+357 96 030922
info@marketpublishers.com

Global Silicon Carbide AR Waveguides Supply, Demand and Key Producers, 2026-2032

https://marketpublishers.com/r/G62419ABCA1AEN.html
Date: September 2026
Pages: 97
Price: US$ 4,480.00 (Single User License)
ID: G62419ABCA1AEN

Abstracts

The global Silicon Carbide AR Waveguides market size is expected to reach $ 129 million by 2032, rising at a market growth of 34.7% CAGR during the forecast period (2026-2032).

Silicon Carbide AR Waveguides are advanced near-eye display optical components that use optical-grade silicon carbide as the primary light-guiding substrate and incorporate micro- and nano-scale optical structures to perform image in-coupling, propagation, pupil expansion, and out-coupling in augmented reality displays. Their high refractive index enables a larger optical étendue and supports wider fields of view while reducing the number of waveguide plates required, making SiC particularly attractive for thin, lightweight, large-FOV AR architectures. Current products are primarily based on diffractive waveguide designs, with direct-etched gratings and nanoimprint-assisted patterning and transfer representing important manufacturing routes. Commercial development is moving toward single-layer full-color configurations, higher optical efficiency, larger field of view, and wafer-level manufacturing. The market covered in this study focuses on functional SiC AR waveguide lenses and waveguide components that have completed the key optical microstructure fabrication process and can be integrated into AR display modules, with major applications including consumer AR glasses, enterprise and industrial AR systems, and defense and aerospace displays. Meta has demonstrated approximately 70° FOV using SiC waveguides, highlighting the material's potential for large-FOV near-eye displays.

Key Findings

The global average selling price of silicon carbide AR waveguides was

+357 96 030922
info@marketpublishers.com

approximately US$250–350 per piece in 2025.

Direct etching is the primary technology route for high-performance, wide-FOV products.

Consumer AR glasses represent the largest application market.

China is the world’s leading region for commercial manufacturing.

Market Trends

The key technology trend is the transition from proving the optical advantages of SiC toward proving manufacturability and cost competitiveness. High refractive index is the core differentiator: compared with conventional high-index glass, SiC provides greater optical bandwidth and enables larger fields of view with fewer waveguide plates. This supports the development of single-layer full-color designs and can reduce optical stack thickness and alignment complexity. Large-FOV SiC products have already progressed from experimental prototypes toward 30° and 50° commercial-development platforms, while approximately 70° FOV has been demonstrated at the system level.

At the manufacturing level, the industry is shifting toward larger wafers, semiconductor-style lithography and etching, higher-throughput micro-nano replication, and tighter wafer-level process control. The transition from 4-inch toward 8-inch and eventually 300 mm substrates is particularly important because substrate utilization, lens yield per wafer, and process throughput directly affect unit economics. Optical-grade 300 mm SiC waveguide wafers were publicly demonstrated in 2025, indicating that upstream material suppliers are preparing for substantially larger AR volumes.

Market Dynamics

Drivers

Demand is primarily driven by the need to improve the optical performance and wearability of next-generation AR glasses. Wider FOV normally increases optical design difficulty, while conventional multi-layer waveguides add thickness, weight, alignment complexity, and manufacturing steps. SiC combines a refractive index of approximately 2.6–2.7 with strong thermal and mechanical properties, allowing designers to pursue

+357 96 030922
info@marketpublishers.com

large-FOV and potentially single-layer full-color architectures. Continued investment in AI glasses and spatial-computing hardware is also encouraging optical component suppliers to develop thinner, brighter, higher-efficiency waveguide solutions.

Restraints

The principal restraint remains cost. Optical-grade SiC requires demanding crystal-quality control, precision polishing, micro-nano patterning, difficult dry-etch processes, and stringent optical inspection. SiC is also an extremely hard material, increasing tooling requirements and process complexity. Early production remains sensitive to grating uniformity, optical defects, wafer utilization, and yield, while high-index glass and polymer-based waveguides continue to offer lower-cost alternatives for products that do not require the highest FOV or optical performance.

Opportunities

The largest opportunity lies in moving SiC from premium demonstration platforms into higher-volume consumer AR glasses. Scaling 8-inch production, introducing 300 mm optical-grade wafers, improving etching throughput, and increasing usable lens yield per wafer could materially reduce cost. Single-layer full-color architectures are particularly attractive because they may simplify downstream optical assembly and reduce stack alignment requirements. In addition, enterprise, industrial, defense, and aerospace AR systems offer opportunities where performance, environmental stability, durability, and thermal characteristics can justify a higher optical component price.

Challenges

The central challenge is achieving consumer-electronics economics without sacrificing optical performance. Yield improvement must occur simultaneously across substrate transparency and uniformity, microstructure fidelity, etching consistency, optical efficiency, color uniformity, rainbow suppression, and final lens inspection. The industry must also build manufacturing-grade equipment and process infrastructure rather than depend on research-grade tools. Rapid improvements in high-index glass, polymer waveguides, and other emerging high-refractive-index materials create an additional substitution risk if SiC cost reduction progresses more slowly than expected.

