermoelectric Modules (TEM) Product and Services

2.15.4 Shenzhen Tecooler technology High Performance Thermoelectric Modules (TEM) Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.15.5 Shenzhen Tecooler technology Recent Developments/Updates

# 3 COMPETITIVE ENVIRONMENT: HIGH PERFORMANCE THERMOELECTRIC MODULES (TEM) BY MANUFACTURER

3.1 Global High Performance Thermoelectric Modules (TEM) Sales Quantity by Manufacturer (2018-2023)

3.2 Global High Performance Thermoelectric Modules (TEM) Revenue by Manufacturer (2018-2023)



3.3 Global High Performance Thermoelectric Modules (TEM) Average Price by Manufacturer (2018-2023)

3.4 Market Share Analysis (2022)

3.4.1 Producer Shipments of High Performance Thermoelectric Modules (TEM) by Manufacturer Revenue (\$MM) and Market Share (%): 2022

3.4.2 Top 3 High Performance Thermoelectric Modules (TEM) Manufacturer Market Share in 2022

3.4.2 Top 6 High Performance Thermoelectric Modules (TEM) Manufacturer Market Share in 2022

3.5 High Performance Thermoelectric Modules (TEM) Market: Overall Company Footprint Analysis

3.5.1 High Performance Thermoelectric Modules (TEM) Market: Region Footprint

3.5.2 High Performance Thermoelectric Modules (TEM) Market: Company Product Type Footprint

3.5.3 High Performance Thermoelectric Modules (TEM) Market: Company Product Application Footprint

3.6 New Market Entrants and Barriers to Market Entry

3.7 Mergers, Acquisition, Agreements, and Collaborations

# 4 CONSUMPTION ANALYSIS BY REGION

4.1 Global High Performance Thermoelectric Modules (TEM) Market Size by Region4.1.1 Global High Performance Thermoelectric Modules (TEM) Sales Quantity byRegion (2018-2029)

4.1.2 Global High Performance Thermoelectric Modules (TEM) Consumption Value by Region (2018-2029)

4.1.3 Global High Performance Thermoelectric Modules (TEM) Average Price by Region (2018-2029)

4.2 North America High Performance Thermoelectric Modules (TEM) Consumption Value (2018-2029)

4.3 Europe High Performance Thermoelectric Modules (TEM) Consumption Value (2018-2029)

4.4 Asia-Pacific High Performance Thermoelectric Modules (TEM) Consumption Value (2018-2029)

4.5 South America High Performance Thermoelectric Modules (TEM) Consumption Value (2018-2029)

4.6 Middle East and Africa High Performance Thermoelectric Modules (TEM) Consumption Value (2018-2029)



# **5 MARKET SEGMENT BY TYPE**

5.1 Global High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2018-2029)

5.2 Global High Performance Thermoelectric Modules (TEM) Consumption Value by Type (2018-2029)

5.3 Global High Performance Thermoelectric Modules (TEM) Average Price by Type (2018-2029)

# **6 MARKET SEGMENT BY APPLICATION**

6.1 Global High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2018-2029)

6.2 Global High Performance Thermoelectric Modules (TEM) Consumption Value by Application (2018-2029)

6.3 Global High Performance Thermoelectric Modules (TEM) Average Price by Application (2018-2029)

# **7 NORTH AMERICA**

7.1 North America High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2018-2029)

7.2 North America High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2018-2029)

7.3 North America High Performance Thermoelectric Modules (TEM) Market Size by Country

7.3.1 North America High Performance Thermoelectric Modules (TEM) Sales Quantity by Country (2018-2029)

7.3.2 North America High Performance Thermoelectric Modules (TEM) Consumption Value by Country (2018-2029)

7.3.3 United States Market Size and Forecast (2018-2029)

7.3.4 Canada Market Size and Forecast (2018-2029)

7.3.5 Mexico Market Size and Forecast (2018-2029)

# 8 EUROPE

8.1 Europe High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2018-2029)

8.2 Europe High Performance Thermoelectric Modules (TEM) Sales Quantity by



Application (2018-2029)

