

Infrared Detector Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

<https://marketpublishers.com/r/ID45936EC140EN.html>

Date: January 2023

Pages: 145

Price: US\$ 2,499.00 (Single User License)

ID: ID45936EC140EN

Abstracts

The global infrared detector market size reached US\$ 483.1 Million in 2022. Looking forward, IMARC Group expects the market to reach US\$ 805.7 Million by 2028, exhibiting a growth rate (CAGR) of 8.34% during 2023-2028.

Infrared (IR) detectors are electronic devices that are used to detect infrared radiation to measure heat and detect motion. They consist of photodiodes or phototransistors and the sensor, which consists of mercury cadmium telluride, lead sulfide and indium antimonide in silicon. They are commonly available in thermal, microbolometer, indium gallium arsenide, photo (quantum) detector variants. IR detectors are widely used in flame detectors, gas analysers, gas warning devices, medical gas measurement technology for contactless precision temperature measurement. They are also utilized in smart homes, biomedical imaging, spectroscopy, people and motion sensing solutions. In comparison to traditionally used detectors, IR detectors can detect infrared light from a distance and have a compact size.

Infrared Detector Market Trends:

The increasing demand for motion- and people-sensing devices is one of the key factors contributing to the growth of the market. IR detectors are installed in retail shops, homes, museums and libraries and are widely used in burglar alarms, security cameras, safety lighting and garage doors. Additionally, the increasing product utilization in the military and defense industry for surveillance, target detection and target tracking due to the compact size and ability to detect the light from distance is favoring the market growth. Moreover, various product innovations, such as the launch of novel infrared sensors for phone cameras, augmented reality (AR) glasses and driverless vehicles that enable the consumers to see through fog and smoke are providing a thrust to the

market growth. In line with this, the widespread product adoption in industrial plants to monitor the functioning of boilers, motors, electrical peripherals and bearings is positively impacting the market growth. Other factors, including the increasing product deployment in smart homes, along with the rising utilization of IR detectors at airports and railway stations, are anticipated to drive the market toward growth.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global infrared detector market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on type, spectral range, technology and application.

Breakup by Type:

- Thermal Detector
- Photo Detector

Breakup by Spectral Range:

- Short-wave Infrared
- Medium-wave Infrared
- Long-wave Infrared

Breakup by Technology:

- Mercury Cadmium Telluride
- Indium Gallium Arsenide (InGaAs)
- Pyroelectric
- Thermopile
- Microbolometer
- Others

Breakup by Application:

- Aerospace and Defense
- Automotive
- Consumer Electronics
- Industrial
- Medical

Security

Breakup by Region:

North America

United States

Canada

Asia-Pacific

China

Japan

India

South Korea

Australia

Indonesia

Others

Europe

Germany

France

United Kingdom

Italy

Spain

Russia

Others

Latin America

Brazil

Mexico

Others

Middle East and Africa

Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being Excelitas Technologies Corp., Hamamatsu Photonics K.K., InfraTec GmbH, Lynred, Murata Manufacturing Co. Ltd., Nippon Avionics Co. Ltd., Omron Corporation, Raytheon Technologies Corporation, TE Connectivity, Teledyne Technologies Incorporated and Texas Instruments Incorporated.

Key Questions Answered in This Report

1. What was the size of the global infrared detector market in 2022?
2. What is the expected growth rate of the global infrared detector market during

2023-2028?

3. What are the key factors driving the global infrared detector market?
4. What has been the impact of COVID-19 on the global infrared detector market?
5. What is the breakup of the global infrared detector market based on the type?
6. What is the breakup of the global infrared detector market based on the spectral range?
7. What is the breakup of the global infrared detector market based on the application?
8. What are the key regions in the global infrared detector market?
9. Who are the key players/companies in the global infrared detector market?

