Global Infrared Detector Market: Analysis By Type (Photo Infrared Detector and Thermal Infrared Detector), By Wavelength (Short Wave, Long Wave and Mid-Wave), By Industry Vertical (Automotive, Security, Military and Defense, Healthcare, Manufacturing, and Others), By Region Size and Trends with Impact of COVID-19 and Forecast up to 2028

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Daedal Research

Global Infrared Detector Market: Coverage

- Executive Summary and Scope
- Introduction/Market Overview
- Global Market Analysis
- Regional Market Analysis
- Impact Of COVID-19
- Dynamics
- Competitive Landscape
- Company Profiling

Global Infrared Detector Market: Coverage

Scope of the Report

Attributes	Details
Title	Global Infrared Detector Market: Analysis By Type (Photo Infrared Detector and Thermal Infrared Detector), By Wavelength (Short Wave, Long Wave and Mid-Wave), By Industry Vertical (Automotive, Security, Military and Defense, Healthcare, Manufacturing, and Others), By Region Size and Trends with Impact of COVID-19 and Forecast up to 2028
Coverage	Global and Regional
Regional Coverage	North America (The US, Canada, and Mexico), Europe (Germany, France, UK, Spain and Rest of Europe), Asia Pacific (China, India, Japan, South Korea and rest of Asia Pacific), Middle East and Africa and Latin America
Market Influencing Variables	Growth Drivers, Challenges, Market Trends
Forecast Period of Market	2023-2028
Competition in the Market	Fragmented
Key Players	Teledyne Technologies Incorporated (Teledyne FLIR LLC); Hamamatsu Photonics K.K.; Murata Manufacturing Co., Ltd.; Texas Instruments Incorporated.; OMRON Corporation; TE Connectivity Ltd.; Honeywell International Inc.; Raytheon Technologies Corporation; LYNRED, Excelitas Technologies Corp.; and Nippon Ceramic Co., Ltd.

Global Infrared Detector Market: Coverage

Executive Summary

Infrared detector is a semiconductor-based electronic device that enables the conversion of infrared radiation (IR) energy into an electrical signal. These devices are capable of detecting and measuring the levels of infrared radiation emitted by objects, and are mainly used to sense the specific characteristics of their surroundings by either detecting or emitting infrared radiations by forming IR images from temperature and emissive differences. The global infrared detector market value stood at US$468.91 billion in 2022, and is expected to reach US$770.10 billion by 2028. The market would grow at a CAGR of 8.62% over the projected period of 2023-2028.

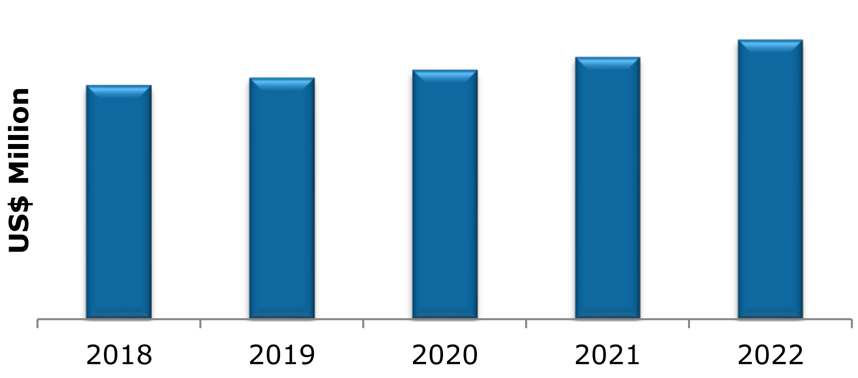
The infrared detector market can be segmented on the basis of type (photo infrared detector and thermal infrared detector), wavelength (short wave, long wave and mid-wave), and industry vertical (automotive, security, military and defense, healthcare, manufacturing, and others). Long-wave infrared (LWIR) detector market is both the largest and fastest growing segment of global infrared detector market owing to increased benefits provided by these devices in terms of provision of excellent detection capabilities even in low light conditions, ability to effectively sense thermal signs, and excellent imaging capabilities through aerosols and smoke.