+357 96 030922
info@marketpublishers.com

Industry Chain Analysis

The upstream industry chain consists of high-purity SiC raw materials, optical-grade crystal growth, wafer slicing, grinding, polishing, and optical-grade substrate inspection. Midstream manufacturing includes optical design, master fabrication, lithography or nanoimprint-assisted patterning, dry etching, coating, wafer-level inspection, dicing, packaging, and waveguide-module integration. Downstream customers include AR optical-module suppliers and AR glasses manufacturers serving consumer, enterprise, industrial, defense, and aerospace applications. Upstream wafer diameter and optical quality have become increasingly important variables: 8-inch production is moving into industrial deployment and 300 mm optical waveguide wafers have been demonstrated, creating a pathway toward greater lens output per wafer and lower unit material cost.

Value Chain Analysis

Value creation is concentrated in three areas: optical-grade SiC material quality, proprietary waveguide and grating design, and high-yield micro-nano manufacturing. Although the substrate accounts for a meaningful portion of early-stage cost, competitive differentiation increasingly depends on optical efficiency, field of view, color uniformity, eyebox performance, ghost and rainbow suppression, manufacturing yield, and the ability to transfer designs into repeatable wafer-level production. As volume increases, the value chain is expected to shift from material scarcity and engineering samples toward process yield, equipment productivity, design-for-manufacturing, and module-level integration capability.

Segment Insights

By Waveguide Layer Architecture, the market is divided into Single-layer Waveguides and Multi-layer Waveguides. Single-layer architectures are becoming increasingly important for SiC because its high refractive index enables greater optical bandwidth and supports the integration of full-color functionality into fewer plates. By Grating Fabrication Route, the market is segmented into Direct Etched Waveguides, Nanoimprint-based Waveguides, and Others. Direct etching represents the principal high-performance route for sophisticated SiC structures, while nanoimprint-assisted processes offer potential advantages in pattern replication and manufacturing throughput.

+357 96 030922
info@marketpublishers.com

By Display Color Capability, the market includes Monochrome Waveguides, Full-color Waveguides, and Others, with full-color products representing the main value-growth direction. By Field of View, the market is classified as ?30° FOV, >30° to 50° FOV, and >50° FOV. Commercial-development products are increasingly moving into the 30°–50° range, while >50° solutions represent a higher-specification segment. By Application, the market comprises Consumer AR Glasses, Enterprise and Industrial AR, Defense and Aerospace AR, and Others. Consumer AR glasses are expected to provide the largest incremental volume opportunity as SiC manufacturing costs decline.

Downstream Market Opportunities

Consumer AR glasses offer the strongest volume opportunity because SiC directly addresses several constraints that become more important as glasses evolve from notification-type displays toward richer spatial content: field of view, optical stack thickness, full-color capability, thermal management, and visual artifacts. Enterprise and industrial systems provide an earlier high-value opportunity where productivity benefits can support higher system prices, while defense and aerospace applications remain attractive for wide-FOV, durability, environmental stability, and mission-critical visibility requirements. The transition from optical prototypes to standardized waveguide-light-engine reference designs should also shorten product development cycles for downstream device manufacturers.

Regional Insights

China currently has the most concentrated commercial supply and manufacturing expansion for SiC AR waveguides, supported by a broad SiC substrate industry, wafer-level micro-nano processing capability, AR optical-component manufacturing, and a dense consumer-electronics supply chain. Specialized Chinese waveguide manufacturers are moving from small-batch development toward 8-inch wafer-level production, and upstream suppliers have already demonstrated 300 mm optical-grade SiC wafers. North America remains a critical technology-development region, particularly in SiC material selection, large-FOV architecture, direct slant-etch processing, and system-level AR validation. Europe, Japan, South Korea, and Taiwan possess strong optics, semiconductor, and AR component ecosystems, but publicly verified commercial SiC AR waveguide manufacturing remains less concentrated than in China and North America.

+357 96 030922
info@marketpublishers.com

Competitive Landscape Analysis

The competitive landscape remains highly concentrated and technology-led because commercial SiC AR waveguide manufacturing requires simultaneous capabilities in optical design, semiconductor-grade micro-nano processing, difficult-material etching, wafer-level yield management, and AR module integration. China currently has the broadest merchant-supply cluster and the fastest visible capacity expansion, while North America retains a strong position in foundational optical architecture and captive high-performance development. Competition is therefore shifting from proof-of-concept performance toward repeatable mass production, yield, cost per lens, large-wafer compatibility, optical efficiency, and customer qualification. As the market matures, suppliers with vertically coordinated access to optical-grade SiC substrates, proprietary grating designs, wafer-level fabrication, inspection, and module integration are expected to hold stronger competitive positions.

Report Scope

This report studies the global Silicon Carbide AR Waveguides production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Silicon Carbide AR Waveguides 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 Silicon Carbide AR Waveguides that contribute to its increasing demand across many markets.

