

# Global External Temperature Controlled Array Waveguide Grating Supply, Demand and Key Producers, 2023-2029

https://marketpublishers.com/r/G1B3DB42F40CEN.html

Date: October 2023 Pages: 112 Price: US\$ 4,480.00 (Single User License) ID: G1B3DB42F40CEN

## **Abstracts**

The global External Temperature Controlled Array Waveguide Grating market size is expected to reach \$ million by 2029, rising at a market growth of % CAGR during the forecast period (2023-2029).

The external temperature-controlled array waveguide grating is an optical device used for temperature compensation during the wavelength division multiplexing and demultiplexing process in optical fiber communication systems. It usually consists of a series of waveguide grating units, each unit has an independent temperature control device. In optical fiber communication systems, due to changes in ambient temperature, the optical signal in the optical fiber will drift in wavelength, causing the performance of the optical fiber communication system to degrade. The external temperature-controlled array waveguide grating can accurately adjust the wavelength of the optical signal by controlling the temperature of each waveguide grating unit, thereby achieving temperature compensation during the wavelength division multiplexing and demultiplexing process. The working principle of the external temperature-controlled array waveguide grating is to use thermal effects to achieve wavelength adjustment. By controlling the temperature of each waveguide grating unit, the refractive index of the grating can be changed, thereby changing the propagation speed and wavelength of the optical signal in the grating. By precisely controlling the temperature of each waveguide grating unit, precise adjustment of the wavelength of the optical signal can be achieved, thereby achieving temperature compensation. External temperature-controlled array waveguide grating has important application value in optical fiber communication systems, which can improve system performance and stability, while also reducing system cost and complexity. It is widely used in temperature compensation during wavelength division multiplexing and demultiplexing in optical fiber communication



systems.

This report studies the global External Temperature Controlled Array Waveguide Grating production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for External Temperature Controlled Array Waveguide Grating, and provides market size (US\$ million) and Year-over-Year (YoY) Growth, considering 2022 as the base year. This report explores demand trends and competition, as well as details the characteristics of External Temperature Controlled Array Waveguide Grating that contribute to its increasing demand across many markets.

Highlights and key features of the study

Global External Temperature Controlled Array Waveguide Grating total production and demand, 2018-2029, (K Units)

Global External Temperature Controlled Array Waveguide Grating total production value, 2018-2029, (USD Million)

Global External Temperature Controlled Array Waveguide Grating production by region & country, production, value, CAGR, 2018-2029, (USD Million) & (K Units)

Global External Temperature Controlled Array Waveguide Grating consumption by region & country, CAGR, 2018-2029 & (K Units)

U.S. VS China: External Temperature Controlled Array Waveguide Grating domestic production, consumption, key domestic manufacturers and share

Global External Temperature Controlled Array Waveguide Grating production by manufacturer, production, price, value and market share 2018-2023, (USD Million) & (K Units)

Global External Temperature Controlled Array Waveguide Grating production by Type, production, value, CAGR, 2018-2029, (USD Million) & (K Units)

Global External Temperature Controlled Array Waveguide Grating production by Application production, value, CAGR, 2018-2029, (USD Million) & (K Units).



This reports profiles key players in the global External Temperature Controlled Array Waveguide Grating 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 Cisco, Huawei, Lumentum, Finisar, Oclaro, Accelink, FiberHome, SENKO and LightComm Technology, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World External Temperature Controlled Array Waveguide Grating market.

**Detailed Segmentation:** 

Each section contains quantitative market data including market by value (US\$ Millions), volume (production, consumption) & (K Units) and average price (US\$/Unit) by manufacturer, by Type, and by Application. Data is given for the years 2018-2029 by year with 2022 as the base year, 2023 as the estimate year, and 2024-2029 as the forecast year.

Global External Temperature Controlled Array Waveguide Grating Market, By Region:

United States China Europe Japan South Korea ASEAN India

Rest of World

Global External Temperature Controlled Array Waveguide Grating Supply, Demand and Key Producers, 2023-2029



### Global External Temperature Controlled Array Waveguide Grating Market, Segmentation by Type

Single Channel Waveguide Grating

Multi-channel Waveguide Grating

Global External Temperature Controlled Array Waveguide Grating Market, Segmentation by Application

Communications Industry

Medical Industry

Industrial

Military Industry

Others

**Companies Profiled:** 

Cisco

Huawei

Lumentum

Finisar

Oclaro

Accelink

FiberHome

Global External Temperature Controlled Array Waveguide Grating Supply, Demand and Key Producers, 2023-2029



SENKO

LightComm Technology

**Optoplex Corporation** 

LioniX International

Lightwave Logic

Reflective arrayed waveguide grating with parallel arms using one ...

Key Questions Answered

1. How big is the global External Temperature Controlled Array Waveguide Grating market?

2. What is the demand of the global External Temperature Controlled Array Waveguide Grating market?

3. What is the year over year growth of the global External Temperature Controlled Array Waveguide Grating market?

4. What is the production and production value of the global External Temperature Controlled Array Waveguide Grating market?