8.3 Europe High Performance Thermoelectric Modules (TEM) Market Size by Country

8.3.1 Europe High Performance Thermoelectric Modules (TEM) Sales Quantity by Country (2018-2029)

8.3.2 Europe High Performance Thermoelectric Modules (TEM) Consumption Value by Country (2018-2029)

8.3.3 Germany Market Size and Forecast (2018-2029)

8.3.4 France Market Size and Forecast (2018-2029)

8.3.5 United Kingdom Market Size and Forecast (2018-2029)

8.3.6 Russia Market Size and Forecast (2018-2029)

8.3.7 Italy Market Size and Forecast (2018-2029)

# 9 ASIA-PACIFIC

9.1 Asia-Pacific High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2018-2029)

9.2 Asia-Pacific High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2018-2029)

9.3 Asia-Pacific High Performance Thermoelectric Modules (TEM) Market Size by Region

9.3.1 Asia-Pacific High Performance Thermoelectric Modules (TEM) Sales Quantity by Region (2018-2029)

9.3.2 Asia-Pacific High Performance Thermoelectric Modules (TEM) Consumption Value by Region (2018-2029)

9.3.3 China Market Size and Forecast (2018-2029)

9.3.4 Japan Market Size and Forecast (2018-2029)

9.3.5 Korea Market Size and Forecast (2018-2029)

9.3.6 India Market Size and Forecast (2018-2029)

9.3.7 Southeast Asia Market Size and Forecast (2018-2029)

9.3.8 Australia Market Size and Forecast (2018-2029)

# **10 SOUTH AMERICA**

10.1 South America High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2018-2029)

10.2 South America High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2018-2029)

10.3 South America High Performance Thermoelectric Modules (TEM) Market Size by Country



10.3.1 South America High Performance Thermoelectric Modules (TEM) Sales Quantity by Country (2018-2029)

10.3.2 South America High Performance Thermoelectric Modules (TEM) Consumption Value by Country (2018-2029)

10.3.3 Brazil Market Size and Forecast (2018-2029)

10.3.4 Argentina Market Size and Forecast (2018-2029)

# 11 MIDDLE EAST & AFRICA

11.1 Middle East & Africa High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2018-2029)

11.2 Middle East & Africa High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2018-2029)

11.3 Middle East & Africa High Performance Thermoelectric Modules (TEM) Market Size by Country

11.3.1 Middle East & Africa High Performance Thermoelectric Modules (TEM) Sales Quantity by Country (2018-2029)

11.3.2 Middle East & Africa High Performance Thermoelectric Modules (TEM) Consumption Value by Country (2018-2029)

11.3.3 Turkey Market Size and Forecast (2018-2029)

11.3.4 Egypt Market Size and Forecast (2018-2029)

11.3.5 Saudi Arabia Market Size and Forecast (2018-2029)

11.3.6 South Africa Market Size and Forecast (2018-2029)

# **12 MARKET DYNAMICS**

12.1 High Performance Thermoelectric Modules (TEM) Market Drivers

- 12.2 High Performance Thermoelectric Modules (TEM) Market Restraints
- 12.3 High Performance Thermoelectric Modules (TEM) Trends Analysis
- 12.4 Porters Five Forces Analysis
- 12.4.1 Threat of New Entrants
- 12.4.2 Bargaining Power of Suppliers
- 12.4.3 Bargaining Power of Buyers
- 12.4.4 Threat of Substitutes
- 12.4.5 Competitive Rivalry
- 12.5 Influence of COVID-19 and Russia-Ukraine War
  - 12.5.1 Influence of COVID-19
  - 12.5.2 Influence of Russia-Ukraine War