Highlights and key features of the study

Global Silicon Carbide AR Waveguides total production and demand, 2021-2032, (K Pcs)

Global Silicon Carbide AR Waveguides total production value, 2021-2032, (USD Million)

Global Silicon Carbide AR Waveguides production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (K Pcs), (based on production site)

+357 96 030922
info@marketpublishers.com

Global Silicon Carbide AR Waveguides consumption by region & country, CAGR, 2021-2032 & (K Pcs)

U.S. VS China: Silicon Carbide AR Waveguides domestic production, consumption, key domestic manufacturers and share

Global Silicon Carbide AR Waveguides production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (K Pcs)

Global Silicon Carbide AR Waveguides production by Field of View, production, value, CAGR, 2021-2032, (USD Million) & (K Pcs)

Global Silicon Carbide AR Waveguides production by Application, production, value, CAGR, 2021-2032, (USD Million) & (K Pcs)

This report profiles key players in the global Silicon Carbide AR Waveguides 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 SeeV Optoelectronics Technology Co., Ltd., Goertek Optical Technology Co., Ltd., Moldnano (Hangzhou) Technology Co., Ltd., AAC Technologies Holdings Inc., North Ocean Photonics Co., Ltd., Magic Leap, Inc., 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 Silicon Carbide AR Waveguides market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US$ Millions), volume (production, consumption) & (K Pcs) and average price (US$/Pcs) by manufacturer, by Field of View, 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.

+357 96 030922
info@marketpublishers.com

Global Silicon Carbide AR Waveguides Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Market Segmentation

Global Silicon Carbide AR Waveguides Market, Segmentation by Field of View:

?30° FOV

>30° to 50° FOV

>50° FOV

Global Silicon Carbide AR Waveguides Market, Segmentation by Grating Fabrication Route:

Direct Etched Waveguides

+357 96 030922
info@marketpublishers.com

Nanoimprint-based Waveguides

Others

Global Silicon Carbide AR Waveguides Market, Segmentation by Display Color Capability:

Monochrome Waveguides

Full-color Waveguides

Others

Global Silicon Carbide AR Waveguides Market, Segmentation by Application:

Consumer AR Glasses

Enterprise and Industrial AR

Defense and Aerospace AR

Others

Companies Profiled:

SeeV Optoelectronics Technology Co., Ltd.

Goertek Optical Technology Co., Ltd.

Moldnano (Hangzhou) Technology Co., Ltd.

AAC Technologies Holdings Inc.

North Ocean Photonics Co., Ltd.

+357 96 030922
info@marketpublishers.com

Magic Leap, Inc.

Key Questions Answered

1. How big is the global Silicon Carbide AR Waveguides market?
2. What is the demand of the global Silicon Carbide AR Waveguides market?
3. What is the year over year growth of the global Silicon Carbide AR Waveguides market?
4. What is the total value of the global Silicon Carbide AR Waveguides market?
5. Who are the Major Players in the global Silicon Carbide AR Waveguides market?
6. What are the growth factors driving the market demand?

+357 96 030922
info@marketpublishers.com

Contents

1 SUPPLY SUMMARY

1.1 Silicon Carbide AR Waveguides Introduction
1.2 World Silicon Carbide AR Waveguides Supply & Forecast
  1.2.1 World Silicon Carbide AR Waveguides Production Value (2021 & 2025 & 2032)
  1.2.2 World Silicon Carbide AR Waveguides Production (2021-2032)
  1.2.3 World Silicon Carbide AR Waveguides Pricing Trends (2021-2032)
1.3 World Silicon Carbide AR Waveguides Production by Region (Based on Production Site)
  1.3.1 World Silicon Carbide AR Waveguides Production Value by Region (2021-2032)
  1.3.2 World Silicon Carbide AR Waveguides Production by Region (2021-2032)
  1.3.3 World Silicon Carbide AR Waveguides Average Price by Region (2021-2032)
  1.3.4 North America Silicon Carbide AR Waveguides Production (2021-2032)
  1.3.5 China Silicon Carbide AR Waveguides Production (2021-2032)
1.4 Market Drivers, Restraints and Trends
  1.4.1 Silicon Carbide AR Waveguides Market Drivers
  1.4.2 Factors Affecting Demand
  1.4.3 Silicon Carbide AR Waveguides Major Market Trends

2 DEMAND SUMMARY

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

3 WORLD MANUFACTURERS COMPETITIVE ANALYSIS

3.1 World Silicon Carbide AR Waveguides Production Value by Manufacturer

+357 96 030922
info@marketpublishers.com

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

+357 96 030922
info@marketpublishers.com

4.4.1 United States Based Silicon Carbide AR Waveguides Manufacturers, Headquarters and Production Site (States, Country)
4.4.2 United States Based Manufacturers Silicon Carbide AR Waveguides Production Value (2021-2026)
4.4.3 United States Based Manufacturers Silicon Carbide AR Waveguides Production (2021-2026)
4.5 China Based Silicon Carbide AR Waveguides Manufacturers and Market Share
4.5.1 China Based Silicon Carbide AR Waveguides Manufacturers, Headquarters and Production Site (Province, Country)
4.5.2 China Based Manufacturers Silicon Carbide AR Waveguides Production Value (2021-2026)
4.5.3 China Based Manufacturers Silicon Carbide AR Waveguides Production (2021-2026)
4.6 Rest of World Based Silicon Carbide AR Waveguides Manufacturers and Market Share, 2021-2026
4.6.1 Rest of World Based Silicon Carbide AR Waveguides Manufacturers, Headquarters and Production Site (State, Country)
4.6.2 Rest of World Based Manufacturers Silicon Carbide AR Waveguides Production Value (2021-2026)
4.6.3 Rest of World Based Manufacturers Silicon Carbide AR Waveguides Production (2021-2026)