5. Who are the key producers in the global External Temperature Controlled Array Waveguide Grating market?



# Contents

#### **1 SUPPLY SUMMARY**

1.1 External Temperature Controlled Array Waveguide Grating Introduction

1.2 World External Temperature Controlled Array Waveguide Grating Supply & Forecast

1.2.1 World External Temperature Controlled Array Waveguide Grating Production Value (2018 & 2022 & 2029)

1.2.2 World External Temperature Controlled Array Waveguide Grating Production (2018-2029)

1.2.3 World External Temperature Controlled Array Waveguide Grating Pricing Trends (2018-2029)

1.3 World External Temperature Controlled Array Waveguide Grating Production by Region (Based on Production Site)

1.3.1 World External Temperature Controlled Array Waveguide Grating Production Value by Region (2018-2029)

1.3.2 World External Temperature Controlled Array Waveguide Grating Production by Region (2018-2029)

1.3.3 World External Temperature Controlled Array Waveguide Grating Average Price by Region (2018-2029)

1.3.4 North America External Temperature Controlled Array Waveguide Grating Production (2018-2029)

1.3.5 Europe External Temperature Controlled Array Waveguide Grating Production (2018-2029)

1.3.6 China External Temperature Controlled Array Waveguide Grating Production (2018-2029)

1.3.7 Japan External Temperature Controlled Array Waveguide Grating Production (2018-2029)

1.3.8 South Korea External Temperature Controlled Array Waveguide Grating Production (2018-2029)

1.4 Market Drivers, Restraints and Trends

1.4.1 External Temperature Controlled Array Waveguide Grating Market Drivers

1.4.2 Factors Affecting Demand

1.4.3 External Temperature Controlled Array Waveguide Grating Major Market Trends

#### 2 DEMAND SUMMARY

2.1 World External Temperature Controlled Array Waveguide Grating Demand

Global External Temperature Controlled Array Waveguide Grating Supply, Demand and Key Producers, 2023-2029



(2018-2029)

2.2 World External Temperature Controlled Array Waveguide Grating Consumption by Region

2.2.1 World External Temperature Controlled Array Waveguide Grating Consumption by Region (2018-2023)

2.2.2 World External Temperature Controlled Array Waveguide Grating Consumption Forecast by Region (2024-2029)

2.3 United States External Temperature Controlled Array Waveguide Grating Consumption (2018-2029)

2.4 China External Temperature Controlled Array Waveguide Grating Consumption (2018-2029)

2.5 Europe External Temperature Controlled Array Waveguide Grating Consumption (2018-2029)

2.6 Japan External Temperature Controlled Array Waveguide Grating Consumption (2018-2029)

2.7 South Korea External Temperature Controlled Array Waveguide Grating Consumption (2018-2029)

2.8 ASEAN External Temperature Controlled Array Waveguide Grating Consumption (2018-2029)

2.9 India External Temperature Controlled Array Waveguide Grating Consumption (2018-2029)

### 3 WORLD EXTERNAL TEMPERATURE CONTROLLED ARRAY WAVEGUIDE GRATING MANUFACTURERS COMPETITIVE ANALYSIS

3.1 World External Temperature Controlled Array Waveguide Grating Production Value by Manufacturer (2018-2023)

3.2 World External Temperature Controlled Array Waveguide Grating Production by Manufacturer (2018-2023)

3.3 World External Temperature Controlled Array Waveguide Grating Average Price by Manufacturer (2018-2023)

3.4 External Temperature Controlled Array Waveguide Grating Company Evaluation Quadrant

3.5 Industry Rank and Concentration Rate (CR)

3.5.1 Global External Temperature Controlled Array Waveguide Grating Industry Rank of Major Manufacturers

3.5.2 Global Concentration Ratios (CR4) for External Temperature Controlled Array Waveguide Grating in 2022

3.5.3 Global Concentration Ratios (CR8) for External Temperature Controlled Array



Waveguide Grating in 2022

3.6 External Temperature Controlled Array Waveguide Grating Market: Overall Company Footprint Analysis

3.6.1 External Temperature Controlled Array Waveguide Grating Market: Region Footprint

3.6.2 External Temperature Controlled Array Waveguide Grating Market: Company Product Type Footprint

3.6.3 External Temperature Controlled Array Waveguide Grating Market: Company Product Application Footprint

- 3.7 Competitive Environment
- 3.7.1 Historical Structure of the Industry
- 3.7.2 Barriers of Market Entry
- 3.7.3 Factors of Competition
- 3.8 New Entrant and Capacity Expansion Plans

3.9 Mergers, Acquisition, Agreements, and Collaborations

#### **4 UNITED STATES VS CHINA VS REST OF THE WORLD**

4.1 United States VS China: External Temperature Controlled Array Waveguide Grating Production Value Comparison

4.1.1 United States VS China: External Temperature Controlled Array Waveguide Grating Production Value Comparison (2018 & 2022 & 2029)

