

# Global Toroidal Microresonators Supply, Demand and Key Producers, 2026-2032

<https://marketpublishers.com/r/G653D30F4DE9EN.html>

Date: December 2025

Pages: 104

Price: US\$ 4,480.00 (Single User License)

ID: G653D30F4DE9EN

## Abstracts

The global Toroidal Microresonators market size is expected to reach \$ 385 million by 2032, rising at a market growth of 10.6% CAGR during the forecast period (2026-2032). In 2025, the global toroidal microresonator market records an annual production volume of approximately 238,000 units against a global production capacity of about 280,000 units per year, with average unit price USD 770, while the industry maintains a relatively strong average gross margin of around 45%. Toroidal microresonators are ultra-high-Q optical microcavities with a donut-shaped (toroidal) geometry, typically fabricated from silica or silicon-based materials on a chip, designed to confine light via whispering-gallery modes for extremely long photon lifetimes, enabling applications in frequency comb generation, precision sensing, nonlinear optics, and low-noise photonic signal processing. The supply chain begins upstream with high-purity substrates and materials such as fused silica wafers, silicon wafers, silicon nitride films, and specialty optical coatings, supplied by advanced materials and wafer manufacturers; midstream processing involves semiconductor-grade microfabrication steps including lithography, etching, reflow or laser-annealing to form the toroidal rim, surface polishing at the atomic level, and optional heterogeneous integration with waveguides or lasers at specialized photonics foundries; downstream activities include device packaging, fiber or waveguide coupling, performance testing (Q-factor, linewidth, thermal stability), and system-level integration by photonics companies and research-instrument suppliers serving end users in telecommunications, quantum optics, metrology, LIDAR, biosensing, and advanced scientific instrumentation.

This report studies the global Toroidal Microresonators production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Toroidal Microresonators and provides market size (US\$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and

competition, as well as details the characteristics of Toroidal Microresonators that contribute to its increasing demand across many markets.

### **Highlights and key features of the study**

Global Toroidal Microresonators total production and demand, 2021-2032, (K Units)

Global Toroidal Microresonators total production value, 2021-2032, (USD Million)

Global Toroidal Microresonators production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (K Units), (based on production site)

Global Toroidal Microresonators consumption by region & country, CAGR, 2021-2032 & (K Units)

U.S. VS China: Toroidal Microresonators domestic production, consumption, key domestic manufacturers and share

Global Toroidal Microresonators production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (K Units)

Global Toroidal Microresonators production by Type, production, value, CAGR, 2021-2032, (USD Million) & (K Units)

Global Toroidal Microresonators production by Application, production, value, CAGR, 2021-2032, (USD Million) & (K Units)

This report profiles key players in the global Toroidal Microresonators 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 OEwaves, LIGENTEC, Jenoptik, AIM Photonics, Hamamatsu Photonics, M Squared, Photonic Systems, Coherent, Rockley Photonics, AC Photonics, 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 Toroidal Microresonators 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 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global Toroidal Microresonators Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

#### Global Toroidal Microresonators Market, Segmentation by Type:

SiO<sub>2</sub> Toroidal Microresonators

Si<sub>3</sub>N<sub>4</sub> Toroidal Microresonators

Others

#### Global Toroidal Microresonators Market, Segmentation by Operating Wavelength:

Visible-band

Near-infrared

Mid-infrared

#### Global Toroidal Microresonators Market, Segmentation by Application:

Telecommunications

Data Centers

LiDAR Systems

Others

### **Companies Profiled:**

OEwaves

LIGENTEC

Jenoptik

AIM Photonics

Hamamatsu Photonics

M Squared

Photonic Systems

Coherent

Rockley Photonics

AC Photonics

### **Key Questions Answered:**

1. How big is the global Toroidal Microresonators market?
2. What is the demand of the global Toroidal Microresonators market?
3. What is the year over year growth of the global Toroidal Microresonators market?
4. What is the production and production value of the global Toroidal Microresonators market?
5. Who are the key producers in the global Toroidal Microresonators market?
6. What are the growth factors driving the market demand?