5 MARKET ANALYSIS BY FIELD OF VIEW

5.1 World Silicon Carbide AR Waveguides Market Size Overview by Field of View: 2021 VS 2025 VS 2032
5.2 Segment Introduction by Field of View
5.2.1 ?30° FOV
5.2.2 >30° to 50° FOV
5.2.3 >50° FOV
5.3 Market Segment by Field of View
5.3.1 World Silicon Carbide AR Waveguides Production by Field of View (2021-2032)
5.3.2 World Silicon Carbide AR Waveguides Production Value by Field of View (2021-2032)
5.3.3 World Silicon Carbide AR Waveguides Average Price by Field of View (2021-2032)

6 MARKET ANALYSIS BY GRATING FABRICATION ROUTE

+357 96 030922
info@marketpublishers.com

6.1 World Silicon Carbide AR Waveguides Market Size Overview by Grating Fabrication Route: 2021 VS 2025 VS 2032
6.2 Segment Introduction by Grating Fabrication Route
6.2.1 Direct Etched Waveguides
6.2.2 Nanoimprint-based Waveguides
6.2.3 Others
6.3 Market Segment by Grating Fabrication Route
6.3.1 World Silicon Carbide AR Waveguides Production by Grating Fabrication Route (2021-2032)
6.3.2 World Silicon Carbide AR Waveguides Production Value by Grating Fabrication Route (2021-2032)
6.3.3 World Silicon Carbide AR Waveguides Average Price by Grating Fabrication Route (2021-2032)

7 MARKET ANALYSIS BY DISPLAY COLOR CAPABILITY

7.1 World Silicon Carbide AR Waveguides Market Size Overview by Display Color Capability: 2021 VS 2025 VS 2032
7.2 Segment Introduction by Display Color Capability
7.2.1 Monochrome Waveguides
7.2.2 Full-color Waveguides
7.2.3 Others
7.3 Market Segment by Display Color Capability
7.3.1 World Silicon Carbide AR Waveguides Production by Display Color Capability (2021-2032)
7.3.2 World Silicon Carbide AR Waveguides Production Value by Display Color Capability (2021-2032)
7.3.3 World Silicon Carbide AR Waveguides Average Price by Display Color Capability (2021-2032)

8 MARKET ANALYSIS BY APPLICATION

8.1 World Silicon Carbide AR Waveguides Market Size Overview by Application: 2021 VS 2025 VS 2032
8.2 Segment Introduction by Application
8.2.1 Consumer AR Glasses
8.2.2 Enterprise and Industrial AR
8.2.3 Defense and Aerospace AR
8.2.4 Others

+357 96 030922
info@marketpublishers.com

8.3 Market Segment by Application
8.3.1 World Silicon Carbide AR Waveguides Production by Application (2021-2032)
8.3.2 World Silicon Carbide AR Waveguides Production Value by Application (2021-2032)
8.3.3 World Silicon Carbide AR Waveguides Average Price by Application (2021-2032)

9 COMPANY PROFILES

9.1 SeeV Optoelectronics Technology Co., Ltd.
9.1.1 SeeV Optoelectronics Technology Co., Ltd. Details
9.1.2 SeeV Optoelectronics Technology Co., Ltd. Major Business
9.1.3 SeeV Optoelectronics Technology Co., Ltd. Silicon Carbide AR Waveguides Product and Services
9.1.4 SeeV Optoelectronics Technology Co., Ltd. Silicon Carbide AR Waveguides Production, Price, Value, Gross Margin and Market Share (2021-2026)
9.1.5 SeeV Optoelectronics Technology Co., Ltd. Recent Developments/Updates
9.1.6 SeeV Optoelectronics Technology Co., Ltd. Competitive Strengths & Weaknesses
9.2 Goertek Optical Technology Co., Ltd.
9.2.1 Goertek Optical Technology Co., Ltd. Details
9.2.2 Goertek Optical Technology Co., Ltd. Major Business
9.2.3 Goertek Optical Technology Co., Ltd. Silicon Carbide AR Waveguides Product and Services
9.2.4 Goertek Optical Technology Co., Ltd. Silicon Carbide AR Waveguides Production, Price, Value, Gross Margin and Market Share (2021-2026)
9.2.5 Goertek Optical Technology Co., Ltd. Recent Developments/Updates
9.2.6 Goertek Optical Technology Co., Ltd. Competitive Strengths & Weaknesses
9.3 Moldnano (Hangzhou) Technology Co., Ltd.
9.3.1 Moldnano (Hangzhou) Technology Co., Ltd. Details
9.3.2 Moldnano (Hangzhou) Technology Co., Ltd. Major Business
9.3.3 Moldnano (Hangzhou) Technology Co., Ltd. Silicon Carbide AR Waveguides Product and Services
9.3.4 Moldnano (Hangzhou) Technology Co., Ltd. Silicon Carbide AR Waveguides Production, Price, Value, Gross Margin and Market Share (2021-2026)
9.3.5 Moldnano (Hangzhou) Technology Co., Ltd. Recent Developments/Updates
9.3.6 Moldnano (Hangzhou) Technology Co., Ltd. Competitive Strengths & Weaknesses
9.4 AAC Technologies Holdings Inc.
9.4.1 AAC Technologies Holdings Inc. Details