4.1.2 United States VS China: External Temperature Controlled Array Waveguide Grating Production Value Market Share Comparison (2018 & 2022 & 2029)

4.2 United States VS China: External Temperature Controlled Array Waveguide Grating Production Comparison

4.2.1 United States VS China: External Temperature Controlled Array Waveguide Grating Production Comparison (2018 & 2022 & 2029)

4.2.2 United States VS China: External Temperature Controlled Array Waveguide Grating Production Market Share Comparison (2018 & 2022 & 2029)

4.3 United States VS China: External Temperature Controlled Array Waveguide Grating Consumption Comparison

4.3.1 United States VS China: External Temperature Controlled Array Waveguide Grating Consumption Comparison (2018 & 2022 & 2029)

4.3.2 United States VS China: External Temperature Controlled Array Waveguide Grating Consumption Market Share Comparison (2018 & 2022 & 2029)

4.4 United States Based External Temperature Controlled Array Waveguide Grating Manufacturers and Market Share, 2018-2023

4.4.1 United States Based External Temperature Controlled Array Waveguide Grating



Manufacturers, Headquarters and Production Site (States, Country)

4.4.2 United States Based Manufacturers External Temperature Controlled Array Waveguide Grating Production Value (2018-2023)

4.4.3 United States Based Manufacturers External Temperature Controlled Array Waveguide Grating Production (2018-2023)

4.5 China Based External Temperature Controlled Array Waveguide Grating Manufacturers and Market Share

4.5.1 China Based External Temperature Controlled Array Waveguide Grating Manufacturers, Headquarters and Production Site (Province, Country)

4.5.2 China Based Manufacturers External Temperature Controlled Array Waveguide Grating Production Value (2018-2023)

4.5.3 China Based Manufacturers External Temperature Controlled Array Waveguide Grating Production (2018-2023)

4.6 Rest of World Based External Temperature Controlled Array Waveguide Grating Manufacturers and Market Share, 2018-2023

4.6.1 Rest of World Based External Temperature Controlled Array Waveguide Grating Manufacturers, Headquarters and Production Site (State, Country)

4.6.2 Rest of World Based Manufacturers External Temperature Controlled Array Waveguide Grating Production Value (2018-2023)

4.6.3 Rest of World Based Manufacturers External Temperature Controlled Array Waveguide Grating Production (2018-2023)

#### **5 MARKET ANALYSIS BY TYPE**

5.1 World External Temperature Controlled Array Waveguide Grating Market Size Overview by Type: 2018 VS 2022 VS 2029

5.2 Segment Introduction by Type

5.2.1 Single Channel Waveguide Grating

5.2.2 Multi-channel Waveguide Grating

5.3 Market Segment by Type

5.3.1 World External Temperature Controlled Array Waveguide Grating Production by Type (2018-2029)

5.3.2 World External Temperature Controlled Array Waveguide Grating Production Value by Type (2018-2029)

5.3.3 World External Temperature Controlled Array Waveguide Grating Average Price by Type (2018-2029)

#### **6 MARKET ANALYSIS BY APPLICATION**



6.1 World External Temperature Controlled Array Waveguide Grating Market Size

Overview by Application: 2018 VS 2022 VS 2029 6.2 Segment Introduction by Application