### 13 RAW MATERIAL AND INDUSTRY CHAIN

13.1 Raw Material of High Performance Thermoelectric Modules (TEM) and Key Manufacturers

13.2 Manufacturing Costs Percentage of High Performance Thermoelectric Modules (TEM)

13.3 High Performance Thermoelectric Modules (TEM) Production Process

13.4 High Performance Thermoelectric Modules (TEM) Industrial Chain

#### **14 SHIPMENTS BY DISTRIBUTION CHANNEL**

- 14.1 Sales Channel
- 14.1.1 Direct to End-User
- 14.1.2 Distributors
- 14.2 High Performance Thermoelectric Modules (TEM) Typical Distributors
- 14.3 High Performance Thermoelectric Modules (TEM) Typical Customers

# 15 RESEARCH FINDINGS AND CONCLUSION

#### **16 APPENDIX**

- 16.1 Methodology
- 16.2 Research Process and Data Source
- 16.3 Disclaimer



# **List Of Tables**

# LIST OF TABLES

Table 1. Global High Performance Thermoelectric Modules (TEM) Consumption Value by Type, (USD Million), 2018 & 2022 & 2029

Table 2. Global High Performance Thermoelectric Modules (TEM) Consumption Value by Application, (USD Million), 2018 & 2022 & 2029

Table 3. CUI Devices Basic Information, Manufacturing Base and Competitors

Table 4. CUI Devices Major Business

Table 5. CUI Devices High Performance Thermoelectric Modules (TEM) Product and Services

Table 6. CUI Devices High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 7. CUI Devices Recent Developments/Updates

Table 8. TE Technology Basic Information, Manufacturing Base and Competitors

Table 9. TE Technology Major Business

Table 10. TE Technology High Performance Thermoelectric Modules (TEM) Product and Services

Table 11. TE Technology High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 12. TE Technology Recent Developments/Updates

Table 13. Crystal Basic Information, Manufacturing Base and Competitors

Table 14. Crystal Major Business

Table 15. Crystal High Performance Thermoelectric Modules (TEM) Product and Services

Table 16. Crystal High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 17. Crystal Recent Developments/Updates

Table 18. WAtronix Inc. Basic Information, Manufacturing Base and Competitors

Table 19. WAtronix Inc. Major Business

Table 20. WAtronix Inc. High Performance Thermoelectric Modules (TEM) Product and Services

Table 21. WAtronix Inc. High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)



Table 22. WAtronix Inc. Recent Developments/Updates

Table 23. Custom Thermoelectric Basic Information, Manufacturing Base and Competitors

Table 24. Custom Thermoelectric Major Business

Table 25. Custom Thermoelectric High Performance Thermoelectric Modules (TEM) Product and Services

Table 26. Custom Thermoelectric High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 27. Custom Thermoelectric Recent Developments/Updates

Table 28. Laird Basic Information, Manufacturing Base and Competitors

Table 29. Laird Major Business

Table 30. Laird High Performance Thermoelectric Modules (TEM) Product and Services

Table 31. Laird High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 32. Laird Recent Developments/Updates

Table 33. FULIANJING Basic Information, Manufacturing Base and Competitors

Table 34. FULIANJING Major Business

Table 35. FULIANJING High Performance Thermoelectric Modules (TEM) Product and Services

Table 36. FULIANJING High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 37. FULIANJING Recent Developments/Updates

Table 38. ECOGEN Basic Information, Manufacturing Base and Competitors

Table 39. ECOGEN Major Business

Table 40. ECOGEN High Performance Thermoelectric Modules (TEM) Product and Services

Table 41. ECOGEN High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 42. ECOGEN Recent Developments/Updates

Table 43. P&N Tech Basic Information, Manufacturing Base and Competitors

Table 44. P&N Tech Major Business

Table 45. P&N Tech High Performance Thermoelectric Modules (TEM) Product and Services

Table 46. P&N Tech High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market



Share (2018-2023)

Table 47. P&N Tech Recent Developments/Updates

Table 48. Thermonamic Electronics Basic Information, Manufacturing Base and Competitors

Table 49. Thermonamic Electronics Major Business

Table 50. Thermonamic Electronics High Performance Thermoelectric Modules (TEM) Product and Services

Table 51. Thermonamic Electronics High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 52. Thermonamic Electronics Recent Developments/Updates