+357 96 030922
info@marketpublishers.com

9.4.2 AAC Technologies Holdings Inc. Major Business
9.4.3 AAC Technologies Holdings Inc. Silicon Carbide AR Waveguides Product and Services
9.4.4 AAC Technologies Holdings Inc. Silicon Carbide AR Waveguides Production, Price, Value, Gross Margin and Market Share (2021-2026)
9.4.5 AAC Technologies Holdings Inc. Recent Developments/Updates
9.4.6 AAC Technologies Holdings Inc. Competitive Strengths & Weaknesses
9.5 North Ocean Photonics Co., Ltd.
9.5.1 North Ocean Photonics Co., Ltd. Details
9.5.2 North Ocean Photonics Co., Ltd. Major Business
9.5.3 North Ocean Photonics Co., Ltd. Silicon Carbide AR Waveguides Product and Services
9.5.4 North Ocean Photonics Co., Ltd. Silicon Carbide AR Waveguides Production, Price, Value, Gross Margin and Market Share (2021-2026)
9.5.5 North Ocean Photonics Co., Ltd. Recent Developments/Updates
9.5.6 North Ocean Photonics Co., Ltd. Competitive Strengths & Weaknesses
9.6 Magic Leap, Inc.
9.6.1 Magic Leap, Inc. Details
9.6.2 Magic Leap, Inc. Major Business
9.6.3 Magic Leap, Inc. Silicon Carbide AR Waveguides Product and Services
9.6.4 Magic Leap, Inc. Silicon Carbide AR Waveguides Production, Price, Value, Gross Margin and Market Share (2021-2026)
9.6.5 Magic Leap, Inc. Recent Developments/Updates
9.6.6 Magic Leap, Inc. Competitive Strengths & Weaknesses

10 INDUSTRY CHAIN ANALYSIS

10.1 Silicon Carbide AR Waveguides Industry Chain
10.2 Silicon Carbide AR Waveguides Upstream Analysis
10.2.1 Silicon Carbide AR Waveguides Core Raw Materials
10.2.2 Main Manufacturers of Silicon Carbide AR Waveguides Core Raw Materials
10.3 Midstream Analysis
10.4 Downstream Analysis
10.5 Silicon Carbide AR Waveguides Production Mode
10.6 Silicon Carbide AR Waveguides Procurement Model
10.7 Silicon Carbide AR Waveguides Industry Sales Model and Sales Channels
10.7.1 Silicon Carbide AR Waveguides Sales Model
10.7.2 Silicon Carbide AR Waveguides Typical Distributors

+357 96 030922
info@marketpublishers.com

11 RESEARCH FINDINGS AND CONCLUSION

12 APPENDIX

12.1 Methodology
12.2 Research Process and Data Source
12.3 Disclaimer

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

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

+357 96 030922
info@marketpublishers.com

Table 19. Production Market Share of Key Silicon Carbide AR Waveguides Producers in 2025
Table 20. World Silicon Carbide AR Waveguides Average Price by Manufacturer (2021-2026) & (US$/Pcs)
Table 21. Global Silicon Carbide AR Waveguides Company Evaluation Quadrant
Table 22. World Silicon Carbide AR Waveguides Industry Rank of Major Manufacturers, Based on Production Value in 2025
Table 23. Head Office and Silicon Carbide AR Waveguides Production Site of Key Manufacturer
Table 24. Silicon Carbide AR Waveguides Market: Company Product Type Footprint
Table 25. Silicon Carbide AR Waveguides Market: Company Product Application Footprint
Table 26. Silicon Carbide AR Waveguides Competitive Factors
Table 27. Silicon Carbide AR Waveguides New Entrant and Capacity Expansion Plans
Table 28. Silicon Carbide AR Waveguides Mergers & Acquisitions Activity
Table 29. United States VS China Silicon Carbide AR Waveguides Production Value Comparison, (2021 & 2025 & 2032) & (USD Million)
Table 30. United States VS China Silicon Carbide AR Waveguides Production Comparison, (2021 & 2025 & 2032) & (K Pcs)
Table 31. United States VS China Silicon Carbide AR Waveguides Consumption Comparison, (2021 & 2025 & 2032) & (K Pcs)
Table 32. United States Based Silicon Carbide AR Waveguides Manufacturers, Headquarters and Production Site (States, Country)
Table 33. United States Based Manufacturers Silicon Carbide AR Waveguides Production Value, (2021-2026) & (USD Million)
Table 34. United States Based Manufacturers Silicon Carbide AR Waveguides Production Value Market Share (2021-2026)
Table 35. United States Based Manufacturers Silicon Carbide AR Waveguides Production (2021-2026) & (K Pcs)
Table 36. United States Based Manufacturers Silicon Carbide AR Waveguides Production Market Share (2021-2026)
Table 37. China Based Silicon Carbide AR Waveguides Manufacturers, Headquarters and Production Site (Province, Country)
Table 38. China Based Manufacturers Silicon Carbide AR Waveguides Production Value, (2021-2026) & (USD Million)
Table 39. China Based Manufacturers Silicon Carbide AR Waveguides Production Value Market Share (2021-2026)
Table 40. China Based Manufacturers Silicon Carbide AR Waveguides Production, (2021-2026) & (K Pcs)

