

Global Quantum Dot Infrared Photodetectors Market Growth 2026-2032

<https://marketpublishers.com/r/G24B69781638EN.html>

Date: May 2026

Pages: 125

Price: US\$ 3,660.00 (Single User License)

ID: G24B69781638EN

Abstracts

The global Quantum Dot Infrared Photodetectors market size is predicted to grow from US\$ 303 million in 2025 to US\$ 794 million in 2032; it is expected to grow at a CAGR of 14.8% from 2026 to 2032.

In 2025, global Quantum Dot Infrared Photodetectors output reached about 5 million units and global capacity of around 8 million units. The average unit price is about USD 62, with gross margins near 39%. Quantum Dot Infrared Photodetectors (QDIPs) are semiconductor photodetectors that utilize quantum dots—nanoscale semiconductor crystals with discrete energy levels—to absorb infrared (IR) radiation and convert it into electrical signals. These devices operate in the short-wave (SWIR), mid-wave (MWIR), and long-wave infrared (LWIR) spectral ranges and are widely used in thermal imaging, night vision, environmental sensing, medical diagnostics, industrial monitoring, and defense surveillance systems. Their key advantages include high sensitivity, tunable spectral response, low dark current, and compatibility with standard semiconductor fabrication processes. The supply chain begins with upstream raw materials and nanomaterial synthesis, including semiconductor compounds such as lead sulfide (PbS), lead selenide (PbSe), mercury telluride (HgTe), indium arsenide (InAs), cadmium selenide (CdSe), and other III-V or II-VI materials, along with precursors, solvents, and ligands used in colloidal quantum dot synthesis. The midstream stage involves quantum dot fabrication, thin-film deposition, and device integration, including epitaxial growth or colloidal synthesis, photolithography, wafer processing, and integration with CMOS readout integrated circuits (ROICs) and focal plane arrays. The downstream segment includes infrared imaging modules, thermal cameras, spectroscopy instruments, autonomous vehicle sensors, aerospace systems, security monitoring devices, and industrial inspection equipment, where QDIPs are incorporated into advanced sensing and imaging platforms.

United States market for Quantum Dot Infrared Photodetectors is estimated to increase from US\$ million in 2025 to US\$ million by 2032, at a CAGR of % from 2026 through 2032.

China market for Quantum Dot Infrared Photodetectors is estimated to increase from US\$ million in 2025 to US\$ million by 2032, at a CAGR of % from 2026 through 2032.

Europe market for Quantum Dot Infrared Photodetectors is estimated to increase from US\$ million in 2025 to US\$ million by 2032, at a CAGR of % from 2026 through 2032.

Global key Quantum Dot Infrared Photodetectors players cover SWIR Vision Systems, Emberion, QDI Systems, Aeluma, Hamamatsu Photonics, etc. In terms of revenue, the global two largest companies occupied for a share nearly % in 2025.

LP Information, Inc. (LPI) ' newest research report, the "Quantum Dot Infrared Photodetectors Industry Forecast" looks at past sales and reviews total world Quantum Dot Infrared Photodetectors sales in 2025, providing a comprehensive analysis by region and market sector of projected Quantum Dot Infrared Photodetectors sales for 2026 through 2032. With Quantum Dot Infrared Photodetectors sales broken down by region, market sector and sub-sector, this report provides a detailed analysis in US\$ millions of the world Quantum Dot Infrared Photodetectors industry.

This Insight Report provides a comprehensive analysis of the global Quantum Dot Infrared Photodetectors landscape and highlights key trends related to product segmentation, company formation, revenue, and market share, latest development, and M&A activity. This report also analyzes the strategies of leading global companies with a focus on Quantum Dot Infrared Photodetectors portfolios and capabilities, market entry strategies, market positions, and geographic footprints, to better understand these firms' unique position in an accelerating global Quantum Dot Infrared Photodetectors market.

This Insight Report evaluates the key market trends, drivers, and affecting factors shaping the global outlook for Quantum Dot Infrared Photodetectors and breaks down the forecast by Type, by Application, geography, and market size to highlight emerging pockets of opportunity. With a transparent methodology based on hundreds of bottom-up qualitative and quantitative market inputs, this study forecast offers a highly nuanced view of the current state and future trajectory in the global Quantum Dot Infrared Photodetectors.

This report presents a comprehensive overview, market shares, and growth opportunities of Quantum Dot Infrared Photodetectors market by product type, application, key manufacturers and key regions and countries.

Segmentation by Type:

Short-Wave Infrared (SWIR) QDIPs

Mid-Wave Infrared (MWIR) QDIPs

Long-Wave Infrared (LWIR) QDIPs

Broadband Infrared QDIPs

Segmentation by Quantum Dot Material:

Lead Sulfide (PbS)

Lead Selenide (PbSe)

Mercury Telluride (HgTe)

Cadmium Selenide (CdSe)

Indium Arsenide (InAs)

Gallium Arsenide (GaAs)

Segmentation by Application:

Aerospace & Defense

Security & Surveillance

Automotive

Industrial

Environmental

Agricultural

Medical

Others

This report also splits the market by region:

Americas

United States

Canada

Mexico

Brazil

APAC

China

Japan

Korea

Southeast Asia

India

Australia

Europe

Germany

France

UK

Italy

Russia

Middle East & Africa

Egypt

South Africa

Israel

Turkey

GCC Countries

The below companies that are profiled have been selected based on inputs gathered from primary experts and analysing the company's coverage, product portfolio, its market penetration.