## Contents

### 1 SUPPLY SUMMARY

- 1.1 Toroidal Microresonators Introduction
- 1.2 World Toroidal Microresonators Supply & Forecast
  - 1.2.1 World Toroidal Microresonators Production Value (2021 & 2025 & 2032)
  - 1.2.2 World Toroidal Microresonators Production (2021-2032)
  - 1.2.3 World Toroidal Microresonators Pricing Trends (2021-2032)
- 1.3 World Toroidal Microresonators Production by Region (Based on Production Site)
  - 1.3.1 World Toroidal Microresonators Production Value by Region (2021-2032)
  - 1.3.2 World Toroidal Microresonators Production by Region (2021-2032)
  - 1.3.3 World Toroidal Microresonators Average Price by Region (2021-2032)
  - 1.3.4 North America Toroidal Microresonators Production (2021-2032)
  - 1.3.5 Europe Toroidal Microresonators Production (2021-2032)
  - 1.3.6 China Toroidal Microresonators Production (2021-2032)
  - 1.3.7 Japan Toroidal Microresonators Production (2021-2032)
  - 1.3.8 South Korea Toroidal Microresonators Production (2021-2032)
  - 1.3.9 Southeast Asia Toroidal Microresonators Production (2021-2032)
  - 1.3.10 China Taiwan Toroidal Microresonators Production (2021-2032)
- 1.4 Market Drivers, Restraints and Trends
  - 1.4.1 Toroidal Microresonators Market Drivers
  - 1.4.2 Factors Affecting Demand
  - 1.4.3 Toroidal Microresonators Major Market Trends

### 2 DEMAND SUMMARY

- 2.1 World Toroidal Microresonators Demand (2021-2032)
- 2.2 World Toroidal Microresonators Consumption by Region
  - 2.2.1 World Toroidal Microresonators Consumption by Region (2021-2026)
  - 2.2.2 World Toroidal Microresonators Consumption Forecast by Region (2027-2032)
- 2.3 United States Toroidal Microresonators Consumption (2021-2032)
- 2.4 China Toroidal Microresonators Consumption (2021-2032)
- 2.5 Europe Toroidal Microresonators Consumption (2021-2032)
- 2.6 Japan Toroidal Microresonators Consumption (2021-2032)
- 2.7 South Korea Toroidal Microresonators Consumption (2021-2032)
- 2.8 ASEAN Toroidal Microresonators Consumption (2021-2032)
- 2.9 India Toroidal Microresonators Consumption (2021-2032)

### **3 WORLD MANUFACTURERS COMPETITIVE ANALYSIS**

- 3.1 World Toroidal Microresonators Production Value by Manufacturer (2021-2026)
- 3.2 World Toroidal Microresonators Production by Manufacturer (2021-2026)
- 3.3 World Toroidal Microresonators Average Price by Manufacturer (2021-2026)
- 3.4 Toroidal Microresonators Company Evaluation Quadrant
- 3.5 Industry Rank and Concentration Rate (CR)
  - 3.5.1 Global Toroidal Microresonators Industry Rank of Major Manufacturers
  - 3.5.2 Global Concentration Ratios (CR4) for Toroidal Microresonators in 2025
  - 3.5.3 Global Concentration Ratios (CR8) for Toroidal Microresonators in 2025
- 3.6 Toroidal Microresonators Market: Overall Company Footprint Analysis
  - 3.6.1 Toroidal Microresonators Market: Region Footprint
  - 3.6.2 Toroidal Microresonators Market: Company Product Type Footprint
  - 3.6.3 Toroidal Microresonators 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: Toroidal Microresonators Production Value Comparison
  - 4.1.1 United States VS China: Toroidal Microresonators Production Value Comparison (2021 & 2025 & 2032)
  - 4.1.2 United States VS China: Toroidal Microresonators Production Value Market Share Comparison (2021 & 2025 & 2032)
- 4.2 United States VS China: Toroidal Microresonators Production Comparison
  - 4.2.1 United States VS China: Toroidal Microresonators Production Comparison (2021 & 2025 & 2032)
  - 4.2.2 United States VS China: Toroidal Microresonators Production Market Share Comparison (2021 & 2025 & 2032)
- 4.3 United States VS China: Toroidal Microresonators Consumption Comparison
  - 4.3.1 United States VS China: Toroidal Microresonators Consumption Comparison (2021 & 2025 & 2032)
  - 4.3.2 United States VS China: Toroidal Microresonators Consumption Market Share Comparison (2021 & 2025 & 2032)
- 4.4 United States Based Toroidal Microresonators Manufacturers and Market Share,