+357 96 030922
info@marketpublishers.com

Table 41. China Based Manufacturers Silicon Carbide AR Waveguides Production Market Share (2021-2026)
Table 42. Rest of World Based Silicon Carbide AR Waveguides Manufacturers, Headquarters and Production Site (State, Country)
Table 43. Rest of World Based Manufacturers Silicon Carbide AR Waveguides Production Value, (2021-2026) & (USD Million)
Table 44. Rest of World Based Manufacturers Silicon Carbide AR Waveguides Production Value Market Share (2021-2026)
Table 45. Rest of World Based Manufacturers Silicon Carbide AR Waveguides Production, (2021-2026) & (K Pcs)
Table 46. Rest of World Based Manufacturers Silicon Carbide AR Waveguides Production Market Share (2021-2026)
Table 47. World Silicon Carbide AR Waveguides Production Value by Field of View, (USD Million), 2021 & 2025 & 2032
Table 48. World Silicon Carbide AR Waveguides Production by Field of View (2021-2026) & (K Pcs)
Table 49. World Silicon Carbide AR Waveguides Production by Field of View (2027-2032) & (K Pcs)
Table 50. World Silicon Carbide AR Waveguides Production Value by Field of View (2021-2026) & (USD Million)
Table 51. World Silicon Carbide AR Waveguides Production Value by Field of View (2027-2032) & (USD Million)
Table 52. World Silicon Carbide AR Waveguides Average Price by Field of View (2021-2026) & (US$/Pcs)
Table 53. World Silicon Carbide AR Waveguides Average Price by Field of View (2027-2032) & (US$/Pcs)
Table 54. World Silicon Carbide AR Waveguides Production Value by Grating Fabrication Route, (USD Million), 2021 & 2025 & 2032
Table 55. World Silicon Carbide AR Waveguides Production by Grating Fabrication Route (2021-2026) & (K Pcs)
Table 56. World Silicon Carbide AR Waveguides Production by Grating Fabrication Route (2027-2032) & (K Pcs)
Table 57. World Silicon Carbide AR Waveguides Production Value by Grating Fabrication Route (2021-2026) & (USD Million)
Table 58. World Silicon Carbide AR Waveguides Production Value by Grating Fabrication Route (2027-2032) & (USD Million)
Table 59. World Silicon Carbide AR Waveguides Average Price by Grating Fabrication Route (2021-2026) & (US$/Pcs)
Table 60. World Silicon Carbide AR Waveguides Average Price by Grating Fabrication

+357 96 030922
info@marketpublishers.com

Route (2027-2032) & (US$/Pcs)
Table 61. World Silicon Carbide AR Waveguides Production Value by Display Color Capability, (USD Million), 2021 & 2025 & 2032
Table 62. World Silicon Carbide AR Waveguides Production by Display Color Capability (2021-2026) & (K Pcs)
Table 63. World Silicon Carbide AR Waveguides Production by Display Color Capability (2027-2032) & (K Pcs)
Table 64. World Silicon Carbide AR Waveguides Production Value by Display Color Capability (2021-2026) & (USD Million)
Table 65. World Silicon Carbide AR Waveguides Production Value by Display Color Capability (2027-2032) & (USD Million)
Table 66. World Silicon Carbide AR Waveguides Average Price by Display Color Capability (2021-2026) & (US$/Pcs)
Table 67. World Silicon Carbide AR Waveguides Average Price by Display Color Capability (2027-2032) & (US$/Pcs)
Table 68. World Silicon Carbide AR Waveguides Production Value by Application, (USD Million), 2021 & 2025 & 2032
Table 69. World Silicon Carbide AR Waveguides Production by Application (2021-2026) & (K Pcs)
Table 70. World Silicon Carbide AR Waveguides Production by Application (2027-2032) & (K Pcs)
Table 71. World Silicon Carbide AR Waveguides Production Value by Application (2021-2026) & (USD Million)
Table 72. World Silicon Carbide AR Waveguides Production Value by Application (2027-2032) & (USD Million)
Table 73. World Silicon Carbide AR Waveguides Average Price by Application (2021-2026) & (US$/Pcs)
Table 74. World Silicon Carbide AR Waveguides Average Price by Application (2027-2032) & (US$/Pcs)
Table 75. SeeV Optoelectronics Technology Co., Ltd. Basic Information, Manufacturing Base and Competitors
Table 76. SeeV Optoelectronics Technology Co., Ltd. Major Business
Table 77. SeeV Optoelectronics Technology Co., Ltd. Silicon Carbide AR Waveguides Product and Services
Table 78. SeeV Optoelectronics Technology Co., Ltd. Silicon Carbide AR Waveguides Production (K Pcs), Price (US$/Pcs), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
Table 79. SeeV Optoelectronics Technology Co., Ltd. Recent Developments/Updates
Table 80. SeeV Optoelectronics Technology Co., Ltd. Competitive Strengths &