SWIR Vision Systems

Emberion

QDI Systems

Aeluma

Hamamatsu Photonics

Teledyne Technologies

Leonardo DRS

SemiConductor Devices

Excelitas Technologies

Allied Vision Technologies

New Imaging Technologies

Princeton Infrared Technologies

Himax Technologies

OmniVision Technologies

Key Questions Addressed in this Report

What is the 10-year outlook for the global Quantum Dot Infrared Photodetectors market?

What factors are driving Quantum Dot Infrared Photodetectors market growth, globally and by region?

Which technologies are poised for the fastest growth by market and region?

How do Quantum Dot Infrared Photodetectors market opportunities vary by end market size?

How does Quantum Dot Infrared Photodetectors break out by Type, by Application?

Contents

1 SCOPE OF THE REPORT

- 1.1 Market Introduction
- 1.2 Years Considered
- 1.3 Research Objectives
- 1.4 Market Research Methodology
- 1.5 Research Process and Data Source
- 1.6 Economic Indicators
- 1.7 Currency Considered
- 1.8 Market Estimation Caveats

2 EXECUTIVE SUMMARY

2.1 World Market Overview

- 2.1.1 Global Quantum Dot Infrared Photodetectors Annual Sales 2021-2032
- 2.1.2 World Current & Future Analysis for Quantum Dot Infrared Photodetectors by Geographic Region, 2021, 2025 & 2032
- 2.1.3 World Current & Future Analysis for Quantum Dot Infrared Photodetectors by Country/Region, 2021, 2025 & 2032

2.2 Quantum Dot Infrared Photodetectors Segment by Type

- 2.2.1 Short-Wave Infrared (SWIR) QDIPs
- 2.2.2 Mid-Wave Infrared (MWIR) QDIPs
- 2.2.3 Long-Wave Infrared (LWIR) QDIPs
- 2.2.4 Broadband Infrared QDIPs
- 2.2.5 Quantum Dot Infrared Photodetectors Sales by Type
 - 2.2.5.1 Global Quantum Dot Infrared Photodetectors Sales Market Share by Type (2021-2026)
 - 2.2.5.2 Global Quantum Dot Infrared Photodetectors Revenue and Market Share by Type (2021-2026)
 - 2.2.5.3 Global Quantum Dot Infrared Photodetectors Sale Price by Type (2021-2026)

2.3 Quantum Dot Infrared Photodetectors Segment by Quantum Dot Material

- 2.3.1 Lead Sulfide (PbS)
- 2.3.2 Lead Selenide (PbSe)
- 2.3.3 Mercury Telluride (HgTe)
- 2.3.4 Cadmium Selenide (CdSe)
- 2.3.5 Indium Arsenide (InAs)
- 2.3.6 Gallium Arsenide (GaAs)

- 2.3.7 Quantum Dot Infrared Photodetectors Sales by Quantum Dot Material
 - 2.3.7.1 Global Quantum Dot Infrared Photodetectors Sales Market Share by Quantum Dot Material (2021-2026)
 - 2.3.7.2 Global Quantum Dot Infrared Photodetectors Revenue and Market Share by Quantum Dot Material (2021-2026)
 - 2.3.7.3 Global Quantum Dot Infrared Photodetectors Sale Price by Quantum Dot Material (2021-2026)
- 2.4 Quantum Dot Infrared Photodetectors Segment by Application
 - 2.4.1 Aerospace & Defense
 - 2.4.2 Security & Surveillance
 - 2.4.3 Automotive
 - 2.4.4 Industrial
 - 2.4.5 Environmental
 - 2.4.6 Agricultural
 - 2.4.7 Medical
 - 2.4.8 Others
 - 2.4.9 Quantum Dot Infrared Photodetectors Sales by Application
 - 2.4.9.1 Global Quantum Dot Infrared Photodetectors Sale Market Share by Application (2021-2026)
 - 2.4.9.2 Global Quantum Dot Infrared Photodetectors Revenue and Market Share by Application (2021-2026)
 - 2.4.9.3 Global Quantum Dot Infrared Photodetectors Sale Price by Application (2021-2026)

3 GLOBAL BY COMPANY

- 3.1 Global Quantum Dot Infrared Photodetectors Breakdown Data by Company
 - 3.1.1 Global Quantum Dot Infrared Photodetectors Annual Sales by Company (2021-2026)
 - 3.1.2 Global Quantum Dot Infrared Photodetectors Sales Market Share by Company (2021-2026)
- 3.2 Global Quantum Dot Infrared Photodetectors Annual Revenue by Company (2021-2026)
 - 3.2.1 Global Quantum Dot Infrared Photodetectors Revenue by Company (2021-2026)
 - 3.2.2 Global Quantum Dot Infrared Photodetectors Revenue Market Share by Company (2021-2026)
- 3.3 Global Quantum Dot Infrared Photodetectors Sale Price by Company
- 3.4 Key Manufacturers Quantum Dot Infrared Photodetectors Producing Area Distribution, Sales Area, Product Type