6.2.1 Communications Industry

6.2.2 Medical Industry

6.2.3 Industrial

6.2.4 Military Industry

6.2.5 Others

6.3 Market Segment by Application

6.3.1 World External Temperature Controlled Array Waveguide Grating Production by Application (2018-2029)

6.3.2 World External Temperature Controlled Array Waveguide Grating Production Value by Application (2018-2029)

6.3.3 World External Temperature Controlled Array Waveguide Grating Average Price by Application (2018-2029)

### 7 COMPANY PROFILES

7.1 Cisco

7.1.1 Cisco Details

7.1.2 Cisco Major Business

7.1.3 Cisco External Temperature Controlled Array Waveguide Grating Product and Services

7.1.4 Cisco External Temperature Controlled Array Waveguide Grating Production,

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

7.1.5 Cisco Recent Developments/Updates

7.1.6 Cisco Competitive Strengths & Weaknesses

7.2 Huawei

7.2.1 Huawei Details

7.2.2 Huawei Major Business

7.2.3 Huawei External Temperature Controlled Array Waveguide Grating Product and Services

7.2.4 Huawei External Temperature Controlled Array Waveguide Grating Production,

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

7.2.5 Huawei Recent Developments/Updates

7.2.6 Huawei Competitive Strengths & Weaknesses

7.3 Lumentum

7.3.1 Lumentum Details

7.3.2 Lumentum Major Business



7.3.3 Lumentum External Temperature Controlled Array Waveguide Grating Product and Services

7.3.4 Lumentum External Temperature Controlled Array Waveguide Grating

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

7.3.5 Lumentum Recent Developments/Updates

7.3.6 Lumentum Competitive Strengths & Weaknesses

7.4 Finisar

7.4.1 Finisar Details

7.4.2 Finisar Major Business

7.4.3 Finisar External Temperature Controlled Array Waveguide Grating Product and Services

7.4.4 Finisar External Temperature Controlled Array Waveguide Grating Production,

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

7.4.5 Finisar Recent Developments/Updates

7.4.6 Finisar Competitive Strengths & Weaknesses

7.5 Oclaro

7.5.1 Oclaro Details

7.5.2 Oclaro Major Business

7.5.3 Oclaro External Temperature Controlled Array Waveguide Grating Product and Services

7.5.4 Oclaro External Temperature Controlled Array Waveguide Grating Production,

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

7.5.5 Oclaro Recent Developments/Updates

7.5.6 Oclaro Competitive Strengths & Weaknesses

7.6 Accelink

7.6.1 Accelink Details

7.6.2 Accelink Major Business

7.6.3 Accelink External Temperature Controlled Array Waveguide Grating Product and Services

7.6.4 Accelink External Temperature Controlled Array Waveguide Grating Production,

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

7.6.5 Accelink Recent Developments/Updates

7.6.6 Accelink Competitive Strengths & Weaknesses

7.7 FiberHome

7.7.1 FiberHome Details

7.7.2 FiberHome Major Business

7.7.3 FiberHome External Temperature Controlled Array Waveguide Grating Product and Services

7.7.4 FiberHome External Temperature Controlled Array Waveguide Grating



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

7.7.5 FiberHome Recent Developments/Updates

7.7.6 FiberHome Competitive Strengths & Weaknesses

7.8 SENKO

7.8.1 SENKO Details

7.8.2 SENKO Major Business

7.8.3 SENKO External Temperature Controlled Array Waveguide Grating Product and Services

7.8.4 SENKO External Temperature Controlled Array Waveguide Grating Production,

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

7.8.5 SENKO Recent Developments/Updates

7.8.6 SENKO Competitive Strengths & Weaknesses

7.9 LightComm Technology

7.9.1 LightComm Technology Details

7.9.2 LightComm Technology Major Business

7.9.3 LightComm Technology External Temperature Controlled Array Waveguide Grating Product and Services

7.9.4 LightComm Technology External Temperature Controlled Array Waveguide Grating Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.9.5 LightComm Technology Recent Developments/Updates

7.9.6 LightComm Technology Competitive Strengths & Weaknesses

7.10 Optoplex Corporation

7.10.1 Optoplex Corporation Details

7.10.2 Optoplex Corporation Major Business

7.10.3 Optoplex Corporation External Temperature Controlled Array Waveguide Grating Product and Services

7.10.4 Optoplex Corporation External Temperature Controlled Array Waveguide Grating Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.10.5 Optoplex Corporation Recent Developments/Updates

7.10.6 Optoplex Corporation Competitive Strengths & Weaknesses

7.11 LioniX International

7.11.1 LioniX International Details

7.11.2 LioniX International Major Business

7.11.3 LioniX International External Temperature Controlled Array Waveguide Grating Product and Services

7.11.4 LioniX International External Temperature Controlled Array Waveguide Grating Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.11.5 LioniX International Recent Developments/Updates

7.11.6 LioniX International Competitive Strengths & Weaknesses



7.12 Lightwave Logic

7.12.1 Lightwave Logic Details

7.12.2 Lightwave Logic Major Business

7.12.3 Lightwave Logic External Temperature Controlled Array Waveguide Grating Product and Services

7.12.4 Lightwave Logic External Temperature Controlled Array Waveguide Grating Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.12.5 Lightwave Logic Recent Developments/Updates

7.12.6 Lightwave Logic Competitive Strengths & Weaknesses

7.13 Reflective arrayed waveguide grating with parallel arms using one ...

7.13.1 Reflective arrayed waveguide grating with parallel arms using one ... Details

7.13.2 Reflective arrayed waveguide grating with parallel arms using one ... Major Business

7.13.3 Reflective arrayed waveguide grating with parallel arms using one ... External Temperature Controlled Array Waveguide Grating Product and Services

7.13.4 Reflective arrayed waveguide grating with parallel arms using one ... External Temperature Controlled Array Waveguide Grating Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.13.5 Reflective arrayed waveguide grating with parallel arms using one ... Recent Developments/Updates