+357 96 030922
info@marketpublishers.com

Weaknesses
Table 81. Goertek Optical Technology Co., Ltd. Basic Information, Manufacturing Base and Competitors
Table 82. Goertek Optical Technology Co., Ltd. Major Business
Table 83. Goertek Optical Technology Co., Ltd. Silicon Carbide AR Waveguides Product and Services
Table 84. Goertek Optical Technology Co., Ltd. Silicon Carbide AR Waveguides Production (K Pcs), Price (US$/Pcs), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
Table 85. Goertek Optical Technology Co., Ltd. Recent Developments/Updates
Table 86. Goertek Optical Technology Co., Ltd. Competitive Strengths & Weaknesses
Table 87. Moldnano (Hangzhou) Technology Co., Ltd. Basic Information, Manufacturing Base and Competitors
Table 88. Moldnano (Hangzhou) Technology Co., Ltd. Major Business
Table 89. Moldnano (Hangzhou) Technology Co., Ltd. Silicon Carbide AR Waveguides Product and Services
Table 90. Moldnano (Hangzhou) Technology Co., Ltd. Silicon Carbide AR Waveguides Production (K Pcs), Price (US$/Pcs), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
Table 91. Moldnano (Hangzhou) Technology Co., Ltd. Recent Developments/Updates
Table 92. Moldnano (Hangzhou) Technology Co., Ltd. Competitive Strengths & Weaknesses
Table 93. AAC Technologies Holdings Inc. Basic Information, Manufacturing Base and Competitors
Table 94. AAC Technologies Holdings Inc. Major Business
Table 95. AAC Technologies Holdings Inc. Silicon Carbide AR Waveguides Product and Services
Table 96. AAC Technologies Holdings Inc. Silicon Carbide AR Waveguides Production (K Pcs), Price (US$/Pcs), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
Table 97. AAC Technologies Holdings Inc. Recent Developments/Updates
Table 98. AAC Technologies Holdings Inc. Competitive Strengths & Weaknesses
Table 99. North Ocean Photonics Co., Ltd. Basic Information, Manufacturing Base and Competitors
Table 100. North Ocean Photonics Co., Ltd. Major Business
Table 101. North Ocean Photonics Co., Ltd. Silicon Carbide AR Waveguides Product and Services
Table 102. North Ocean Photonics Co., Ltd. Silicon Carbide AR Waveguides Production (K Pcs), Price (US$/Pcs), Production Value (USD Million), Gross Margin and Market

+357 96 030922
info@marketpublishers.com

Share (2021-2026)
Table 103. North Ocean Photonics Co., Ltd. Recent Developments/Updates
Table 104. North Ocean Photonics Co., Ltd. Competitive Strengths & Weaknesses
Table 105. Magic Leap, Inc. Basic Information, Manufacturing Base and Competitors
Table 106. Magic Leap, Inc. Major Business
Table 107. Magic Leap, Inc. Silicon Carbide AR Waveguides Product and Services
Table 108. Magic Leap, Inc. Silicon Carbide AR Waveguides Production (K Pcs), Price (US$/Pcs), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
Table 109. Magic Leap, Inc. Recent Developments/Updates
Table 110. Magic Leap, Inc. Competitive Strengths & Weaknesses
Table 111. Global Key Players of Silicon Carbide AR Waveguides Upstream (Raw Materials)
Table 112. Global Silicon Carbide AR Waveguides Typical Customers
Table 113. Silicon Carbide AR Waveguides Typical Distributors

+357 96 030922
info@marketpublishers.com

List Of Figures

LIST OF FIGURES

Figure 1. Silicon Carbide AR Waveguides Picture
Figure 2. World Silicon Carbide AR Waveguides Production Value: 2021 & 2025 & 2032, (USD Million)
Figure 3. World Silicon Carbide AR Waveguides Production Value and Forecast (2021-2032) & (USD Million)
Figure 4. World Silicon Carbide AR Waveguides Production (2021-2032) & (K Pcs)
Figure 5. World Silicon Carbide AR Waveguides Average Price (2021-2032) & (US$/Pcs)
Figure 6. World Silicon Carbide AR Waveguides Production Value Market Share by Region (2021-2032)
Figure 7. World Silicon Carbide AR Waveguides Production Market Share by Region (2021-2032)
Figure 8. North America Silicon Carbide AR Waveguides Production (2021-2032) & (K Pcs)
Figure 9. China Silicon Carbide AR Waveguides Production (2021-2032) & (K Pcs)
Figure 10. Silicon Carbide AR Waveguides Market Drivers
Figure 11. Factors Affecting Demand
Figure 12. World Silicon Carbide AR Waveguides Consumption (2021-2032) & (K Pcs)
Figure 13. World Silicon Carbide AR Waveguides Consumption Market Share by Region (2021-2032)
Figure 14. United States Silicon Carbide AR Waveguides Consumption (2021-2032) & (K Pcs)
Figure 15. China Silicon Carbide AR Waveguides Consumption (2021-2032) & (K Pcs)
Figure 16. Europe Silicon Carbide AR Waveguides Consumption (2021-2032) & (K Pcs)
Figure 17. Japan Silicon Carbide AR Waveguides Consumption (2021-2032) & (K Pcs)
Figure 18. South Korea Silicon Carbide AR Waveguides Consumption (2021-2032) & (K Pcs)
Figure 19. ASEAN Silicon Carbide AR Waveguides Consumption (2021-2032) & (K Pcs)
Figure 20. India Silicon Carbide AR Waveguides Consumption (2021-2032) & (K Pcs)
Figure 21. Producer Shipments of Silicon Carbide AR Waveguides by Manufacturer Revenue ($MM) and Market Share (%): 2025
Figure 22. Global Four-firm Concentration Ratios (CR4) for Silicon Carbide AR Waveguides Markets in 2025
Figure 23. Global Four-firm Concentration Ratios (CR8) for Silicon Carbide AR