 Table 53. RMT Ltd Basic Information, Manufacturing Base and Competitors

Table 54. RMT Ltd Major Business

Table 55. RMT Ltd High Performance Thermoelectric Modules (TEM) Product and Services

Table 56. RMT Ltd High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 57. RMT Ltd Recent Developments/Updates

Table 58. TEC Microsystems GmbH Basic Information, Manufacturing Base and Competitors

Table 59. TEC Microsystems GmbH Major Business

Table 60. TEC Microsystems GmbH High Performance Thermoelectric Modules (TEM) Product and Services

Table 61. TEC Microsystems GmbH High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 62. TEC Microsystems GmbH Recent Developments/Updates

Table 63. Yuxiang Electronics Basic Information, Manufacturing Base and CompetitorsTable 64. Yuxiang Electronics Major Business

Table 65. Yuxiang Electronics High Performance Thermoelectric Modules (TEM) Product and Services

Table 66. Yuxiang Electronics High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 67. Yuxiang Electronics Recent Developments/Updates

 Table 68. EGOO Basic Information, Manufacturing Base and Competitors

Table 69. EGOO Major Business

Table 70. EGOO High Performance Thermoelectric Modules (TEM) Product and



Services

Table 71. EGOO High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 72. EGOO Recent Developments/Updates

Table 73. Shenzhen Tecooler technology Basic Information, Manufacturing Base and Competitors

Table 74. Shenzhen Tecooler technology Major Business

Table 75. Shenzhen Tecooler technology High Performance Thermoelectric Modules (TEM) Product and Services

Table 76. Shenzhen Tecooler technology High Performance Thermoelectric Modules (TEM) Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 77. Shenzhen Tecooler technology Recent Developments/Updates

Table 78. Global High Performance Thermoelectric Modules (TEM) Sales Quantity by Manufacturer (2018-2023) & (K Units)

Table 79. Global High Performance Thermoelectric Modules (TEM) Revenue by Manufacturer (2018-2023) & (USD Million)

Table 80. Global High Performance Thermoelectric Modules (TEM) Average Price by Manufacturer (2018-2023) & (US\$/Unit)

Table 81. Market Position of Manufacturers in High Performance Thermoelectric Modules (TEM), (Tier 1, Tier 2, and Tier 3), Based on Consumption Value in 2022 Table 82. Head Office and High Performance Thermoelectric Modules (TEM) Production Site of Key Manufacturer

Table 83. High Performance Thermoelectric Modules (TEM) Market: Company Product Type Footprint

Table 84. High Performance Thermoelectric Modules (TEM) Market: Company ProductApplication Footprint

Table 85. High Performance Thermoelectric Modules (TEM) New Market Entrants and Barriers to Market Entry

Table 86. High Performance Thermoelectric Modules (TEM) Mergers, Acquisition,

Agreements, and Collaborations

Table 87. Global High Performance Thermoelectric Modules (TEM) Sales Quantity by Region (2018-2023) & (K Units)

Table 88. Global High Performance Thermoelectric Modules (TEM) Sales Quantity by Region (2024-2029) & (K Units)

Table 89. Global High Performance Thermoelectric Modules (TEM) Consumption Value by Region (2018-2023) & (USD Million)