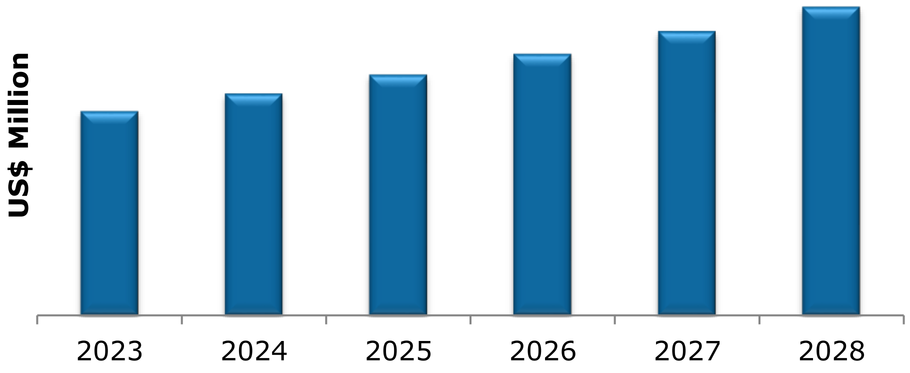
COVID-19 pandemic brought in many changes in the world in terms of reduced productivity, loss of life, business closures, and closing down of factories and organizations. Lockdown policies imposed by the government to prevent the spread of virus resulted in an increasing number of restrictions in the form of social distancing policies and the number of people allowed by industries to work in a physical environment, forcing end user sectors to continue their operations in a digital environment. Therefore, increasing adoption of contactless technologies across various end user sectors resulted in an increasing demand for IR detectors by industrial plants to monitor the efficient functions of motors, electrical peripherals, & bearings, as the non-contact nature of IR detectors makes them ideal for measuring temperatures remotely without interrupting equipment operation, boosting global IR detector market.

The global IR detector market has increased from 2018-2022 and the projections are made that the market will continue to rise in the next five years i.e. 2023-2028. The demand for IR detector market has been rising significantly in recent years, owing to increasing IoT connectivity, growth in number of smart homes and buildings, rising demand of IR detectors in various end user industries, increasing use of IR in wearable devices, increasing focus on improved security and surveillance, etc. Further, the market is expected to grow at a rapid pace due to increasing integration of AI and ML, growing popularity of uncooled IR detectors, technological advancements in spectroscopy and biomedical imaging etc. Yet the market faces some challenges such as high cost and stringent government restrictions, availability of alternative technologies etc.

Infrared Detector Market: Global Analysis

Global Infrared Detector Market by Value





CAGR	
2023-2028	xx%

Global infrared detector market was valued at US$... million in 2022 and is anticipated to reach up to US$... million by 2028 from US$... million in 2023, with a CAGR of xx%.

Infrared Detector Market: Global Analysis

Global Infrared Detector Market by Type; 2022

Type	Share (2022)
Photo Infrared Detector	xx%
Thermal Infrared Detector	xx%

Global Infrared Detector Market by Wavelength; 2022

Wavelength	Share (2022)
Long Wave	xx%
Mid-Wave	xx%
Short Wave	xx%

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Infrared Detector Market: Global Analysis

Global Infrared Detector Market by Industry Vertical; 2022

Industry Vertical	Share (2022)
Automotive	xx%
Security	xx%
Healthcare	xx%
Manufacturing	xx%
Military and Defense	xx%
Others	xx%