Contents

1 PREFACE

2 SCOPE AND METHODOLOGY

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
 - 2.3.1 Primary Sources
 - 2.3.2 Secondary Sources
- 2.4 Market Estimation
 - 2.4.1 Bottom-Up Approach
 - 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

3 EXECUTIVE SUMMARY

4 INTRODUCTION

- 4.1 Overview
- 4.2 Key Industry Trends

5 GLOBAL INFRARED DETECTOR MARKET

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Forecast

6 MARKET BREAKUP BY TYPE

- 6.1 Thermal Detector
 - 6.1.1 Market Trends
 - 6.1.2 Market Forecast
- 6.2 Photo Detector
 - 6.2.1 Market Trends
 - 6.2.2 Market Forecast

7 MARKET BREAKUP BY SPECTRAL RANGE

7.1 Short-wave Infrared

7.1.1 Market Trends

7.1.2 Market Forecast

7.2 Medium-wave Infrared

7.2.1 Market Trends

7.2.2 Market Forecast

7.3 Long-wave Infrared

7.3.1 Market Trends

7.3.2 Market Forecast

8 MARKET BREAKUP BY TECHNOLOGY

8.1 Mercury Cadmium Telluride

8.1.1 Market Trends

8.1.2 Market Forecast

8.2 Indium Gallium Arsenide (InGaAs)

8.2.1 Market Trends

8.2.2 Market Forecast

8.3 Pyroelectric

8.3.1 Market Trends

8.3.2 Market Forecast

8.4 Thermopile

8.4.1 Market Trends

8.4.2 Market Forecast

8.5 Microbolometer

8.5.1 Market Trends

8.5.2 Market Forecast

8.6 Others

8.6.1 Market Trends

8.6.2 Market Forecast

9 MARKET BREAKUP BY APPLICATION

9.1 Aerospace and Defense

9.1.1 Market Trends

9.1.2 Market Forecast

9.2 Automotive

- 9.2.1 Market Trends
- 9.2.2 Market Forecast
- 9.3 Consumer Electronics
 - 9.3.1 Market Trends
 - 9.3.2 Market Forecast
- 9.4 Industrial
 - 9.4.1 Market Trends
 - 9.4.2 Market Forecast
- 9.5 Medical
 - 9.5.1 Market Trends
 - 9.5.2 Market Forecast
- 9.6 Security
 - 9.6.1 Market Trends
 - 9.6.2 Market Forecast

10 MARKET BREAKUP BY REGION

- 10.1 North America
 - 10.1.1 United States
 - 10.1.1.1 Market Trends
 - 10.1.1.2 Market Forecast
 - 10.1.2 Canada
 - 10.1.2.1 Market Trends
 - 10.1.2.2 Market Forecast
- 10.2 Asia-Pacific
 - 10.2.1 China
 - 10.2.1.1 Market Trends
 - 10.2.1.2 Market Forecast
 - 10.2.2 Japan
 - 10.2.2.1 Market Trends
 - 10.2.2.2 Market Forecast
 - 10.2.3 India
 - 10.2.3.1 Market Trends
 - 10.2.3.2 Market Forecast
 - 10.2.4 South Korea
 - 10.2.4.1 Market Trends
 - 10.2.4.2 Market Forecast
 - 10.2.5 Australia
 - 10.2.5.1 Market Trends

- 10.2.5.2 Market Forecast
- 10.2.6 Indonesia
 - 10.2.6.1 Market Trends
 - 10.2.6.2 Market Forecast
- 10.2.7 Others
 - 10.2.7.1 Market Trends
 - 10.2.7.2 Market Forecast
- 10.3 Europe
 - 10.3.1 Germany
 - 10.3.1.1 Market Trends
 - 10.3.1.2 Market Forecast
 - 10.3.2 France
 - 10.3.2.1 Market Trends
 - 10.3.2.2 Market Forecast
 - 10.3.3 United Kingdom
 - 10.3.3.1 Market Trends
 - 10.3.3.2 Market Forecast
 - 10.3.4 Italy
 - 10.3.4.1 Market Trends
 - 10.3.4.2 Market Forecast
 - 10.3.5 Spain
 - 10.3.5.1 Market Trends
 - 10.3.5.2 Market Forecast
 - 10.3.6 Russia
 - 10.3.6.1 Market Trends
 - 10.3.6.2 Market Forecast
 - 10.3.7 Others
 - 10.3.7.1 Market Trends
 - 10.3.7.2 Market Forecast
- 10.4 Latin America
 - 10.4.1 Brazil
 - 10.4.1.1 Market Trends
 - 10.4.1.2 Market Forecast
 - 10.4.2 Mexico
 - 10.4.2.1 Market Trends
 - 10.4.2.2 Market Forecast
 - 10.4.3 Others
 - 10.4.3.1 Market Trends
 - 10.4.3.2 Market Forecast