Table 90. Global High Performance Thermoelectric Modules (TEM) Consumption Value



by Region (2024-2029) & (USD Million) Table 91. Global High Performance Thermoelectric Modules (TEM) Average Price by Region (2018-2023) & (US\$/Unit) Table 92. Global High Performance Thermoelectric Modules (TEM) Average Price by Region (2024-2029) & (US\$/Unit) Table 93. Global High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2018-2023) & (K Units) Table 94. Global High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2024-2029) & (K Units) Table 95. Global High Performance Thermoelectric Modules (TEM) Consumption Value by Type (2018-2023) & (USD Million) Table 96. Global High Performance Thermoelectric Modules (TEM) Consumption Value by Type (2024-2029) & (USD Million) Table 97. Global High Performance Thermoelectric Modules (TEM) Average Price by Type (2018-2023) & (US\$/Unit) Table 98. Global High Performance Thermoelectric Modules (TEM) Average Price by Type (2024-2029) & (US\$/Unit) Table 99. Global High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2018-2023) & (K Units) Table 100. Global High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2024-2029) & (K Units) Table 101. Global High Performance Thermoelectric Modules (TEM) Consumption Value by Application (2018-2023) & (USD Million) Table 102. Global High Performance Thermoelectric Modules (TEM) Consumption Value by Application (2024-2029) & (USD Million) Table 103. Global High Performance Thermoelectric Modules (TEM) Average Price by Application (2018-2023) & (US\$/Unit) Table 104. Global High Performance Thermoelectric Modules (TEM) Average Price by Application (2024-2029) & (US\$/Unit) Table 105. North America High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2018-2023) & (K Units) Table 106. North America High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2024-2029) & (K Units) Table 107. North America High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2018-2023) & (K Units) Table 108. North America High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2024-2029) & (K Units) Table 109. North America High Performance Thermoelectric Modules (TEM) Sales Quantity by Country (2018-2023) & (K Units)



Table 110. North America High Performance Thermoelectric Modules (TEM) Sales Quantity by Country (2024-2029) & (K Units) Table 111. North America High Performance Thermoelectric Modules (TEM) Consumption Value by Country (2018-2023) & (USD Million)

Table 112. North America High Performance Thermoelectric Modules (TEM)

Consumption Value by Country (2024-2029) & (USD Million)

Table 113. Europe High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2018-2023) & (K Units)

Table 114. Europe High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2024-2029) & (K Units)

Table 115. Europe High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2018-2023) & (K Units)

Table 116. Europe High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2024-2029) & (K Units)

Table 117. Europe High Performance Thermoelectric Modules (TEM) Sales Quantity by Country (2018-2023) & (K Units)

Table 118. Europe High Performance Thermoelectric Modules (TEM) Sales Quantity by Country (2024-2029) & (K Units)

Table 119. Europe High Performance Thermoelectric Modules (TEM) Consumption Value by Country (2018-2023) & (USD Million)

Table 120. Europe High Performance Thermoelectric Modules (TEM) Consumption Value by Country (2024-2029) & (USD Million)

Table 121. Asia-Pacific High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2018-2023) & (K Units)

Table 122. Asia-Pacific High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2024-2029) & (K Units)

Table 123. Asia-Pacific High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2018-2023) & (K Units)

Table 124. Asia-Pacific High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2024-2029) & (K Units)

Table 125. Asia-Pacific High Performance Thermoelectric Modules (TEM) Sales Quantity by Region (2018-2023) & (K Units)

Table 126. Asia-Pacific High Performance Thermoelectric Modules (TEM) Sales Quantity by Region (2024-2029) & (K Units)

Table 127. Asia-Pacific High Performance Thermoelectric Modules (TEM) Consumption Value by Region (2018-2023) & (USD Million)

Table 128. Asia-Pacific High Performance Thermoelectric Modules (TEM) Consumption Value by Region (2024-2029) & (USD Million)