## 2021-2026

4.4.1 United States Based Toroidal Microresonators Manufacturers, Headquarters and Production Site (States, Country)

4.4.2 United States Based Manufacturers Toroidal Microresonators Production Value (2021-2026)

4.4.3 United States Based Manufacturers Toroidal Microresonators Production (2021-2026)

4.5 China Based Toroidal Microresonators Manufacturers and Market Share

4.5.1 China Based Toroidal Microresonators Manufacturers, Headquarters and Production Site (Province, Country)

4.5.2 China Based Manufacturers Toroidal Microresonators Production Value (2021-2026)

4.5.3 China Based Manufacturers Toroidal Microresonators Production (2021-2026)

4.6 Rest of World Based Toroidal Microresonators Manufacturers and Market Share, 2021-2026

4.6.1 Rest of World Based Toroidal Microresonators Manufacturers, Headquarters and Production Site (State, Country)

4.6.2 Rest of World Based Manufacturers Toroidal Microresonators Production Value (2021-2026)

4.6.3 Rest of World Based Manufacturers Toroidal Microresonators Production (2021-2026)

## 5 MARKET ANALYSIS BY TYPE

5.1 World Toroidal Microresonators Market Size Overview by Type: 2021 VS 2025 VS 2032

5.2 Segment Introduction by Type

5.2.1 SiO<sub>2</sub> Toroidal Microresonators

5.2.2 Si<sub>3</sub>N<sub>4</sub> Toroidal Microresonators

5.2.3 Others

5.3 Market Segment by Type

5.3.1 World Toroidal Microresonators Production by Type (2021-2032)

5.3.2 World Toroidal Microresonators Production Value by Type (2021-2032)

5.3.3 World Toroidal Microresonators Average Price by Type (2021-2032)

## 6 MARKET ANALYSIS BY OPERATING WAVELENGTH

6.1 World Toroidal Microresonators Market Size Overview by Operating Wavelength: 2021 VS 2025 VS 2032

## 6.2 Segment Introduction by Operating Wavelength

6.2.1 Visible-band

6.2.2 Near-infrared

6.2.3 Mid-infrared

## 6.3 Market Segment by Operating Wavelength

6.3.1 World Toroidal Microresonators Production by Operating Wavelength (2021-2032)

6.3.2 World Toroidal Microresonators Production Value by Operating Wavelength (2021-2032)

6.3.3 World Toroidal Microresonators Average Price by Operating Wavelength (2021-2032)

## 7 MARKET ANALYSIS BY APPLICATION

7.1 World Toroidal Microresonators Market Size Overview by Application: 2021 VS 2025 VS 2032

### 7.2 Segment Introduction by Application

7.2.1 Telecommunications

7.2.2 Data Centers

7.2.3 LiDAR Systems

7.2.4 Others

### 7.3 Market Segment by Application

7.3.1 World Toroidal Microresonators Production by Application (2021-2032)

7.3.2 World Toroidal Microresonators Production Value by Application (2021-2032)

7.3.3 World Toroidal Microresonators Average Price by Application (2021-2032)

## 8 COMPANY PROFILES

### 8.1 OEwaves

8.1.1 OEwaves Details

8.1.2 OEwaves Major Business

8.1.3 OEwaves Toroidal Microresonators Product and Services

8.1.4 OEwaves Toroidal Microresonators Production, Price, Value, Gross Margin and Market Share (2021-2026)

8.1.5 OEwaves Recent Developments/Updates

8.1.6 OEwaves Competitive Strengths & Weaknesses

### 8.2 LIGENTEC

8.2.1 LIGENTEC Details

8.2.2 LIGENTEC Major Business

- 8.2.3 LIGENTEC Toroidal Microresonators Product and Services
- 8.2.4 LIGENTEC Toroidal Microresonators Production, Price, Value, Gross Margin and Market Share (2021-2026)
- 8.2.5 LIGENTEC Recent Developments/Updates