3.4.1 Key Manufacturers Quantum Dot Infrared Photodetectors Product Location Distribution

3.4.2 Players Quantum Dot Infrared Photodetectors Products Offered

3.5 Market Concentration Rate Analysis

3.5.1 Competition Landscape Analysis

3.5.2 Concentration Ratio (CR3, CR5 and CR10) & (2024-2026)

3.6 New Products and Potential Entrants

3.7 Market M&A Activity & Strategy

4 WORLD HISTORIC REVIEW FOR QUANTUM DOT INFRARED PHOTODETECTORS BY GEOGRAPHIC REGION

4.1 World Historic Quantum Dot Infrared Photodetectors Market Size by Geographic Region (2021-2026)

4.1.1 Global Quantum Dot Infrared Photodetectors Annual Sales by Geographic Region (2021-2026)

4.1.2 Global Quantum Dot Infrared Photodetectors Annual Revenue by Geographic Region (2021-2026)

4.2 World Historic Quantum Dot Infrared Photodetectors Market Size by Country/Region (2021-2026)

4.2.1 Global Quantum Dot Infrared Photodetectors Annual Sales by Country/Region (2021-2026)

4.2.2 Global Quantum Dot Infrared Photodetectors Annual Revenue by Country/Region (2021-2026)

4.3 Americas Quantum Dot Infrared Photodetectors Sales Growth

4.4 APAC Quantum Dot Infrared Photodetectors Sales Growth

4.5 Europe Quantum Dot Infrared Photodetectors Sales Growth

4.6 Middle East & Africa Quantum Dot Infrared Photodetectors Sales Growth

5 AMERICAS

5.1 Americas Quantum Dot Infrared Photodetectors Sales by Country

5.1.1 Americas Quantum Dot Infrared Photodetectors Sales by Country (2021-2026)

5.1.2 Americas Quantum Dot Infrared Photodetectors Revenue by Country (2021-2026)

5.2 Americas Quantum Dot Infrared Photodetectors Sales by Type (2021-2026)

5.3 Americas Quantum Dot Infrared Photodetectors Sales by Application (2021-2026)

5.4 United States

5.5 Canada

5.6 Mexico

5.7 Brazil

6 APAC

6.1 APAC Quantum Dot Infrared Photodetectors Sales by Region

6.1.1 APAC Quantum Dot Infrared Photodetectors Sales by Region (2021-2026)

6.1.2 APAC Quantum Dot Infrared Photodetectors Revenue by Region (2021-2026)

6.2 APAC Quantum Dot Infrared Photodetectors Sales by Type (2021-2026)

6.3 APAC Quantum Dot Infrared Photodetectors Sales by Application (2021-2026)

6.4 China

6.5 Japan

6.6 South Korea

6.7 Southeast Asia

6.8 India

6.9 Australia

6.10 China Taiwan

7 EUROPE

7.1 Europe Quantum Dot Infrared Photodetectors by Country

7.1.1 Europe Quantum Dot Infrared Photodetectors Sales by Country (2021-2026)

7.1.2 Europe Quantum Dot Infrared Photodetectors Revenue by Country (2021-2026)

7.2 Europe Quantum Dot Infrared Photodetectors Sales by Type (2021-2026)

7.3 Europe Quantum Dot Infrared Photodetectors Sales by Application (2021-2026)

7.4 Germany

7.5 France

7.6 UK

7.7 Italy

7.8 Russia

8 MIDDLE EAST & AFRICA

8.1 Middle East & Africa Quantum Dot Infrared Photodetectors by Country

8.1.1 Middle East & Africa Quantum Dot Infrared Photodetectors Sales by Country (2021-2026)

8.1.2 Middle East & Africa Quantum Dot Infrared Photodetectors Revenue by Country (2021-2026)

8.2 Middle East & Africa Quantum Dot Infrared Photodetectors Sales by Type

(2021-2026)

8.3 Middle East & Africa Quantum Dot Infrared Photodetectors Sales by Application

(2021-2026)