Table 129. South America High Performance Thermoelectric Modules (TEM) Sales



Quantity by Type (2018-2023) & (K Units) Table 130. South America High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2024-2029) & (K Units) Table 131. South America High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2018-2023) & (K Units) Table 132. South America High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2024-2029) & (K Units) Table 133. South America High Performance Thermoelectric Modules (TEM) Sales Quantity by Country (2018-2023) & (K Units) Table 134. South America High Performance Thermoelectric Modules (TEM) Sales Quantity by Country (2024-2029) & (K Units) Table 135. South America High Performance Thermoelectric Modules (TEM) Consumption Value by Country (2018-2023) & (USD Million) Table 136. South America High Performance Thermoelectric Modules (TEM) Consumption Value by Country (2024-2029) & (USD Million) Table 137. Middle East & Africa High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2018-2023) & (K Units) Table 138. Middle East & Africa High Performance Thermoelectric Modules (TEM) Sales Quantity by Type (2024-2029) & (K Units) Table 139. Middle East & Africa High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2018-2023) & (K Units) Table 140. Middle East & Africa High Performance Thermoelectric Modules (TEM) Sales Quantity by Application (2024-2029) & (K Units) Table 141. Middle East & Africa High Performance Thermoelectric Modules (TEM) Sales Quantity by Region (2018-2023) & (K Units) Table 142. Middle East & Africa High Performance Thermoelectric Modules (TEM) Sales Quantity by Region (2024-2029) & (K Units) Table 143. Middle East & Africa High Performance Thermoelectric Modules (TEM) Consumption Value by Region (2018-2023) & (USD Million) Table 144. Middle East & Africa High Performance Thermoelectric Modules (TEM) Consumption Value by Region (2024-2029) & (USD Million) Table 145. High Performance Thermoelectric Modules (TEM) Raw Material Table 146. Key Manufacturers of High Performance Thermoelectric Modules (TEM) **Raw Materials** Table 147. High Performance Thermoelectric Modules (TEM) Typical Distributors Table 148. High Performance Thermoelectric Modules (TEM) Typical Customers



# **List Of Figures**

### LIST OF FIGURES

Figure 1. High Performance Thermoelectric Modules (TEM) Picture

Figure 2. Global High Performance Thermoelectric Modules (TEM) Consumption Value by Type, (USD Million), 2018 & 2022 & 2029

Figure 3. Global High Performance Thermoelectric Modules (TEM) Consumption Value Market Share by Type in 2022

Figure 4. Higher Temperature Difference Examples

Figure 5. More Heat Pumping Capacity Examples

Figure 6. Global High Performance Thermoelectric Modules (TEM) Consumption Value by Application, (USD Million), 2018 & 2022 & 2029

Figure 7. Global High Performance Thermoelectric Modules (TEM) Consumption Value Market Share by Application in 2022

- Figure 8. Medical Examples
- Figure 9. Aerospace & Defense Examples
- Figure 10. Electronics Examples
- Figure 11. Industrial Examples
- Figure 12. Automotive Examples
- Figure 13. Others Examples

Figure 14. Global High Performance Thermoelectric Modules (TEM) Consumption

Value, (USD Million): 2018 & 2022 & 2029

Figure 15. Global High Performance Thermoelectric Modules (TEM) Consumption Value and Forecast (2018-2029) & (USD Million)

Figure 16. Global High Performance Thermoelectric Modules (TEM) Sales Quantity (2018-2029) & (K Units)

Figure 17. Global High Performance Thermoelectric Modules (TEM) Average Price (2018-2029) & (US\$/Unit)

Figure 18. Global High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Manufacturer in 2022

Figure 19. Global High Performance Thermoelectric Modules (TEM) Consumption Value Market Share by Manufacturer in 2022

Figure 20. Producer Shipments of High Performance Thermoelectric Modules (TEM) by Manufacturer Sales Quantity (\$MM) and Market Share (%): 2021

Figure 21. Top 3 High Performance Thermoelectric Modules (TEM) Manufacturer (Consumption Value) Market Share in 2022

Figure 22. Top 6 High Performance Thermoelectric Modules (TEM) Manufacturer (Consumption Value) Market Share in 2022



Figure 23. Global High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Region (2018-2029) Figure 24. Global High Performance Thermoelectric Modules (TEM) Consumption Value Market Share by Region (2018-2029) Figure 25. North America High Performance Thermoelectric Modules (TEM) Consumption Value (2018-2029) & (USD Million) Figure 26. Europe High Performance Thermoelectric Modules (TEM) Consumption Value (2018-2029) & (USD Million) Figure 27. Asia-Pacific High Performance Thermoelectric Modules (TEM) Consumption Value (2018-2029) & (USD Million) Figure 28. South America High Performance Thermoelectric Modules (TEM) Consumption Value (2018-2029) & (USD Million) Figure 29. Middle East & Africa High Performance Thermoelectric Modules (TEM) Consumption Value (2018-2029) & (USD Million) Figure 30. Global High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Type (2018-2029) Figure 31. Global High Performance Thermoelectric Modules (TEM) Consumption Value Market Share by Type (2018-2029) Figure 32. Global High Performance Thermoelectric Modules (TEM) Average Price by Type (2018-2029) & (US\$/Unit) Figure 33. Global High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Application (2018-2029) Figure 34. Global High Performance Thermoelectric Modules (TEM) Consumption Value Market Share by Application (2018-2029) Figure 35. Global High Performance Thermoelectric Modules (TEM) Average Price by Application (2018-2029) & (US\$/Unit) Figure 36. North America High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Type (2018-2029) Figure 37. North America High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Application (2018-2029) Figure 38. North America High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Country (2018-2029) Figure 39. North America High Performance Thermoelectric Modules (TEM) Consumption Value Market Share by Country (2018-2029) Figure 40. United States High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 41. Canada High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 42. Mexico High Performance Thermoelectric Modules (TEM) Consumption