- 8.2.6 LIGENTEC Competitive Strengths & Weaknesses
- 8.3 Jenoptik
  - 8.3.1 Jenoptik Details
  - 8.3.2 Jenoptik Major Business
  - 8.3.3 Jenoptik Toroidal Microresonators Product and Services
  - 8.3.4 Jenoptik Toroidal Microresonators Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 8.3.5 Jenoptik Recent Developments/Updates
  - 8.3.6 Jenoptik Competitive Strengths & Weaknesses
- 8.4 AIM Photonics
  - 8.4.1 AIM Photonics Details
  - 8.4.2 AIM Photonics Major Business
  - 8.4.3 AIM Photonics Toroidal Microresonators Product and Services
  - 8.4.4 AIM Photonics Toroidal Microresonators Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 8.4.5 AIM Photonics Recent Developments/Updates
  - 8.4.6 AIM Photonics Competitive Strengths & Weaknesses
- 8.5 Hamamatsu Photonics
  - 8.5.1 Hamamatsu Photonics Details
  - 8.5.2 Hamamatsu Photonics Major Business
  - 8.5.3 Hamamatsu Photonics Toroidal Microresonators Product and Services
  - 8.5.4 Hamamatsu Photonics Toroidal Microresonators Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 8.5.5 Hamamatsu Photonics Recent Developments/Updates
  - 8.5.6 Hamamatsu Photonics Competitive Strengths & Weaknesses
- 8.6 M Squared
  - 8.6.1 M Squared Details
  - 8.6.2 M Squared Major Business
  - 8.6.3 M Squared Toroidal Microresonators Product and Services
  - 8.6.4 M Squared Toroidal Microresonators Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 8.6.5 M Squared Recent Developments/Updates
  - 8.6.6 M Squared Competitive Strengths & Weaknesses
- 8.7 Photonic Systems
  - 8.7.1 Photonic Systems Details

- 8.7.2 Photonic Systems Major Business
- 8.7.3 Photonic Systems Toroidal Microresonators Product and Services
- 8.7.4 Photonic Systems Toroidal Microresonators Production, Price, Value, Gross Margin and Market Share (2021-2026)
- 8.7.5 Photonic Systems Recent Developments/Updates
- 8.7.6 Photonic Systems Competitive Strengths & Weaknesses
- 8.8 Coherent
  - 8.8.1 Coherent Details
  - 8.8.2 Coherent Major Business
  - 8.8.3 Coherent Toroidal Microresonators Product and Services
  - 8.8.4 Coherent Toroidal Microresonators Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 8.8.5 Coherent Recent Developments/Updates
  - 8.8.6 Coherent Competitive Strengths & Weaknesses
- 8.9 Rockley Photonics
  - 8.9.1 Rockley Photonics Details
  - 8.9.2 Rockley Photonics Major Business
  - 8.9.3 Rockley Photonics Toroidal Microresonators Product and Services
  - 8.9.4 Rockley Photonics Toroidal Microresonators Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 8.9.5 Rockley Photonics Recent Developments/Updates
  - 8.9.6 Rockley Photonics Competitive Strengths & Weaknesses
- 8.10 AC Photonics
  - 8.10.1 AC Photonics Details
  - 8.10.2 AC Photonics Major Business
  - 8.10.3 AC Photonics Toroidal Microresonators Product and Services
  - 8.10.4 AC Photonics Toroidal Microresonators Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 8.10.5 AC Photonics Recent Developments/Updates
  - 8.10.6 AC Photonics Competitive Strengths & Weaknesses

## **9 INDUSTRY CHAIN ANALYSIS**

- 9.1 Toroidal Microresonators Industry Chain
- 9.2 Toroidal Microresonators Upstream Analysis
  - 9.2.1 Toroidal Microresonators Core Raw Materials
  - 9.2.2 Main Manufacturers of Toroidal Microresonators Core Raw Materials
- 9.3 Midstream Analysis
- 9.4 Downstream Analysis

