

# **Infrared Imaging Market by Technology (Cooled & Uncooled Infrared Imaging), Wavelength (Near, Shortwave, Mid-wave, & Long-wave Infrared), Application (Security & Surveillance, Monitoring & Inspection, Detection), Vertical - Global Forecast to 2028**

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## **Abstracts**

The infrared imaging market is projected to reach USD 9.6 billion by 2028 from USD 6.7 billion in 2023, at a CAGR of 7.3% from 2023 to 2028. Penetration of infrared cameras in the consumer electronics industry and emerging infrared imaging applications in the automotive sector are the major opportunities in the market.

The Rise of Cool Infrared Imaging by technology to propel market growth.

Cool infrared imaging technology has revolutionized security systems, enabling efficient surveillance in low-light conditions and improved threat detection capabilities. In the healthcare sector, it aids in early disease detection, vascular issue identification, and non-invasive diagnostics. Moreover, it optimizes energy usage, identifies insulation gaps, and enhances energy efficiency in buildings and industrial processes. Additionally, it facilitates accurate detection of forest fires, climate pattern mapping, and wildlife conservation efforts in environmental monitoring.

Increased use of NIR imaging in food quality and safety inspection to drive market.

NIR imaging finds utility in the industrial sector for quality control, material analysis, and identifying defects, contributing to enhanced product manufacturing. The versatility, non-destructive nature, and cost-effectiveness of NIR imaging have propelled its remarkable

growth in various industries, empowering innovation and driving progress.

Demand for infrared imaging in inspection application to fuel market growth.

Infrared imaging can identify defects, irregularities, or anomalies in various materials and products. It is particularly useful in manufacturing, automotive, and electronics industries, where it can detect hidden defects, assess structural integrity, and ensure product quality.

North America is expected to account for largest market share during the forecast period.

The market in North America accounted for the largest share of the infrared imaging market in 2023. The North American infrared imaging market has grown substantially due to increasing demand across various industries, such as defense and security, healthcare, and industrial automation. Factors driving this growth include technological advancements, rising awareness about the benefits of infrared imaging, and the need for enhanced efficiency, safety, and quality control in these sectors.

The break-up of profile of primary participants in the infrared imaging market

By Company Type: Tier 1 – 38%, Tier 2 – 28%, Tier 3 – 34%

By Designation Type: C Level – 40%, Director Level – 30%, Others – 30%

By Region Type: North America – 35%, Europe – 35%, Asia Pacific – 20%, Rest of the World – 10%

The major players of infrared imaging market are Teledyne FLIR LLC (US), Fluke Corporation (US), Raytheon Technologies Corporation (US), Leonardo DRS (US), Axis Communications AB (Sweden), among others.

## Research Coverage

The report segments the infrared market and forecasts its size based on Technology; Wavelength; Application; Vertical and Region. The report also provides a comprehensive review of drivers, restraints, opportunities, and challenges influencing market growth. The report also covers qualitative aspects in addition to the quantitative

aspects of the market.

Reasons to buy the report:

The report will help the market leaders/new entrants in this market with information on the closest approximate revenues for the overall infrared imaging market and related segments. This report will help stakeholders understand the competitive landscape and gain more insights to strengthen their position in the market and plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, opportunities, and challenges.

The report provides insights on the following pointers:

**Market Dynamics:** Analysis of key drivers (Increased adoption of infrared imaging products in security & surveillance application; Increasing use of infrared cameras in quality control and inspection application; Growing popularity of uncooled infrared cameras; Rise in use of SWIR cameras in machine vision applications), restraints (Stringent import and export regulations limit growth of infrared imaging market; Limitations associated with image resolution and sensitivity of infrared cameras), opportunities (Emerging infrared imaging applications in automotive sector; Increase in application areas for infrared cameras; Penetration of infrared cameras in consumer electronics industry), and challenges (High cost of infrared cameras to challenge adoption; Need of improving accuracy of infrared cameras; Integration and compatibility challenges in infrared imaging technologies).

**Product Development/Innovation:** Detailed insights on upcoming technologies, research & development activities, and new product launches in the infrared imaging market

**Market Development:** Comprehensive information about lucrative markets – the report analyses the infrared imaging market across varied regions

**Market Diversification:** Exhaustive information about new products, untapped geographies, recent developments, and investments in the infrared imaging market

**Competitive Assessment:** In-depth assessment of market shares, growth

strategies and product offerings of leading players like Teledyne FLIR LLC (US), Fluke Corporation (US), Raytheon Technologies Corporation (US), Leonardo DRS (US), Axis Communications AB (Sweden), L3Harris Technologies (US), Inc, Xenics nv (Belgium), Zhejiang Dali Technology Co.,Ltd. (China), OPGAL Optronics Industries Ltd (Israel) and Allied Vision Technologies GmbH (Germany) among others.

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\* Business Overview, Products/Services/Solutions Offered, Recent Developments, and MnM View might not be captured in case of unlisted companies.

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## About

According to the new market research report "Infrared Imaging Market by Technology (Cooled Infrared Imaging and Uncooled Infrared Imaging), Wavelength (Near Infrared, Shortwave Infrared, Mid-wave Infrared, and Long-wave Infrared), Application, Vertical, and Geography - Global Forecast to 2023", the infrared imaging market is expected to grow from USD 5.16 Billion in 2018 to USD 7.30 Billion by 2023, at a CAGR of 7.18% between 2018 and 2023. The growth of this market can be attributed to the high demand for infrared imaging products from the military and defense sector, primarily for security and surveillance application.

### **Some of the players operating in the infrared imaging market include:**

FLIR Systems (US),

Fluke (US),

Sensors Unlimited (US),

Leonardo DRS (US),

Princeton Infrared Technologies (US),

L3 Technologies (US),

Axis Communications (Sweden),

Xenics (Belgium),

Opgal Optronics Industries (Israel),

New Imaging Technologies (France),

Sofradir (France),

C-Thermal (Austria),

Tonbo Imaging (India),

Raptor Photonics (UK), and

Episensors (US).

### **Uncooled infrared imaging segment held larger share of infrared imaging market in 2017**

On the basis of technologies, the uncooled infrared imaging segment leads the infrared imaging market. The cost of uncooled infrared imaging cameras is generally lower than that of cooled infrared imaging cameras. This is one of the major reasons for the high demand for uncooled infrared imaging cameras.

### **Security and surveillance application to dominate infrared imaging market during forecast period**

On the basis of applications, security and surveillance is currently leading the market. It will continue to dominate the market during the forecast period. The ability of infrared imaging products to enhance visibility even in restricted visibility conditions, such as complete darkness and bad weather conditions, has led to their wide adoption for the security and surveillance application.

### **Market for nonindustrial vertical to grow at higher CAGR during forecast period**

On the basis of verticals, the market for nonindustrial vertical is expected to witness higher growth during the forecast period. Military and defense, and civil infrastructure are the 2 major segments within the nonindustrial vertical that generate the highest demand for infrared imaging products and are driving the growth of this segment.

### **North America held largest share of infrared imaging market in 2017**

North America held the largest share of the infrared imaging market in 2017. The US accounted for the largest share of the infrared imaging market in North America, followed by Canada and Mexico. The US Army is one of the major users of infrared imaging products, contributing to the leading position of North America in the infrared imaging market.

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Product name: Infrared Imaging Market by Technology (Cooled & Uncooled Infrared Imaging), Wavelength (Near, Shortwave, Mid-wave, & Long-wave Infrared), Application (Security & Surveillance, Monitoring & Inspection, Detection), Vertical - Global Forecast to 2028

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