7.13.6 Reflective arrayed waveguide grating with parallel arms using one ... Competitive Strengths & Weaknesses

#### **8 INDUSTRY CHAIN ANALYSIS**

8.1 External Temperature Controlled Array Waveguide Grating Industry Chain

8.2 External Temperature Controlled Array Waveguide Grating Upstream Analysis

8.2.1 External Temperature Controlled Array Waveguide Grating Core Raw Materials

8.2.2 Main Manufacturers of External Temperature Controlled Array Waveguide Grating Core Raw Materials

8.3 Midstream Analysis

8.4 Downstream Analysis

8.5 External Temperature Controlled Array Waveguide Grating Production Mode

8.6 External Temperature Controlled Array Waveguide Grating Procurement Model

8.7 External Temperature Controlled Array Waveguide Grating Industry Sales Model and Sales Channels

8.7.1 External Temperature Controlled Array Waveguide Grating Sales Model

8.7.2 External Temperature Controlled Array Waveguide Grating Typical Customers



#### **9 RESEARCH FINDINGS AND CONCLUSION**

#### **10 APPENDIX**

- 10.1 Methodology
- 10.2 Research Process and Data Source
- 10.3 Disclaimer



# **List Of Tables**

#### LIST OF TABLES

Table 1. World External Temperature Controlled Array Waveguide Grating Production Value by Region (2018, 2022 and 2029) & (USD Million) Table 2. World External Temperature Controlled Array Waveguide Grating Production Value by Region (2018-2023) & (USD Million) Table 3. World External Temperature Controlled Array Waveguide Grating Production Value by Region (2024-2029) & (USD Million) Table 4. World External Temperature Controlled Array Waveguide Grating Production Value Market Share by Region (2018-2023) Table 5. World External Temperature Controlled Array Waveguide Grating Production Value Market Share by Region (2024-2029) Table 6. World External Temperature Controlled Array Waveguide Grating Production by Region (2018-2023) & (K Units) Table 7. World External Temperature Controlled Array Waveguide Grating Production by Region (2024-2029) & (K Units) Table 8. World External Temperature Controlled Array Waveguide Grating Production Market Share by Region (2018-2023) Table 9. World External Temperature Controlled Array Waveguide Grating Production Market Share by Region (2024-2029) Table 10. World External Temperature Controlled Array Waveguide Grating Average Price by Region (2018-2023) & (US\$/Unit) Table 11. World External Temperature Controlled Array Waveguide Grating Average Price by Region (2024-2029) & (US\$/Unit) Table 12. External Temperature Controlled Array Waveguide Grating Major Market Trends Table 13. World External Temperature Controlled Array Waveguide Grating Consumption Growth Rate Forecast by Region (2018 & 2022 & 2029) & (K Units) Table 14. World External Temperature Controlled Array Waveguide Grating Consumption by Region (2018-2023) & (K Units) Table 15. World External Temperature Controlled Array Waveguide Grating Consumption Forecast by Region (2024-2029) & (K Units) Table 16. World External Temperature Controlled Array Waveguide Grating Production Value by Manufacturer (2018-2023) & (USD Million) Table 17. Production Value Market Share of Key External Temperature Controlled Array Waveguide Grating Producers in 2022 Table 18. World External Temperature Controlled Array Waveguide Grating Production



by Manufacturer (2018-2023) & (K Units)

Table 19. Production Market Share of Key External Temperature Controlled Array Waveguide Grating Producers in 2022

Table 20. World External Temperature Controlled Array Waveguide Grating Average Price by Manufacturer (2018-2023) & (US\$/Unit)

Table 21. Global External Temperature Controlled Array Waveguide Grating Company Evaluation Quadrant

Table 22. World External Temperature Controlled Array Waveguide Grating Industry Rank of Major Manufacturers, Based on Production Value in 2022

Table 23. Head Office and External Temperature Controlled Array Waveguide Grating Production Site of Key Manufacturer

Table 24. External Temperature Controlled Array Waveguide Grating Market: CompanyProduct Type Footprint

Table 25. External Temperature Controlled Array Waveguide Grating Market: CompanyProduct Application Footprint

Table 26. External Temperature Controlled Array Waveguide Grating CompetitiveFactors

Table 27. External Temperature Controlled Array Waveguide Grating New Entrant and Capacity Expansion Plans

Table 28. External Temperature Controlled Array Waveguide Grating Mergers &Acquisitions Activity

Table 29. United States VS China External Temperature Controlled Array Waveguide Grating Production Value Comparison, (2018 & 2022 & 2029) & (USD Million)

Table 30. United States VS China External Temperature Controlled Array Waveguide Grating Production Comparison, (2018 & 2022 & 2029) & (K Units)

Table 31. United States VS China External Temperature Controlled Array Waveguide Grating Consumption Comparison, (2018 & 2022 & 2029) & (K Units)

Table 32. United States Based External Temperature Controlled Array WaveguideGrating Manufacturers, Headquarters and Production Site (States, Country)

Table 33. United States Based Manufacturers External Temperature Controlled Array Waveguide Grating Production Value, (2018-2023) & (USD Million)

Table 34. United States Based Manufacturers External Temperature Controlled ArrayWaveguide Grating Production Value Market Share (2018-2023)