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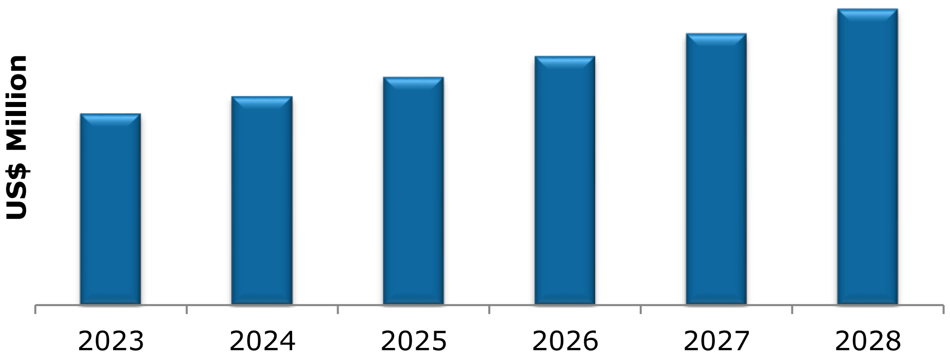
Infrared Detector Market: Global Analysis

Global Infrared Detector by Region; 2022

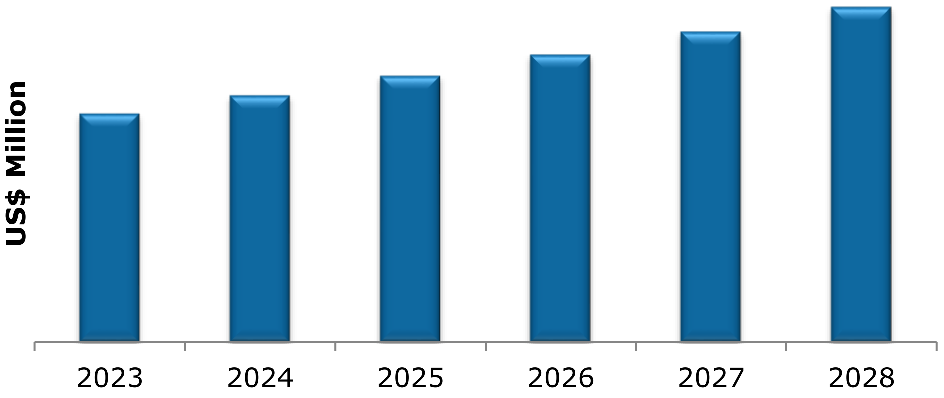
- North America, xx%
- Europe, xx%
- Asia Pacific, xx%
- Middle East and Africa, xx%
- Latin America, xx%

Infrared Detector Market: Type Analysis

Global Photo Infrared Detector Market by Value



Global Thermal Infrared Detector Market by Value



Application	CAGR (2023-2028)
Photo Infrared Detector	xx%
Thermal Infrared Detector	xx%

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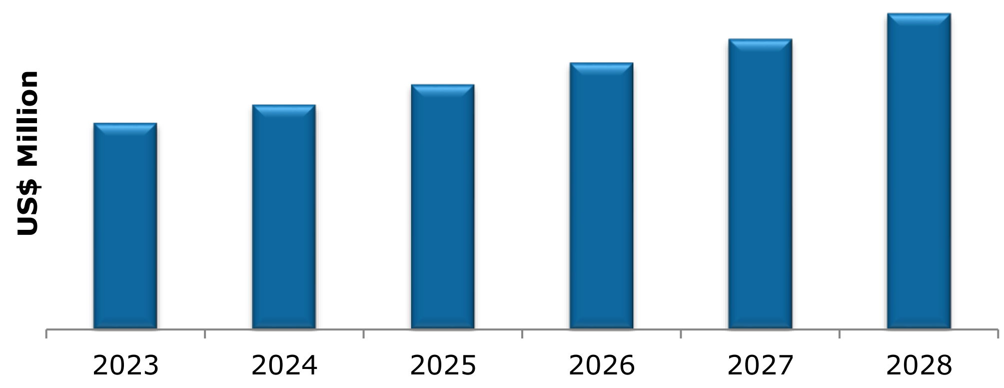
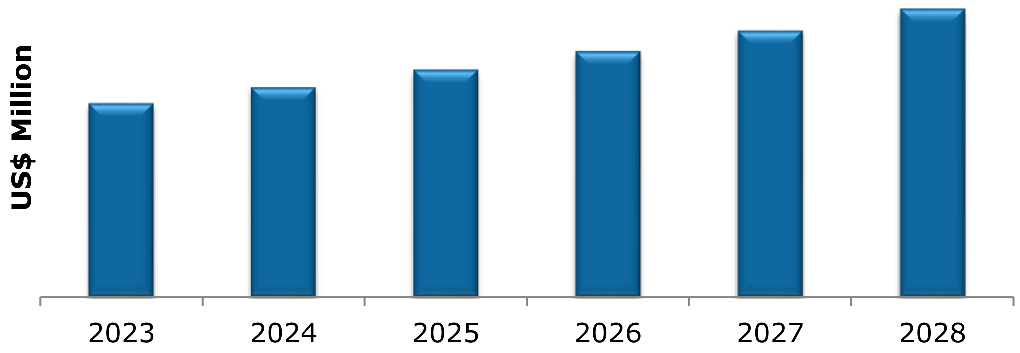
Infrared Detector Market: Wavelength Analysis