9.5 Toroidal Microresonators Production Mode

9.6 Toroidal Microresonators Procurement Model

9.7 Toroidal Microresonators Industry Sales Model and Sales Channels

9.7.1 Toroidal Microresonators Sales Model

9.7.2 Toroidal Microresonators Typical Distributors

## **10 RESEARCH FINDINGS AND CONCLUSION**

## **11 APPENDIX**

11.1 Methodology

11.2 Research Process and Data Source

11.3 Disclaimer

## List Of Tables

### LIST OF TABLES

- Table 1. World Toroidal Microresonators Production Value by Region (2021, 2025 and 2032) & (USD Million)
- Table 2. World Toroidal Microresonators Production Value by Region (2021-2026) & (USD Million)
- Table 3. World Toroidal Microresonators Production Value by Region (2027-2032) & (USD Million)
- Table 4. World Toroidal Microresonators Production Value Market Share by Region (2021-2026)
- Table 5. World Toroidal Microresonators Production Value Market Share by Region (2027-2032)
- Table 6. World Toroidal Microresonators Production by Region (2021-2026) & (K Units)
- Table 7. World Toroidal Microresonators Production by Region (2027-2032) & (K Units)
- Table 8. World Toroidal Microresonators Production Market Share by Region (2021-2026)
- Table 9. World Toroidal Microresonators Production Market Share by Region (2027-2032)
- Table 10. World Toroidal Microresonators Average Price by Region (2021-2026) & (US\$/Unit)
- Table 11. World Toroidal Microresonators Average Price by Region (2027-2032) & (US\$/Unit)
- Table 12. Toroidal Microresonators Major Market Trends
- Table 13. World Toroidal Microresonators Consumption Growth Rate Forecast by Region (2021 & 2025 & 2032) & (K Units)
- Table 14. World Toroidal Microresonators Consumption by Region (2021-2026) & (K Units)
- Table 15. World Toroidal Microresonators Consumption Forecast by Region (2027-2032) & (K Units)
- Table 16. World Toroidal Microresonators Production Value by Manufacturer (2021-2026) & (USD Million)
- Table 17. Production Value Market Share of Key Toroidal Microresonators Producers in 2025
- Table 18. World Toroidal Microresonators Production by Manufacturer (2021-2026) & (K Units)
- Table 19. Production Market Share of Key Toroidal Microresonators Producers in 2025
- Table 20. World Toroidal Microresonators Average Price by Manufacturer (2021-2026)

& (US\$/Unit)

Table 21. Global Toroidal Microresonators Company Evaluation Quadrant

Table 22. World Toroidal Microresonators Industry Rank of Major Manufacturers, Based on Production Value in 2025

Table 23. Head Office and Toroidal Microresonators Production Site of Key Manufacturer

Table 24. Toroidal Microresonators Market: Company Product Type Footprint

Table 25. Toroidal Microresonators Market: Company Product Application Footprint

Table 26. Toroidal Microresonators Competitive Factors

Table 27. Toroidal Microresonators New Entrant and Capacity Expansion Plans

Table 28. Toroidal Microresonators Mergers & Acquisitions Activity

Table 29. United States VS China Toroidal Microresonators Production Value Comparison, (2021 & 2025 & 2032) & (USD Million)

Table 30. United States VS China Toroidal Microresonators Production Comparison, (2021 & 2025 & 2032) & (K Units)

Table 31. United States VS China Toroidal Microresonators Consumption Comparison, (2021 & 2025 & 2032) & (K Units)

Table 32. United States Based Toroidal Microresonators Manufacturers, Headquarters and Production Site (States, Country)

Table 33. United States Based Manufacturers Toroidal Microresonators Production Value, (2021-2026) & (USD Million)

Table 34. United States Based Manufacturers Toroidal Microresonators Production Value Market Share (2021-2026)

Table 35. United States Based Manufacturers Toroidal Microresonators Production (2021-2026) & (K Units)

Table 36. United States Based Manufacturers Toroidal Microresonators Production Market Share (2021-2026)

Table 37. China Based Toroidal Microresonators Manufacturers, Headquarters and Production Site (Province, Country)

Table 38. China Based Manufacturers Toroidal Microresonators Production Value, (2021-2026) & (USD Million)

Table 39. China Based Manufacturers Toroidal Microresonators Production Value Market Share (2021-2026)

Table 40. China Based Manufacturers Toroidal Microresonators Production, (2021-2026) & (K Units)