10.5 Middle East and Africa

10.5.1 Market Trends

10.5.2 Market Breakup by Country

10.5.3 Market Forecast

11 SWOT ANALYSIS

11.1 Overview

11.2 Strengths

11.3 Weaknesses

11.4 Opportunities

11.5 Threats

12 VALUE CHAIN ANALYSIS

13 PORTERS FIVE FORCES ANALYSIS

13.1 Overview

13.2 Bargaining Power of Buyers

13.3 Bargaining Power of Suppliers

13.4 Degree of Competition

13.5 Threat of New Entrants

13.6 Threat of Substitutes

14 PRICE ANALYSIS

15 COMPETITIVE LANDSCAPE

15.1 Market Structure

15.2 Key Players

15.3 Profiles of Key Players

15.3.1 Excelitas Technologies Corp.

15.3.1.1 Company Overview

15.3.1.2 Product Portfolio

15.3.2 Hamamatsu Photonics K.K.

15.3.2.1 Company Overview

15.3.2.2 Product Portfolio

15.3.2.3 Financials

15.3.2.4 SWOT Analysis

- 15.3.3 InfraTec GmbH
 - 15.3.3.1 Company Overview
 - 15.3.3.2 Product Portfolio
- 15.3.4 Lynred
 - 15.3.4.1 Company Overview
 - 15.3.4.2 Product Portfolio
- 15.3.5 Murata Manufacturing Co. Ltd.
 - 15.3.5.1 Company Overview
 - 15.3.5.2 Product Portfolio
 - 15.3.5.3 Financials
 - 15.3.5.4 SWOT Analysis
- 15.3.6 Nippon Avionics Co. Ltd.
 - 15.3.6.1 Company Overview
 - 15.3.6.2 Product Portfolio
 - 15.3.6.3 Financials
- 15.3.7 Omron Corporation
 - 15.3.7.1 Company Overview
 - 15.3.7.2 Product Portfolio
 - 15.3.7.3 Financials
 - 15.3.7.4 SWOT Analysis
- 15.3.8 Raytheon Technologies Corporation
 - 15.3.8.1 Company Overview
 - 15.3.8.2 Product Portfolio
 - 15.3.8.3 Financials
 - 15.3.8.4 SWOT Analysis
- 15.3.9 TE Connectivity
 - 15.3.9.1 Company Overview
 - 15.3.9.2 Product Portfolio
 - 15.3.9.3 Financials
 - 15.3.9.4 SWOT Analysis
- 15.3.10 Teledyne Technologies Incorporated
 - 15.3.10.1 Company Overview
 - 15.3.10.2 Product Portfolio
 - 15.3.10.3 Financials
 - 15.3.10.4 SWOT Analysis
- 15.3.11 Texas Instruments Incorporated
 - 15.3.11.1 Company Overview
 - 15.3.11.2 Product Portfolio
 - 15.3.11.3 Financials

15.3.11.4 SWOT Analysis

List Of Tables

LIST OF TABLES

Table 1: Global: Infrared Detector Market: Key Industry Highlights, 2022 and 2028

Table 2: Global: Infrared Detector Market Forecast: Breakup by Type (in Million US\$), 2023-2028

Table 3: Global: Infrared Detector Market Forecast: Breakup by Spectral Range (in Million US\$), 2023-2028

Table 4: Global: Infrared Detector Market Forecast: Breakup by Technology (in Million US\$), 2023-2028

Table 5: Global: Infrared Detector Market Forecast: Breakup by Application (in Million US\$), 2023-2028

Table 6: Global: Infrared Detector Market Forecast: Breakup by Region (in Million US\$), 2023-2028

Table 7: Global: Infrared Detector Market: Competitive Structure

Table 8: Global: Infrared Detector Market: Key Players

List Of Figures

LIST OF FIGURES

Figure 1: Global: Infrared Detector Market: Major Drivers and Challenges

Figure 2: Global: Infrared Detector Market: Sales Value (in Million US\$), 2017-2022