8.4 Egypt

8.5 South Africa

8.6 Israel

8.7 Turkey

8.8 GCC Countries

9 MARKET DRIVERS, CHALLENGES AND TRENDS

9.1 Market Drivers & Growth Opportunities

9.2 Market Challenges & Risks

9.3 Industry Trends

10 MANUFACTURING COST STRUCTURE ANALYSIS

10.1 Raw Material and Suppliers

10.2 Manufacturing Cost Structure Analysis of Quantum Dot Infrared Photodetectors

10.3 Manufacturing Process Analysis of Quantum Dot Infrared Photodetectors

10.4 Industry Chain Structure of Quantum Dot Infrared Photodetectors

11 MARKETING, DISTRIBUTORS AND CUSTOMER

11.1 Sales Channel

11.1.1 Direct Channels

11.1.2 Indirect Channels

11.2 Quantum Dot Infrared Photodetectors Distributors

11.3 Quantum Dot Infrared Photodetectors Customer

12 WORLD FORECAST REVIEW FOR QUANTUM DOT INFRARED PHOTODETECTORS BY GEOGRAPHIC REGION

12.1 Global Quantum Dot Infrared Photodetectors Market Size Forecast by Region

12.1.1 Global Quantum Dot Infrared Photodetectors Forecast by Region (2027-2032)

12.1.2 Global Quantum Dot Infrared Photodetectors Annual Revenue Forecast by Region (2027-2032)

12.2 Americas Forecast by Country (2027-2032)

12.3 APAC Forecast by Region (2027-2032)

12.4 Europe Forecast by Country (2027-2032)

12.5 Middle East & Africa Forecast by Country (2027-2032)

12.6 Global Quantum Dot Infrared Photodetectors Forecast by Type (2027-2032)

12.7 Global Quantum Dot Infrared Photodetectors Forecast by Application (2027-2032)

13 KEY PLAYERS ANALYSIS

13.1 SWIR Vision Systems

13.1.1 SWIR Vision Systems Company Information

13.1.2 SWIR Vision Systems Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

13.1.3 SWIR Vision Systems Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)

13.1.4 SWIR Vision Systems Main Business Overview

13.1.5 SWIR Vision Systems Latest Developments

13.2 Emberion

13.2.1 Emberion Company Information

13.2.2 Emberion Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

13.2.3 Emberion Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)

13.2.4 Emberion Main Business Overview

13.2.5 Emberion Latest Developments

13.3 QDI Systems

13.3.1 QDI Systems Company Information

13.3.2 QDI Systems Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

13.3.3 QDI Systems Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)

13.3.4 QDI Systems Main Business Overview

13.3.5 QDI Systems Latest Developments

13.4 Aeluma

13.4.1 Aeluma Company Information

13.4.2 Aeluma Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

13.4.3 Aeluma Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)

13.4.4 Aeluma Main Business Overview

13.4.5 Aeluma Latest Developments

13.5 Hamamatsu Photonics

13.5.1 Hamamatsu Photonics Company Information

13.5.2 Hamamatsu Photonics Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

13.5.3 Hamamatsu Photonics Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)

13.5.4 Hamamatsu Photonics Main Business Overview

13.5.5 Hamamatsu Photonics Latest Developments

13.6 Teledyne Technologies

13.6.1 Teledyne Technologies Company Information

13.6.2 Teledyne Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

13.6.3 Teledyne Technologies Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)

13.6.4 Teledyne Technologies Main Business Overview

13.6.5 Teledyne Technologies Latest Developments

13.7 Leonardo DRS

13.7.1 Leonardo DRS Company Information

13.7.2 Leonardo DRS Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

13.7.3 Leonardo DRS Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)

13.7.4 Leonardo DRS Main Business Overview

13.7.5 Leonardo DRS Latest Developments

13.8 SemiConductor Devices

13.8.1 SemiConductor Devices Company Information

13.8.2 SemiConductor Devices Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

13.8.3 SemiConductor Devices Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)

13.8.4 SemiConductor Devices Main Business Overview

13.8.5 SemiConductor Devices Latest Developments

13.9 Excelitas Technologies

13.9.1 Excelitas Technologies Company Information

13.9.2 Excelitas Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

13.9.3 Excelitas Technologies Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)

13.9.4 Excelitas Technologies Main Business Overview

- 13.9.5 Excelitas Technologies Latest Developments
- 13.10 Allied Vision Technologies
 - 13.10.1 Allied Vision Technologies Company Information
 - 13.10.2 Allied Vision Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications
 - 13.10.3 Allied Vision Technologies Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)
 - 13.10.4 Allied Vision Technologies Main Business Overview
 - 13.10.5 Allied Vision Technologies Latest Developments
- 13.11 New Imaging Technologies
 - 13.11.1 New Imaging Technologies Company Information
 - 13.11.2 New Imaging Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications
 - 13.11.3 New Imaging Technologies Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)
 - 13.11.4 New Imaging Technologies Main Business Overview
 - 13.11.5 New Imaging Technologies Latest Developments
- 13.12 Princeton Infrared Technologies
 - 13.12.1 Princeton Infrared Technologies Company Information
 - 13.12.2 Princeton Infrared Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications
 - 13.12.3 Princeton Infrared Technologies Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)
 - 13.12.4 Princeton Infrared Technologies Main Business Overview
 - 13.12.5 Princeton Infrared Technologies Latest Developments
- 13.13 Himax Technologies
 - 13.13.1 Himax Technologies Company Information
 - 13.13.2 Himax Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications
 - 13.13.3 Himax Technologies Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)
 - 13.13.4 Himax Technologies Main Business Overview
 - 13.13.5 Himax Technologies Latest Developments
- 13.14 OmniVision Technologies
 - 13.14.1 OmniVision Technologies Company Information
 - 13.14.2 OmniVision Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications
 - 13.14.3 OmniVision Technologies Quantum Dot Infrared Photodetectors Sales, Revenue, Price and Gross Margin (2021-2026)

13.14.4 OmniVision Technologies Main Business Overview

13.14.5 OmniVision Technologies Latest Developments

14 RESEARCH FINDINGS AND CONCLUSION

List Of Tables

LIST OF TABLES

Table 1. Quantum Dot Infrared Photodetectors Annual Sales CAGR by Geographic Region (2021, 2025 & 2032) & (\$ millions)

Table 2. Quantum Dot Infrared Photodetectors Annual Sales CAGR by Country/Region (2021, 2025 & 2032) & (\$ millions)

Table 3. Major Players of Short-Wave Infrared (SWIR) QDIPs

Table 4. Major Players of Mid-Wave Infrared (MWIR) QDIPs

Table 5. Major Players of Long-Wave Infrared (LWIR) QDIPs

Table 6. Major Players of Broadband Infrared QDIPs

Table 7. Global Quantum Dot Infrared Photodetectors Sales by Type (2021-2026) & (K Units)