Table 41. China Based Manufacturers Toroidal Microresonators Production Market Share (2021-2026)

Table 42. Rest of World Based Toroidal Microresonators Manufacturers, Headquarters and Production Site (State, Country)

Table 43. Rest of World Based Manufacturers Toroidal Microresonators Production Value, (2021-2026) & (USD Million)

Table 44. Rest of World Based Manufacturers Toroidal Microresonators Production Value Market Share (2021-2026)

Table 45. Rest of World Based Manufacturers Toroidal Microresonators Production, (2021-2026) & (K Units)

Table 46. Rest of World Based Manufacturers Toroidal Microresonators Production Market Share (2021-2026)

Table 47. World Toroidal Microresonators Production Value by Type, (USD Million), 2021 & 2025 & 2032

Table 48. World Toroidal Microresonators Production by Type (2021-2026) & (K Units)

Table 49. World Toroidal Microresonators Production by Type (2027-2032) & (K Units)

Table 50. World Toroidal Microresonators Production Value by Type (2021-2026) & (USD Million)

Table 51. World Toroidal Microresonators Production Value by Type (2027-2032) & (USD Million)

Table 52. World Toroidal Microresonators Average Price by Type (2021-2026) & (US\$/Unit)

Table 53. World Toroidal Microresonators Average Price by Type (2027-2032) & (US\$/Unit)

Table 54. World Toroidal Microresonators Production Value by Operating Wavelength, (USD Million), 2021 & 2025 & 2032

Table 55. World Toroidal Microresonators Production by Operating Wavelength (2021-2026) & (K Units)

Table 56. World Toroidal Microresonators Production by Operating Wavelength (2027-2032) & (K Units)

Table 57. World Toroidal Microresonators Production Value by Operating Wavelength (2021-2026) & (USD Million)

Table 58. World Toroidal Microresonators Production Value by Operating Wavelength (2027-2032) & (USD Million)

Table 59. World Toroidal Microresonators Average Price by Operating Wavelength (2021-2026) & (US\$/Unit)

Table 60. World Toroidal Microresonators Average Price by Operating Wavelength (2027-2032) & (US\$/Unit)

Table 61. World Toroidal Microresonators Production Value by Application, (USD Million), 2021 & 2025 & 2032

Table 62. World Toroidal Microresonators Production by Application (2021-2026) & (K Units)

Table 63. World Toroidal Microresonators Production by Application (2027-2032) & (K

Units)

Table 64. World Toroidal Microresonators Production Value by Application (2021-2026) & (USD Million)

Table 65. World Toroidal Microresonators Production Value by Application (2027-2032) & (USD Million)

Table 66. World Toroidal Microresonators Average Price by Application (2021-2026) & (US\$/Unit)

Table 67. World Toroidal Microresonators Average Price by Application (2027-2032) & (US\$/Unit)

Table 68. OEwaves Basic Information, Manufacturing Base and Competitors

Table 69. OEwaves Major Business

Table 70. OEwaves Toroidal Microresonators Product and Services

Table 71. OEwaves Toroidal Microresonators Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 72. OEwaves Recent Developments/Updates

Table 73. OEwaves Competitive Strengths & Weaknesses

Table 74. LIGENTEC Basic Information, Manufacturing Base and Competitors

Table 75. LIGENTEC Major Business

Table 76. LIGENTEC Toroidal Microresonators Product and Services

Table 77. LIGENTEC Toroidal Microresonators Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 78. LIGENTEC Recent Developments/Updates

Table 79. LIGENTEC Competitive Strengths & Weaknesses

Table 80. Jenoptik Basic Information, Manufacturing Base and Competitors

Table 81. Jenoptik Major Business

Table 82. Jenoptik Toroidal Microresonators Product and Services

Table 83. Jenoptik Toroidal Microresonators Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 84. Jenoptik Recent Developments/Updates

Table 85. Jenoptik Competitive Strengths & Weaknesses

Table 86. AIM Photonics Basic Information, Manufacturing Base and Competitors

Table 87. AIM Photonics Major Business

Table 88. AIM Photonics Toroidal Microresonators Product and Services

Table 89. AIM Photonics Toroidal Microresonators Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 90. AIM Photonics Recent Developments/Updates