Table 35. United States Based Manufacturers External Temperature Controlled Array Waveguide Grating Production (2018-2023) & (K Units)

Table 36. United States Based Manufacturers External Temperature Controlled ArrayWaveguide Grating Production Market Share (2018-2023)

Table 37. China Based External Temperature Controlled Array Waveguide GratingManufacturers, Headquarters and Production Site (Province, Country)



Table 38. China Based Manufacturers External Temperature Controlled Array Waveguide Grating Production Value, (2018-2023) & (USD Million) Table 39. China Based Manufacturers External Temperature Controlled Array Waveguide Grating Production Value Market Share (2018-2023) Table 40. China Based Manufacturers External Temperature Controlled Array Waveguide Grating Production (2018-2023) & (K Units) Table 41. China Based Manufacturers External Temperature Controlled Array Waveguide Grating Production Market Share (2018-2023) Table 42. Rest of World Based External Temperature Controlled Array Waveguide Grating Manufacturers, Headquarters and Production Site (States, Country) Table 43. Rest of World Based Manufacturers External Temperature Controlled Array Waveguide Grating Production Value, (2018-2023) & (USD Million) Table 44. Rest of World Based Manufacturers External Temperature Controlled Array Waveguide Grating Production Value Market Share (2018-2023) Table 45. Rest of World Based Manufacturers External Temperature Controlled Array Waveguide Grating Production (2018-2023) & (K Units) Table 46. Rest of World Based Manufacturers External Temperature Controlled Array Waveguide Grating Production Market Share (2018-2023) Table 47. World External Temperature Controlled Array Waveguide Grating Production Value by Type, (USD Million), 2018 & 2022 & 2029 Table 48. World External Temperature Controlled Array Waveguide Grating Production by Type (2018-2023) & (K Units) Table 49. World External Temperature Controlled Array Waveguide Grating Production by Type (2024-2029) & (K Units) Table 50. World External Temperature Controlled Array Waveguide Grating Production Value by Type (2018-2023) & (USD Million) Table 51. World External Temperature Controlled Array Waveguide Grating Production Value by Type (2024-2029) & (USD Million) Table 52. World External Temperature Controlled Array Waveguide Grating Average Price by Type (2018-2023) & (US\$/Unit) Table 53. World External Temperature Controlled Array Waveguide Grating Average Price by Type (2024-2029) & (US\$/Unit) Table 54. World External Temperature Controlled Array Waveguide Grating Production Value by Application, (USD Million), 2018 & 2022 & 2029 Table 55. World External Temperature Controlled Array Waveguide Grating Production by Application (2018-2023) & (K Units) Table 56. World External Temperature Controlled Array Waveguide Grating Production by Application (2024-2029) & (K Units)

Table 57. World External Temperature Controlled Array Waveguide Grating Production



Value by Application (2018-2023) & (USD Million)

Table 58. World External Temperature Controlled Array Waveguide Grating Production Value by Application (2024-2029) & (USD Million)

Table 59. World External Temperature Controlled Array Waveguide Grating Average Price by Application (2018-2023) & (US\$/Unit)

Table 60. World External Temperature Controlled Array Waveguide Grating Average Price by Application (2024-2029) & (US\$/Unit)

Table 61. Cisco Basic Information, Manufacturing Base and Competitors

Table 62. Cisco Major Business

Table 63. Cisco External Temperature Controlled Array Waveguide Grating Product and Services

Table 64. Cisco External Temperature Controlled Array Waveguide Grating Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 65. Cisco Recent Developments/Updates

 Table 66. Cisco Competitive Strengths & Weaknesses

Table 67. Huawei Basic Information, Manufacturing Base and Competitors

Table 68. Huawei Major Business

Table 69. Huawei External Temperature Controlled Array Waveguide Grating Product and Services

Table 70. Huawei External Temperature Controlled Array Waveguide Grating Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 71. Huawei Recent Developments/Updates

Table 72. Huawei Competitive Strengths & Weaknesses

Table 73. Lumentum Basic Information, Manufacturing Base and Competitors

Table 74. Lumentum Major Business

Table 75. Lumentum External Temperature Controlled Array Waveguide GratingProduct and Services

Table 76. Lumentum External Temperature Controlled Array Waveguide Grating Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 77. Lumentum Recent Developments/Updates

Table 78. Lumentum Competitive Strengths & Weaknesses

Table 79. Finisar Basic Information, Manufacturing Base and Competitors

Table 80. Finisar Major Business

Table 81. Finisar External Temperature Controlled Array Waveguide Grating Product and Services

Table 82. Finisar External Temperature Controlled Array Waveguide Grating Production



(K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

 Table 83. Finisar Recent Developments/Updates

Table 84. Finisar Competitive Strengths & Weaknesses

Table 85. Oclaro Basic Information, Manufacturing Base and Competitors

Table 86. Oclaro Major Business

Table 87. Oclaro External Temperature Controlled Array Waveguide Grating Product and Services