Table 8. Global Quantum Dot Infrared Photodetectors Sales Market Share by Type (2021-2026)

Table 9. Global Quantum Dot Infrared Photodetectors Revenue by Type (2021-2026) & (\$ million)

Table 10. Global Quantum Dot Infrared Photodetectors Revenue Market Share by Type (2021-2026)

Table 11. Global Quantum Dot Infrared Photodetectors Sale Price by Type (2021-2026) & (US\$/Unit)

Table 12. Major Players of Lead Sulfide (PbS)

Table 13. Major Players of Lead Selenide (PbSe)

Table 14. Major Players of Mercury Telluride (HgTe)

Table 15. Major Players of Cadmium Selenide (CdSe)

Table 16. Major Players of Indium Arsenide (InAs)

Table 17. Major Players of Gallium Arsenide (GaAs)

Table 18. Global Quantum Dot Infrared Photodetectors Sales by Quantum Dot Material (2021-2026) & (K Units)

Table 19. Global Quantum Dot Infrared Photodetectors Sales Market Share by Quantum Dot Material (2021-2026)

Table 20. Global Quantum Dot Infrared Photodetectors Revenue by Quantum Dot Material (2021-2026) & (\$ million)

Table 21. Global Quantum Dot Infrared Photodetectors Revenue Market Share by Quantum Dot Material (2021-2026)

Table 22. Global Quantum Dot Infrared Photodetectors Sale Price by Quantum Dot Material (2021-2026) & (US\$/Unit)

Table 23. Global Quantum Dot Infrared Photodetectors Sale by Application (2021-2026)

& (K Units)

Table 24. Global Quantum Dot Infrared Photodetectors Sale Market Share by Application (2021-2026)

Table 25. Global Quantum Dot Infrared Photodetectors Revenue by Application (2021-2026) & (\$ million)

Table 26. Global Quantum Dot Infrared Photodetectors Revenue Market Share by Application (2021-2026)

Table 27. Global Quantum Dot Infrared Photodetectors Sale Price by Application (2021-2026) & (US\$/Unit)

Table 28. Global Quantum Dot Infrared Photodetectors Sales by Company (2021-2026) & (K Units)

Table 29. Global Quantum Dot Infrared Photodetectors Sales Market Share by Company (2021-2026)

Table 30. Global Quantum Dot Infrared Photodetectors Revenue by Company (2021-2026) & (\$ millions)

Table 31. Global Quantum Dot Infrared Photodetectors Revenue Market Share by Company (2021-2026)

Table 32. Global Quantum Dot Infrared Photodetectors Sale Price by Company (2021-2026) & (US\$/Unit)

Table 33. Key Manufacturers Quantum Dot Infrared Photodetectors Producing Area Distribution and Sales Area

Table 34. Players Quantum Dot Infrared Photodetectors Products Offered

Table 35. Quantum Dot Infrared Photodetectors Concentration Ratio (CR3, CR5 and CR10) & (2024-2026)

Table 36. New Products and Potential Entrants

Table 37. Market M&A Activity & Strategy

Table 38. Global Quantum Dot Infrared Photodetectors Sales by Geographic Region (2021-2026) & (K Units)

Table 39. Global Quantum Dot Infrared Photodetectors Sales Market Share Geographic Region (2021-2026)

Table 40. Global Quantum Dot Infrared Photodetectors Revenue by Geographic Region (2021-2026) & (\$ millions)

Table 41. Global Quantum Dot Infrared Photodetectors Revenue Market Share by Geographic Region (2021-2026)

Table 42. Global Quantum Dot Infrared Photodetectors Sales by Country/Region (2021-2026) & (K Units)

Table 43. Global Quantum Dot Infrared Photodetectors Sales Market Share by Country/Region (2021-2026)

Table 44. Global Quantum Dot Infrared Photodetectors Revenue by Country/Region

(2021-2026) & (\$ millions)

Table 45. Global Quantum Dot Infrared Photodetectors Revenue Market Share by Country/Region (2021-2026)

Table 46. Americas Quantum Dot Infrared Photodetectors Sales by Country (2021-2026) & (K Units)

Table 47. Americas Quantum Dot Infrared Photodetectors Sales Market Share by Country (2021-2026)

Table 48. Americas Quantum Dot Infrared Photodetectors Revenue by Country (2021-2026) & (\$ millions)

Table 49. Americas Quantum Dot Infrared Photodetectors Sales by Type (2021-2026) & (K Units)

Table 50. Americas Quantum Dot Infrared Photodetectors Sales by Application (2021-2026) & (K Units)

Table 51. APAC Quantum Dot Infrared Photodetectors Sales by Region (2021-2026) & (K Units)

Table 52. APAC Quantum Dot Infrared Photodetectors Sales Market Share by Region (2021-2026)

Table 53. APAC Quantum Dot Infrared Photodetectors Revenue by Region (2021-2026) & (\$ millions)

Table 54. APAC Quantum Dot Infrared Photodetectors Sales by Type (2021-2026) & (K Units)

Table 55. APAC Quantum Dot Infrared Photodetectors Sales by Application (2021-2026) & (K Units)

Table 56. Europe Quantum Dot Infrared Photodetectors Sales by Country (2021-2026) & (K Units)