Global Long Wave Infrared Detector Market by Value



Global Mid-Wave Infrared Detector Market by Value



Wavelength	CAGR (2023-2028)
Long Wave	xx%
Mid-Wave	xx%
Short Wave	xx%

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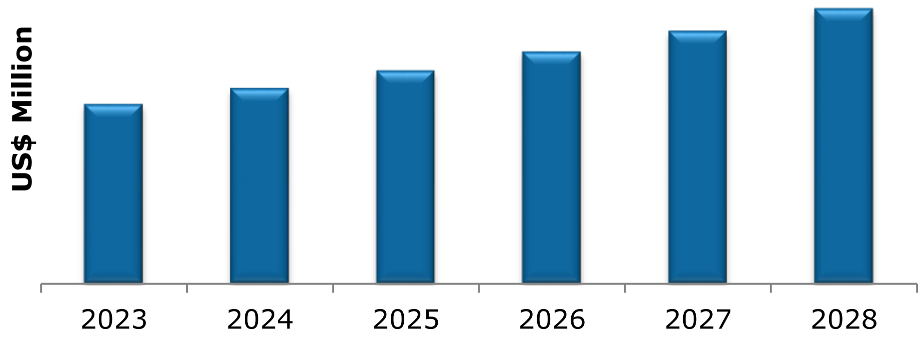
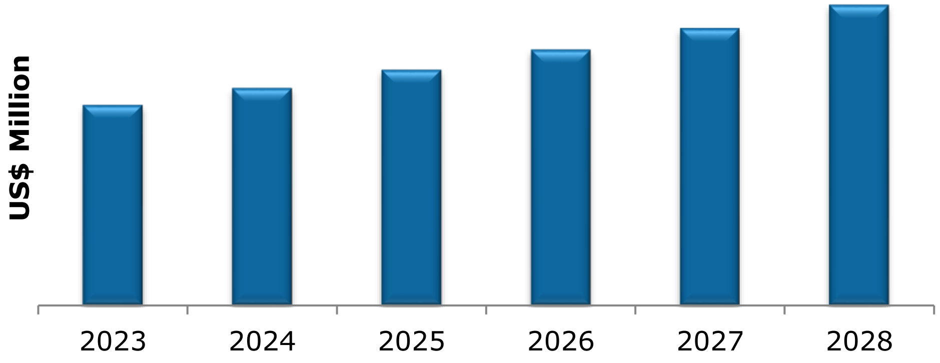
Infrared Detector Market: Industry Vertical Analysis

Global Automotive Infrared Detector Market by Value



Global Security Infrared Detector Market by Value



Industry Vertical	CAGR (2023-2028)
Automotive	xx%
Security	xx%
Healthcare	xx%
Manufacturing	xx%
Military and Defense	xx%
Others	xx%