Table 88. Oclaro External Temperature Controlled Array Waveguide Grating Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 89. Oclaro Recent Developments/Updates

Table 90. Oclaro Competitive Strengths & Weaknesses

Table 91. Accelink Basic Information, Manufacturing Base and Competitors

Table 92. Accelink Major Business

Table 93. Accelink External Temperature Controlled Array Waveguide Grating Product and Services

Table 94. Accelink External Temperature Controlled Array Waveguide Grating

Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 95. Accelink Recent Developments/Updates

Table 96. Accelink Competitive Strengths & Weaknesses

Table 97. FiberHome Basic Information, Manufacturing Base and Competitors

Table 98. FiberHome Major Business

Table 99. FiberHome External Temperature Controlled Array Waveguide Grating Product and Services

Table 100. FiberHome External Temperature Controlled Array Waveguide Grating Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 101. FiberHome Recent Developments/Updates

Table 102. FiberHome Competitive Strengths & Weaknesses

Table 103. SENKO Basic Information, Manufacturing Base and Competitors

Table 104. SENKO Major Business

Table 105. SENKO External Temperature Controlled Array Waveguide Grating Product and Services

Table 106. SENKO External Temperature Controlled Array Waveguide Grating Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 107. SENKO Recent Developments/Updates



Table 108. SENKO Competitive Strengths & Weaknesses

Table 109. LightComm Technology Basic Information, Manufacturing Base and Competitors

Table 110. LightComm Technology Major Business

Table 111. LightComm Technology External Temperature Controlled Array Waveguide Grating Product and Services

Table 112. LightComm Technology External Temperature Controlled Array Waveguide Grating Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 113. LightComm Technology Recent Developments/Updates

 Table 114. LightComm Technology Competitive Strengths & Weaknesses

Table 115. Optoplex Corporation Basic Information, Manufacturing Base and Competitors

 Table 116. Optoplex Corporation Major Business

Table 117. Optoplex Corporation External Temperature Controlled Array WaveguideGrating Product and Services

Table 118. Optoplex Corporation External Temperature Controlled Array Waveguide Grating Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

 Table 119. Optoplex Corporation Recent Developments/Updates

Table 120. Optoplex Corporation Competitive Strengths & Weaknesses

Table 121. LioniX International Basic Information, Manufacturing Base and Competitors

Table 122. LioniX International Major Business

Table 123. LioniX International External Temperature Controlled Array Waveguide Grating Product and Services

Table 124. LioniX International External Temperature Controlled Array Waveguide Grating Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 125. LioniX International Recent Developments/Updates

Table 126. LioniX International Competitive Strengths & Weaknesses

Table 127. Lightwave Logic Basic Information, Manufacturing Base and Competitors

Table 128. Lightwave Logic Major Business

Table 129. Lightwave Logic External Temperature Controlled Array Waveguide Grating Product and Services

Table 130. Lightwave Logic External Temperature Controlled Array Waveguide Grating Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

 Table 131. Lightwave Logic Recent Developments/Updates

Table 132. Reflective arrayed waveguide grating with parallel arms using one ... Basic



Information, Manufacturing Base and Competitors

Table 133. Reflective arrayed waveguide grating with parallel arms using one ... Major Business

Table 134. Reflective arrayed waveguide grating with parallel arms using one ... ExternalTemperature Controlled Array Waveguide Grating Product and Services

Table 135. Reflective arrayed waveguide grating with parallel arms using one ... ExternalTemperature Controlled Array Waveguide Grating Production (K Units), Price

(US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 136. Global Key Players of External Temperature Controlled Array Waveguide Grating Upstream (Raw Materials)

Table 137. External Temperature Controlled Array Waveguide Grating TypicalCustomers

Table 138. External Temperature Controlled Array Waveguide Grating TypicalDistributors

List of Figure

Figure 1. External Temperature Controlled Array Waveguide Grating Picture

Figure 2. World External Temperature Controlled Array Waveguide Grating Production Value: 2018 & 2022 & 2029, (USD Million)

Figure 3. World External Temperature Controlled Array Waveguide Grating Production Value and Forecast (2018-2029) & (USD Million)

Figure 4. World External Temperature Controlled Array Waveguide Grating Production (2018-2029) & (K Units)

Figure 5. World External Temperature Controlled Array Waveguide Grating Average Price (2018-2029) & (US\$/Unit)

Figure 6. World External Temperature Controlled Array Waveguide Grating Production Value Market Share by Region (2018-2029)

Figure 7. World External Temperature Controlled Array Waveguide Grating Production Market Share by Region (2018-2029)

Figure 8. North America External Temperature Controlled Array Waveguide Grating Production (2018-2029) & (K Units)

Figure 9. Europe External Temperature Controlled Array Waveguide Grating Production (2018-2029) & (K Units)

Figure 10. China External Temperature Controlled Array Waveguide Grating Production (2018-2029) & (K Units)