Table 57. Europe Quantum Dot Infrared Photodetectors Revenue by Country (2021-2026) & (\$ millions)

Table 58. Europe Quantum Dot Infrared Photodetectors Sales by Type (2021-2026) & (K Units)

Table 59. Europe Quantum Dot Infrared Photodetectors Sales by Application (2021-2026) & (K Units)

Table 60. Middle East & Africa Quantum Dot Infrared Photodetectors Sales by Country (2021-2026) & (K Units)

Table 61. Middle East & Africa Quantum Dot Infrared Photodetectors Revenue Market Share by Country (2021-2026)

Table 62. Middle East & Africa Quantum Dot Infrared Photodetectors Sales by Type (2021-2026) & (K Units)

Table 63. Middle East & Africa Quantum Dot Infrared Photodetectors Sales by Application (2021-2026) & (K Units)

Table 64. Key Market Drivers & Growth Opportunities of Quantum Dot Infrared Photodetectors

Table 65. Key Market Challenges & Risks of Quantum Dot Infrared Photodetectors

Table 66. Key Industry Trends of Quantum Dot Infrared Photodetectors

Table 67. Quantum Dot Infrared Photodetectors Raw Material

Table 68. Key Suppliers of Raw Materials

Table 69. Quantum Dot Infrared Photodetectors Distributors List

Table 70. Quantum Dot Infrared Photodetectors Customer List

Table 71. Global Quantum Dot Infrared Photodetectors Sales Forecast by Region (2027-2032) & (K Units)

Table 72. Global Quantum Dot Infrared Photodetectors Revenue Forecast by Region (2027-2032) & (\$ millions)

Table 73. Americas Quantum Dot Infrared Photodetectors Sales Forecast by Country (2027-2032) & (K Units)

Table 74. Americas Quantum Dot Infrared Photodetectors Annual Revenue Forecast by Country (2027-2032) & (\$ millions)

Table 75. APAC Quantum Dot Infrared Photodetectors Sales Forecast by Region (2027-2032) & (K Units)

Table 76. APAC Quantum Dot Infrared Photodetectors Annual Revenue Forecast by Region (2027-2032) & (\$ millions)

Table 77. Europe Quantum Dot Infrared Photodetectors Sales Forecast by Country (2027-2032) & (K Units)

Table 78. Europe Quantum Dot Infrared Photodetectors Revenue Forecast by Country (2027-2032) & (\$ millions)

Table 79. Middle East & Africa Quantum Dot Infrared Photodetectors Sales Forecast by Country (2027-2032) & (K Units)

Table 80. Middle East & Africa Quantum Dot Infrared Photodetectors Revenue Forecast by Country (2027-2032) & (\$ millions)

Table 81. Global Quantum Dot Infrared Photodetectors Sales Forecast by Type (2027-2032) & (K Units)

Table 82. Global Quantum Dot Infrared Photodetectors Revenue Forecast by Type (2027-2032) & (\$ millions)

Table 83. Global Quantum Dot Infrared Photodetectors Sales Forecast by Application (2027-2032) & (K Units)

Table 84. Global Quantum Dot Infrared Photodetectors Revenue Forecast by Application (2027-2032) & (\$ millions)

Table 85. SWIR Vision Systems Basic Information, Quantum Dot Infrared Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 86. SWIR Vision Systems Quantum Dot Infrared Photodetectors Product

Portfolios and Specifications

Table 87. SWIR Vision Systems Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 88. SWIR Vision Systems Main Business

Table 89. SWIR Vision Systems Latest Developments

Table 90. Emberion Basic Information, Quantum Dot Infrared Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 91. Emberion Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

Table 92. Emberion Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 93. Emberion Main Business

Table 94. Emberion Latest Developments

Table 95. QDI Systems Basic Information, Quantum Dot Infrared Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 96. QDI Systems Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

Table 97. QDI Systems Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 98. QDI Systems Main Business

Table 99. QDI Systems Latest Developments

Table 100. Aeluma Basic Information, Quantum Dot Infrared Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 101. Aeluma Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

Table 102. Aeluma Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 103. Aeluma Main Business

Table 104. Aeluma Latest Developments

Table 105. Hamamatsu Photonics Basic Information, Quantum Dot Infrared Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 106. Hamamatsu Photonics Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

Table 107. Hamamatsu Photonics Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 108. Hamamatsu Photonics Main Business

Table 109. Hamamatsu Photonics Latest Developments

Table 110. Teledyne Technologies Basic Information, Quantum Dot Infrared Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 111. Teledyne Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

Table 112. Teledyne Technologies Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 113. Teledyne Technologies Main Business

Table 114. Teledyne Technologies Latest Developments

Table 115. Leonardo DRS Basic Information, Quantum Dot Infrared Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 116. Leonardo DRS Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

Table 117. Leonardo DRS Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 118. Leonardo DRS Main Business

Table 119. Leonardo DRS Latest Developments

Table 120. SemiConductor Devices Basic Information, Quantum Dot Infrared Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 121. SemiConductor Devices Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

Table 122. SemiConductor Devices Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 123. SemiConductor Devices Main Business

Table 124. SemiConductor Devices Latest Developments

Table 125. Excelitas Technologies Basic Information, Quantum Dot Infrared Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 126. Excelitas Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

Table 127. Excelitas Technologies Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 128. Excelitas Technologies Main Business