+357 96 030922
info@marketpublishers.com

Waveguides Markets in 2025
Figure 24. United States VS China: Silicon Carbide AR Waveguides Production Value Market Share Comparison (2021 & 2025 & 2032)
Figure 25. United States VS China: Silicon Carbide AR Waveguides Production Market Share Comparison (2021 & 2025 & 2032)
Figure 26. United States VS China: Silicon Carbide AR Waveguides Consumption Market Share Comparison (2021 & 2025 & 2032)
Figure 27. United States Based Manufacturers Silicon Carbide AR Waveguides Production Market Share 2025
Figure 28. China Based Manufacturers Silicon Carbide AR Waveguides Production Market Share 2025
Figure 29. Rest of World Based Manufacturers Silicon Carbide AR Waveguides Production Market Share 2025
Figure 30. World Silicon Carbide AR Waveguides Production Value by Field of View, (USD Million), 2021 & 2025 & 2032
Figure 31. World Silicon Carbide AR Waveguides Production Value Market Share by Field of View in 2025
Figure 32. ?30° FOV
Figure 33. >30° to 50° FOV
Figure 34. >50° FOV
Figure 35. World Silicon Carbide AR Waveguides Production Market Share by Field of View (2021-2032)
Figure 36. World Silicon Carbide AR Waveguides Production Value Market Share by Field of View (2021-2032)
Figure 37. World Silicon Carbide AR Waveguides Average Price by Field of View (2021-2032) & (US$/Pcs)
Figure 38. World Silicon Carbide AR Waveguides Production Value by Grating Fabrication Route, (USD Million), 2021 & 2025 & 2032
Figure 39. World Silicon Carbide AR Waveguides Production Value Market Share by Grating Fabrication Route in 2025
Figure 40. Direct Etched Waveguides
Figure 41. Nanoimprint-based Waveguides
Figure 42. Others
Figure 43. World Silicon Carbide AR Waveguides Production Market Share by Grating Fabrication Route (2021-2032)
Figure 44. World Silicon Carbide AR Waveguides Production Value Market Share by Grating Fabrication Route (2021-2032)
Figure 45. World Silicon Carbide AR Waveguides Average Price by Grating Fabrication Route (2021-2032) & (US$/Pcs)

+357 96 030922
info@marketpublishers.com

Figure 46. World Silicon Carbide AR Waveguides Production Value by Display Color Capability, (USD Million), 2021 & 2025 & 2032
Figure 47. World Silicon Carbide AR Waveguides Production Value Market Share by Display Color Capability in 2025
Figure 48. Monochrome Waveguides
Figure 49. Full-color Waveguides
Figure 50. Others
Figure 51. World Silicon Carbide AR Waveguides Production Market Share by Display Color Capability (2021-2032)
Figure 52. World Silicon Carbide AR Waveguides Production Value Market Share by Display Color Capability (2021-2032)
Figure 53. World Silicon Carbide AR Waveguides Average Price by Display Color Capability (2021-2032) & (US$/Pcs)
Figure 54. World Silicon Carbide AR Waveguides Production Value by Application, (USD Million), 2021 & 2025 & 2032
Figure 55. World Silicon Carbide AR Waveguides Production Value Market Share by Application in 2025
Figure 56. Consumer AR Glasses
Figure 57. Enterprise and Industrial AR
Figure 58. Defense and Aerospace AR
Figure 59. Others
Figure 60. World Silicon Carbide AR Waveguides Production Market Share by Application (2021-2032)
Figure 61. World Silicon Carbide AR Waveguides Production Value Market Share by Application (2021-2032)
Figure 62. World Silicon Carbide AR Waveguides Average Price by Application (2021-2032) & (US$/Pcs)
Figure 63. Silicon Carbide AR Waveguides Industry Chain
Figure 64. Silicon Carbide AR Waveguides Procurement Model
Figure 65. Silicon Carbide AR Waveguides Sales Model
Figure 66. Silicon Carbide AR Waveguides Sales Channels, Direct Sales, and Distribution
Figure 67. Methodology
Figure 68. Research Process and Data Source

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Global Silicon Carbide AR Waveguides Supply, Demand and Key Producers, 2026-2032

Product link: https://marketpublishers.com/r/G62419ABCA1AEN.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

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G62419ABCA1AEN.html