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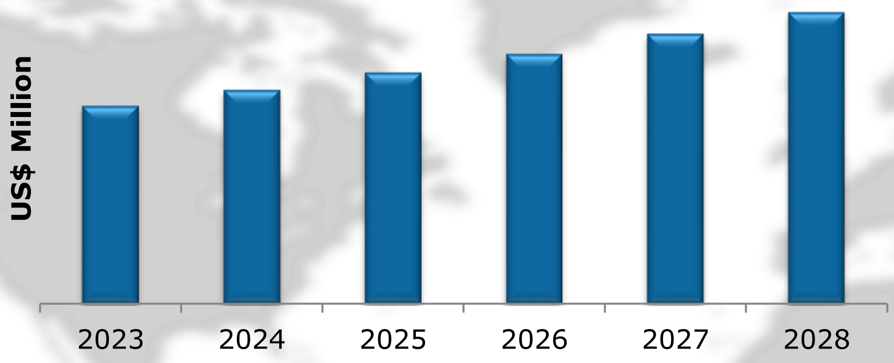
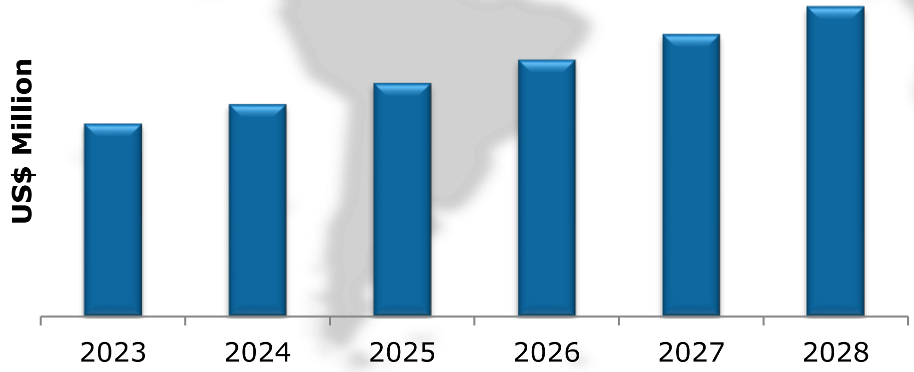
Infrared Detector Market: Regional Analysis

North America Infrared Detector Market by Value



Asia Pacific Infrared Detector Market by Value



Region	CAGR (2023-2028)
North America	xx%
Europe	xx%
Asia Pacific	xx%
Middle East and Africa	xx%
Latin America	xx%

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North America Infrared Detector Market: An Analysis

North America Infrared Detector Market by Region; 2022

Region	Share (2022)	CAGR (2023-2028)
The US	xx%	xx%
Canada	xx%	xx%
Mexico	xx%	xx%

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Asia Pacific Infrared Detector Market: An Analysis

Asia Pacific Infrared Detector Market by Region; 2022

Region	Share (2022)	CAGR (2023-2028)
China	xx%	xx%
Japan	xx%	xx%
India	xx%	xx%
South Korea	xx%	xx%
Rest of Asia Pacific	xx%	xx%

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Europe Infrared Detector Market: An Analysis

Europe Infrared Detector Market by Region; 2022

Region	Share (2022)	CAGR (2023-2028)
Germany	xx%	xx%
UK	xx%	xx%
France	xx%	xx%
Spain	xx%	xx%
Rest of Europe	xx%	xx%

Global Infrared Detector Market: Dynamics

Global Infrared Detector Market: Competitive Landscape

Players Profiled

- Teledyne Technologies Incorporated (Teledyne FLIR LLC)
- Hamamatsu Photonics K.K.
- Murata Manufacturing Co., Ltd.
- Texas Instruments Incorporated.
- OMRON Corporation
- TE Connectivity Ltd.
- Honeywell International Inc.
- Raytheon Technologies Corporation;
- LYNRED
- Excelitas Technologies Corp.
- Nippon Ceramic Co., Ltd.,