Table 129. Excelitas Technologies Latest Developments

Table 130. Allied Vision Technologies Basic Information, Quantum Dot Infrared Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 131. Allied Vision Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

Table 132. Allied Vision Technologies Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 133. Allied Vision Technologies Main Business

Table 134. Allied Vision Technologies Latest Developments

Table 135. New Imaging Technologies Basic Information, Quantum Dot Infrared

Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 136. New Imaging Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

Table 137. New Imaging Technologies Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 138. New Imaging Technologies Main Business

Table 139. New Imaging Technologies Latest Developments

Table 140. Princeton Infrared Technologies Basic Information, Quantum Dot Infrared Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 141. Princeton Infrared Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

Table 142. Princeton Infrared Technologies Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 143. Princeton Infrared Technologies Main Business

Table 144. Princeton Infrared Technologies Latest Developments

Table 145. Himax Technologies Basic Information, Quantum Dot Infrared Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 146. Himax Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

Table 147. Himax Technologies Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 148. Himax Technologies Main Business

Table 149. Himax Technologies Latest Developments

Table 150. OmniVision Technologies Basic Information, Quantum Dot Infrared Photodetectors Manufacturing Base, Sales Area and Its Competitors

Table 151. OmniVision Technologies Quantum Dot Infrared Photodetectors Product Portfolios and Specifications

Table 152. OmniVision Technologies Quantum Dot Infrared Photodetectors Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 153. OmniVision Technologies Main Business

Table 154. OmniVision Technologies Latest Developments

List Of Figures

LIST OF FIGURES

Figure 1. Picture of Quantum Dot Infrared Photodetectors

Figure 2. Quantum Dot Infrared Photodetectors Report Years Considered

Figure 3. Research Objectives

Figure 4. Research Methodology

Figure 5. Research Process and Data Source

Figure 6. Global Quantum Dot Infrared Photodetectors Sales Growth Rate 2021-2032 (K Units)

Figure 7. Global Quantum Dot Infrared Photodetectors Revenue Growth Rate 2021-2032 (\$ millions)

Figure 8. Quantum Dot Infrared Photodetectors Sales by Geographic Region (2021, 2025 & 2032) & (\$ millions)

Figure 9. Quantum Dot Infrared Photodetectors Sales Market Share by Country/Region (2025)

Figure 10. Quantum Dot Infrared Photodetectors Sales Market Share by Country/Region (2021, 2025 & 2032)

Figure 11. Product Picture of Short-Wave Infrared (SWIR) QDIPs

Figure 12. Product Picture of Mid-Wave Infrared (MWIR) QDIPs

Figure 13. Product Picture of Long-Wave Infrared (LWIR) QDIPs

Figure 14. Product Picture of Broadband Infrared QDIPs

Figure 15. Global Quantum Dot Infrared Photodetectors Sales Market Share by Type in 2026

Figure 16. Global Quantum Dot Infrared Photodetectors Revenue Market Share by Type (2021-2026)

Figure 17. Product Picture of Lead Sulfide (PbS)

Figure 18. Product Picture of Lead Selenide (PbSe)

Figure 19. Product Picture of Mercury Telluride (HgTe)

Figure 20. Product Picture of Cadmium Selenide (CdSe)

Figure 21. Product Picture of Indium Arsenide (InAs)

Figure 22. Product Picture of Gallium Arsenide (GaAs)

Figure 23. Global Quantum Dot Infrared Photodetectors Sales Market Share by Quantum Dot Material in 2026

Figure 24. Global Quantum Dot Infrared Photodetectors Revenue Market Share by Quantum Dot Material (2021-2026)

Figure 25. Quantum Dot Infrared Photodetectors Consumed in Aerospace & Defense

Figure 26. Global Quantum Dot Infrared Photodetectors Market: Aerospace & Defense

(2021-2026) & (K Units)

Figure 27. Quantum Dot Infrared Photodetectors Consumed in Security & Surveillance

Figure 28. Global Quantum Dot Infrared Photodetectors Market: Security & Surveillance (2021-2026) & (K Units)

Figure 29. Quantum Dot Infrared Photodetectors Consumed in Automotive

Figure 30. Global Quantum Dot Infrared Photodetectors Market: Automotive (2021-2026) & (K Units)

Figure 31. Quantum Dot Infrared Photodetectors Consumed in Industrial

Figure 32. Global Quantum Dot Infrared Photodetectors Market: Industrial (2021-2026) & (K Units)

Figure 33. Quantum Dot Infrared Photodetectors Consumed in Environmental

Figure 34. Global Quantum Dot Infrared Photodetectors Market: Environmental (2021-2026) & (K Units)

Figure 35. Quantum Dot Infrared Photodetectors Consumed in Agricultural

Figure 36. Global Quantum Dot Infrared Photodetectors Market: Agricultural (2021-2026) & (K Units)

Figure 37. Quantum Dot Infrared Photodetectors Consumed in Medical

Figure 38. Global Quantum Dot Infrared Photodetectors Market: Medical (2021-2026) & (K Units)

Figure 39. Quantum Dot Infrared Photodetectors Consumed in Others

Figure 40. Global Quantum Dot Infrared Photodetectors Market: Others (2021-2026) & (K Units)

Figure 41. Global Quantum Dot Infrared Photodetectors Sale Market Share by Application (2025)