Figure 11. Japan External Temperature Controlled Array Waveguide Grating Production (2018-2029) & (K Units)

Figure 12. South Korea External Temperature Controlled Array Waveguide Grating Production (2018-2029) & (K Units)



Figure 13. External Temperature Controlled Array Waveguide Grating Market Drivers Figure 14. Factors Affecting Demand Figure 15. World External Temperature Controlled Array Waveguide Grating Consumption (2018-2029) & (K Units) Figure 16. World External Temperature Controlled Array Waveguide Grating Consumption Market Share by Region (2018-2029) Figure 17. United States External Temperature Controlled Array Waveguide Grating Consumption (2018-2029) & (K Units) Figure 18. China External Temperature Controlled Array Waveguide Grating Consumption (2018-2029) & (K Units) Figure 19. Europe External Temperature Controlled Array Waveguide Grating Consumption (2018-2029) & (K Units) Figure 20. Japan External Temperature Controlled Array Waveguide Grating Consumption (2018-2029) & (K Units) Figure 21. South Korea External Temperature Controlled Array Waveguide Grating Consumption (2018-2029) & (K Units) Figure 22. ASEAN External Temperature Controlled Array Waveguide Grating Consumption (2018-2029) & (K Units) Figure 23. India External Temperature Controlled Array Waveguide Grating Consumption (2018-2029) & (K Units) Figure 24. Producer Shipments of External Temperature Controlled Array Waveguide Grating by Manufacturer Revenue (\$MM) and Market Share (%): 2022 Figure 25. Global Four-firm Concentration Ratios (CR4) for External Temperature Controlled Array Waveguide Grating Markets in 2022 Figure 26. Global Four-firm Concentration Ratios (CR8) for External Temperature Controlled Array Waveguide Grating Markets in 2022 Figure 27. United States VS China: External Temperature Controlled Array Waveguide Grating Production Value Market Share Comparison (2018 & 2022 & 2029) Figure 28. United States VS China: External Temperature Controlled Array Waveguide Grating Production Market Share Comparison (2018 & 2022 & 2029) Figure 29. United States VS China: External Temperature Controlled Array Waveguide Grating Consumption Market Share Comparison (2018 & 2022 & 2029) Figure 30. United States Based Manufacturers External Temperature Controlled Array Waveguide Grating Production Market Share 2022 Figure 31. China Based Manufacturers External Temperature Controlled Array Waveguide Grating Production Market Share 2022 Figure 32. Rest of World Based Manufacturers External Temperature Controlled Array Waveguide Grating Production Market Share 2022 Figure 33. World External Temperature Controlled Array Waveguide Grating Production



Value by Type, (USD Million), 2018 & 2022 & 2029

Figure 34. World External Temperature Controlled Array Waveguide Grating Production Value Market Share by Type in 2022

Figure 35. Single Channel Waveguide Grating

Figure 36. Multi-channel Waveguide Grating

Figure 37. World External Temperature Controlled Array Waveguide Grating Production Market Share by Type (2018-2029)

Figure 38. World External Temperature Controlled Array Waveguide Grating Production Value Market Share by Type (2018-2029)

Figure 39. World External Temperature Controlled Array Waveguide Grating Average Price by Type (2018-2029) & (US\$/Unit)

Figure 40. World External Temperature Controlled Array Waveguide Grating Production Value by Application, (USD Million), 2018 & 2022 & 2029

Figure 41. World External Temperature Controlled Array Waveguide Grating Production Value Market Share by Application in 2022

- Figure 42. Communications Industry
- Figure 43. Medical Industry
- Figure 44. Industrial
- Figure 45. Military Industry
- Figure 46. Others

Figure 47. World External Temperature Controlled Array Waveguide Grating Production Market Share by Application (2018-2029)

Figure 48. World External Temperature Controlled Array Waveguide Grating Production Value Market Share by Application (2018-2029)

Figure 49. World External Temperature Controlled Array Waveguide Grating Average Price by Application (2018-2029) & (US\$/Unit)

Figure 50. External Temperature Controlled Array Waveguide Grating Industry Chain

- Figure 51. External Temperature Controlled Array Waveguide Grating Procurement Model
- Figure 52. External Temperature Controlled Array Waveguide Grating Sales Model

Figure 53. External Temperature Controlled Array Waveguide Grating Sales Channels,

Direct Sales, and Distribution

- Figure 54. Methodology
- Figure 55. Research Process and Data Source



#### I would like to order

Product name: Global External Temperature Controlled Array Waveguide Grating Supply, Demand and Key Producers, 2023-2029

Product link: https://marketpublishers.com/r/G1B3DB42F40CEN.html

Price: US\$ 4,480.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer

If you want to order Corporate License or Hard Copy, please, contact our Custom Service: info@marketpublishers.com

#### Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/G1B3DB42F40CEN.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 External Temperature Controlled Array Waveguide Grating Supply, Demand and Key Producers, 2023-2029