Value and Growth Rate (2018-2029) & (USD Million) Figure 43. Europe High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Type (2018-2029) Figure 44. Europe High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Application (2018-2029) Figure 45. Europe High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Country (2018-2029) Figure 46. Europe High Performance Thermoelectric Modules (TEM) Consumption Value Market Share by Country (2018-2029) Figure 47. Germany High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 48. France High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 49. United Kingdom High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 50. Russia High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 51. Italy High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 52. Asia-Pacific High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Type (2018-2029) Figure 53. Asia-Pacific High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Application (2018-2029) Figure 54. Asia-Pacific High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Region (2018-2029) Figure 55. Asia-Pacific High Performance Thermoelectric Modules (TEM) Consumption Value Market Share by Region (2018-2029) Figure 56. China High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 57. Japan High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 58. Korea High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 59. India High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 60. Southeast Asia High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 61. Australia High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million)



Figure 62. South America High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Type (2018-2029) Figure 63. South America High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Application (2018-2029) Figure 64. South America High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Country (2018-2029) Figure 65. South America High Performance Thermoelectric Modules (TEM) Consumption Value Market Share by Country (2018-2029) Figure 66. Brazil High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 67. Argentina High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 68. Middle East & Africa High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Type (2018-2029) Figure 69. Middle East & Africa High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Application (2018-2029) Figure 70. Middle East & Africa High Performance Thermoelectric Modules (TEM) Sales Quantity Market Share by Region (2018-2029) Figure 71. Middle East & Africa High Performance Thermoelectric Modules (TEM) Consumption Value Market Share by Region (2018-2029) Figure 72. Turkey High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 73. Egypt High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 74. Saudi Arabia High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 75. South Africa High Performance Thermoelectric Modules (TEM) Consumption Value and Growth Rate (2018-2029) & (USD Million) Figure 76. High Performance Thermoelectric Modules (TEM) Market Drivers Figure 77. High Performance Thermoelectric Modules (TEM) Market Restraints Figure 78. High Performance Thermoelectric Modules (TEM) Market Trends Figure 79. Porters Five Forces Analysis Figure 80. Manufacturing Cost Structure Analysis of High Performance Thermoelectric Modules (TEM) in 2022 Figure 81. Manufacturing Process Analysis of High Performance Thermoelectric Modules (TEM) Figure 82. High Performance Thermoelectric Modules (TEM) Industrial Chain Figure 83. Sales Quantity Channel: Direct to End-User vs Distributors Figure 84. Direct Channel Pros & Cons



Figure 85. Indirect Channel Pros & Cons Figure 86. Methodology Figure 87. Research Process and Data Source



### I would like to order

Product name: Global High Performance Thermoelectric Modules (TEM) Market 2023 by Manufacturers, Regions, Type and Application, Forecast to 2029 Product link: <u>https://marketpublishers.com/r/G8BF463A0B72EN.html</u> Price: US\$ 3,480.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service: <u>info@marketpublishers.com</u>

# Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/G8BF463A0B72EN.html</u>

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

Custumer signature \_\_\_\_\_

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

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



Global High Performance Thermoelectric Modules (TEM) Market 2023 by Manufacturers, Regions, Type and Applicati...