Table 91. AIM Photonics Competitive Strengths & Weaknesses

Table 92. Hamamatsu Photonics Basic Information, Manufacturing Base and

## Competitors

Table 93. Hamamatsu Photonics Major Business

Table 94. Hamamatsu Photonics Toroidal Microresonators Product and Services

Table 95. Hamamatsu Photonics Toroidal Microresonators Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 96. Hamamatsu Photonics Recent Developments/Updates

Table 97. Hamamatsu Photonics Competitive Strengths & Weaknesses

Table 98. M Squared Basic Information, Manufacturing Base and Competitors

Table 99. M Squared Major Business

Table 100. M Squared Toroidal Microresonators Product and Services

Table 101. M Squared Toroidal Microresonators Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 102. M Squared Recent Developments/Updates

Table 103. M Squared Competitive Strengths & Weaknesses

Table 104. Photonic Systems Basic Information, Manufacturing Base and Competitors

Table 105. Photonic Systems Major Business

Table 106. Photonic Systems Toroidal Microresonators Product and Services

Table 107. Photonic Systems Toroidal Microresonators Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 108. Photonic Systems Recent Developments/Updates

Table 109. Photonic Systems Competitive Strengths & Weaknesses

Table 110. Coherent Basic Information, Manufacturing Base and Competitors

Table 111. Coherent Major Business

Table 112. Coherent Toroidal Microresonators Product and Services

Table 113. Coherent Toroidal Microresonators Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 114. Coherent Recent Developments/Updates

Table 115. Coherent Competitive Strengths & Weaknesses

Table 116. Rockley Photonics Basic Information, Manufacturing Base and Competitors

Table 117. Rockley Photonics Major Business

Table 118. Rockley Photonics Toroidal Microresonators Product and Services

Table 119. Rockley Photonics Toroidal Microresonators Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 120. Rockley Photonics Recent Developments/Updates

Table 121. Rockley Photonics Competitive Strengths & Weaknesses

Table 122. AC Photonics Basic Information, Manufacturing Base and Competitors

Table 123. AC Photonics Major Business

Table 124. AC Photonics Toroidal Microresonators Product and Services

Table 125. AC Photonics Toroidal Microresonators Production (K Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 126. AC Photonics Recent Developments/Updates

Table 127. AC Photonics Competitive Strengths & Weaknesses

Table 128. Global Key Players of Toroidal Microresonators Upstream (Raw Materials)

Table 129. Global Toroidal Microresonators Typical Customers

Table 130. Toroidal Microresonators Typical Distributors

## List Of Figures

### LIST OF FIGURES

- Figure 1. Toroidal Microresonators Picture
- Figure 2. World Toroidal Microresonators Production Value: 2021 & 2025 & 2032, (USD Million)
- Figure 3. World Toroidal Microresonators Production Value and Forecast (2021-2032) & (USD Million)
- Figure 4. World Toroidal Microresonators Production (2021-2032) & (K Units)
- Figure 5. World Toroidal Microresonators Average Price (2021-2032) & (US\$/Unit)
- Figure 6. World Toroidal Microresonators Production Value Market Share by Region (2021-2032)
- Figure 7. World Toroidal Microresonators Production Market Share by Region (2021-2032)
- Figure 8. North America Toroidal Microresonators Production (2021-2032) & (K Units)
- Figure 9. Europe Toroidal Microresonators Production (2021-2032) & (K Units)
- Figure 10. China Toroidal Microresonators Production (2021-2032) & (K Units)
- Figure 11. Japan Toroidal Microresonators Production (2021-2032) & (K Units)
- Figure 12. South Korea Toroidal Microresonators Production (2021-2032) & (K Units)
- Figure 13. Southeast Asia Toroidal Microresonators Production (2021-2032) & (K Units)
- Figure 14. China Taiwan Toroidal Microresonators Production (2021-2032) & (K Units)
- Figure 15. Toroidal Microresonators Market Drivers
- Figure 16. Factors Affecting Demand
- Figure 17. World Toroidal Microresonators Consumption (2021-2032) & (K Units)
- Figure 18. World Toroidal Microresonators Consumption Market Share by Region (2021-2032)
- Figure 19. United States Toroidal Microresonators Consumption (2021-2032) & (K Units)
- Figure 20. China Toroidal Microresonators Consumption (2021-2032) & (K Units)
- Figure 21. Europe Toroidal Microresonators Consumption (2021-2032) & (K Units)
- Figure 22. Japan Toroidal Microresonators Consumption (2021-2032) & (K Units)
- Figure 23. South Korea Toroidal Microresonators Consumption (2021-2032) & (K Units)
- Figure 24. ASEAN Toroidal Microresonators Consumption (2021-2032) & (K Units)
- Figure 25. India Toroidal Microresonators Consumption (2021-2032) & (K Units)
- Figure 26. Producer Shipments of Toroidal Microresonators by Manufacturer Revenue (\$MM) and Market Share (%): 2025
- Figure 27. Global Four-firm Concentration Ratios (CR4) for Toroidal Microresonators Markets in 2025