Figure 3: Global: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 4: Global: Infrared Detector Market: Breakup by Type (in %), 2022

Figure 5: Global: Infrared Detector Market: Breakup by Spectral Range (in %), 2022

Figure 6: Global: Infrared Detector Market: Breakup by Technology (in %), 2022

Figure 7: Global: Infrared Detector Market: Breakup by Application (in %), 2022

Figure 8: Global: Infrared Detector Market: Breakup by Region (in %), 2022

Figure 9: Global: Infrared Detector (Thermal Detector) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 10: Global: Infrared Detector (Thermal Detector) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 11: Global: Infrared Detector (Photo Detector) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 12: Global: Infrared Detector (Photo Detector) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 13: Global: Infrared Detector (Short-wave Infrared) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 14: Global: Infrared Detector (Short-wave Infrared) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 15: Global: Infrared Detector (Medium-wave Infrared) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 16: Global: Infrared Detector (Medium-wave Infrared) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 17: Global: Infrared Detector (Long-wave Infrared) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 18: Global: Infrared Detector (Long-wave Infrared) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 19: Global: Infrared Detector (Mercury Cadmium Telluride) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 20: Global: Infrared Detector (Mercury Cadmium Telluride) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 21: Global: Infrared Detector (Indium Gallium Arsenide (InGaAs)) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 22: Global: Infrared Detector (Indium Gallium Arsenide (InGaAs)) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 23: Global: Infrared Detector (Pyroelectric) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 24: Global: Infrared Detector (Pyroelectric) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 25: Global: Infrared Detector (Thermopile) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 26: Global: Infrared Detector (Thermopile) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 27: Global: Infrared Detector (Microbolometer) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 28: Global: Infrared Detector (Microbolometer) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 29: Global: Infrared Detector (Other Technologies) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 30: Global: Infrared Detector (Other Technologies) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 31: Global: Infrared Detector (Aerospace and Defense) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 32: Global: Infrared Detector (Aerospace and Defense) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 33: Global: Infrared Detector (Automotive) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 34: Global: Infrared Detector (Automotive) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 35: Global: Infrared Detector (Consumer Electronics) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 36: Global: Infrared Detector (Consumer Electronics) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 37: Global: Infrared Detector (Industrial) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 38: Global: Infrared Detector (Industrial) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 39: Global: Infrared Detector (Medical) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 40: Global: Infrared Detector (Medical) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 41: Global: Infrared Detector (Security) Market: Sales Value (in Million US\$),

2017 & 2022

Figure 42: Global: Infrared Detector (Security) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 43: North America: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 44: North America: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 45: United States: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 46: United States: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 47: Canada: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 48: Canada: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 49: Asia-Pacific: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 50: Asia-Pacific: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 51: China: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 52: China: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 53: Japan: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 54: Japan: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 55: India: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 56: India: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 57: South Korea: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 58: South Korea: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 59: Australia: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 60: Australia: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 61: Indonesia: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 62: Indonesia: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 63: Others: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 64: Others: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 65: Europe: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 66: Europe: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 67: Germany: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 68: Germany: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 69: France: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 70: France: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 71: United Kingdom: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 72: United Kingdom: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 73: Italy: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 74: Italy: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 75: Spain: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 76: Spain: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 77: Russia: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 78: Russia: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 79: Others: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 80: Others: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 81: Latin America: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 82: Latin America: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 83: Brazil: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 84: Brazil: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 85: Mexico: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 86: Mexico: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 87: Others: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 88: Others: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 89: Middle East and Africa: Infrared Detector Market: Sales Value (in Million US\$), 2017 & 2022

Figure 90: Middle East and Africa: Infrared Detector Market: Breakup by Country (in %), 2022

Figure 91: Middle East and Africa: Infrared Detector Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 92: Global: Infrared Detector Industry: SWOT Analysis

Figure 93: Global: Infrared Detector Industry: Value Chain Analysis

Figure 94: Global: Infrared Detector Industry: Porter's Five Forces Analysis

I would like to order

Product name: Infrared Detector Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

Product link: <https://marketpublishers.com/r/ID45936EC140EN.html>

Price: US\$ 2,499.00 (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/ID45936EC140EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

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

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