Figure 42. Global Quantum Dot Infrared Photodetectors Revenue Market Share by Application in 2025

Figure 43. Quantum Dot Infrared Photodetectors Sales by Company in 2025 (K Units)

Figure 44. Global Quantum Dot Infrared Photodetectors Sales Market Share by Company in 2025

Figure 45. Quantum Dot Infrared Photodetectors Revenue by Company in 2025 (\$ millions)

Figure 46. Global Quantum Dot Infrared Photodetectors Revenue Market Share by Company in 2025

Figure 47. Global Quantum Dot Infrared Photodetectors Sales Market Share by Geographic Region (2021-2026)

Figure 48. Global Quantum Dot Infrared Photodetectors Revenue Market Share by Geographic Region in 2025

Figure 49. Americas Quantum Dot Infrared Photodetectors Sales 2021-2026 (K Units)

Figure 50. Americas Quantum Dot Infrared Photodetectors Revenue 2021-2026 (\$

millions)

Figure 51. APAC Quantum Dot Infrared Photodetectors Sales 2021-2026 (K Units)

Figure 52. APAC Quantum Dot Infrared Photodetectors Revenue 2021-2026 (\$ millions)

Figure 53. Europe Quantum Dot Infrared Photodetectors Sales 2021-2026 (K Units)

Figure 54. Europe Quantum Dot Infrared Photodetectors Revenue 2021-2026 (\$ millions)

Figure 55. Middle East & Africa Quantum Dot Infrared Photodetectors Sales 2021-2026 (K Units)

Figure 56. Middle East & Africa Quantum Dot Infrared Photodetectors Revenue 2021-2026 (\$ millions)

Figure 57. Americas Quantum Dot Infrared Photodetectors Sales Market Share by Country in 2025

Figure 58. Americas Quantum Dot Infrared Photodetectors Revenue Market Share by Country (2021-2026)

Figure 59. Americas Quantum Dot Infrared Photodetectors Sales Market Share by Type (2021-2026)

Figure 60. Americas Quantum Dot Infrared Photodetectors Sales Market Share by Application (2021-2026)

Figure 61. United States Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 62. Canada Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 63. Mexico Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 64. Brazil Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 65. APAC Quantum Dot Infrared Photodetectors Sales Market Share by Region in 2025

Figure 66. APAC Quantum Dot Infrared Photodetectors Revenue Market Share by Region (2021-2026)

Figure 67. APAC Quantum Dot Infrared Photodetectors Sales Market Share by Type (2021-2026)

Figure 68. APAC Quantum Dot Infrared Photodetectors Sales Market Share by Application (2021-2026)

Figure 69. China Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 70. Japan Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 71. South Korea Quantum Dot Infrared Photodetectors Revenue Growth

2021-2026 (\$ millions)

Figure 72. Southeast Asia Quantum Dot Infrared Photodetectors Revenue Growth

2021-2026 (\$ millions)

Figure 73. India Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 74. Australia Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 75. China Taiwan Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 76. Europe Quantum Dot Infrared Photodetectors Sales Market Share by Country in 2025

Figure 77. Europe Quantum Dot Infrared Photodetectors Revenue Market Share by Country (2021-2026)

Figure 78. Europe Quantum Dot Infrared Photodetectors Sales Market Share by Type (2021-2026)

Figure 79. Europe Quantum Dot Infrared Photodetectors Sales Market Share by Application (2021-2026)

Figure 80. Germany Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 81. France Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 82. UK Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 83. Italy Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 84. Russia Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 85. Middle East & Africa Quantum Dot Infrared Photodetectors Sales Market Share by Country (2021-2026)

Figure 86. Middle East & Africa Quantum Dot Infrared Photodetectors Sales Market Share by Type (2021-2026)

Figure 87. Middle East & Africa Quantum Dot Infrared Photodetectors Sales Market Share by Application (2021-2026)

Figure 88. Egypt Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 89. South Africa Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 90. Israel Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 91. Turkey Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 92. GCC Countries Quantum Dot Infrared Photodetectors Revenue Growth 2021-2026 (\$ millions)

Figure 93. Manufacturing Cost Structure Analysis of Quantum Dot Infrared Photodetectors in 2026

Figure 94. Manufacturing Process Analysis of Quantum Dot Infrared Photodetectors

Figure 95. Industry Chain Structure of Quantum Dot Infrared Photodetectors

Figure 96. Channels of Distribution

Figure 97. Global Quantum Dot Infrared Photodetectors Sales Market Forecast by Region (2027-2032)

Figure 98. Global Quantum Dot Infrared Photodetectors Revenue Market Share Forecast by Region (2027-2032)

Figure 99. Global Quantum Dot Infrared Photodetectors Sales Market Share Forecast by Type (2027-2032)

Figure 100. Global Quantum Dot Infrared Photodetectors Revenue Market Share Forecast by Type (2027-2032)

Figure 101. Global Quantum Dot Infrared Photodetectors Sales Market Share Forecast by Application (2027-2032)

Figure 102. Global Quantum Dot Infrared Photodetectors Revenue Market Share Forecast by Application (2027-2032)

I would like to order

Product name: Global Quantum Dot Infrared Photodetectors Market Growth 2026-2032

Product link: <https://marketpublishers.com/r/G24B69781638EN.html>

Price: US\$ 3,660.00 (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/G24B69781638EN.html>