Figure 28. Global Four-firm Concentration Ratios (CR8) for Toroidal Microresonators Markets in 2025

Figure 29. United States VS China: Toroidal Microresonators Production Value Market Share Comparison (2021 & 2025 & 2032)

Figure 30. United States VS China: Toroidal Microresonators Production Market Share Comparison (2021 & 2025 & 2032)

Figure 31. United States VS China: Toroidal Microresonators Consumption Market Share Comparison (2021 & 2025 & 2032)

Figure 32. United States Based Manufacturers Toroidal Microresonators Production Market Share 2025

Figure 33. China Based Manufacturers Toroidal Microresonators Production Market Share 2025

Figure 34. Rest of World Based Manufacturers Toroidal Microresonators Production Market Share 2025

Figure 35. World Toroidal Microresonators Production Value by Type, (USD Million), 2021 & 2025 & 2032

Figure 36. World Toroidal Microresonators Production Value Market Share by Type in 2025

Figure 37. SiO<sub>2</sub> Toroidal Microresonators

Figure 38. Si<sub>3</sub>N<sub>4</sub> Toroidal Microresonators

Figure 39. Others

Figure 40. World Toroidal Microresonators Production Market Share by Type (2021-2032)

Figure 41. World Toroidal Microresonators Production Value Market Share by Type (2021-2032)

Figure 42. World Toroidal Microresonators Average Price by Type (2021-2032) & (US\$/Unit)

Figure 43. World Toroidal Microresonators Production Value by Operating Wavelength, (USD Million), 2021 & 2025 & 2032

Figure 44. World Toroidal Microresonators Production Value Market Share by Operating Wavelength in 2025

Figure 45. Visible-band

Figure 46. Near-infrared

Figure 47. Mid-infrared

Figure 48. World Toroidal Microresonators Production Market Share by Operating Wavelength (2021-2032)

Figure 49. World Toroidal Microresonators Production Value Market Share by Operating Wavelength (2021-2032)

Figure 50. World Toroidal Microresonators Average Price by Operating Wavelength

(2021-2032) & (US\$/Unit)

Figure 51. World Toroidal Microresonators Production Value by Application, (USD Million), 2021 & 2025 & 2032

Figure 52. World Toroidal Microresonators Production Value Market Share by Application in 2025

Figure 53. Telecommunications

Figure 54. Data Centers

Figure 55. LiDAR Systems

Figure 56. Others

Figure 57. World Toroidal Microresonators Production Market Share by Application (2021-2032)

Figure 58. World Toroidal Microresonators Production Value Market Share by Application (2021-2032)

Figure 59. World Toroidal Microresonators Average Price by Application (2021-2032) & (US\$/Unit)

Figure 60. Toroidal Microresonators Industry Chain

Figure 61. Toroidal Microresonators Procurement Model

Figure 62. Toroidal Microresonators Sales Model

Figure 63. Toroidal Microresonators Sales Channels, Direct Sales, and Distribution

Figure 64. Methodology

Figure 65. Research Process and Data Source

## I would like to order

Product name: Global Toroidal Microresonators Supply, Demand and Key Producers, 2026-2032

Product link: <https://marketpublishers.com/r/G653D30F4DE9EN.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 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/G653D30F4DE9EN.html>