

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.

Contents

1 INTRODUCTION

1.1 STUDY OBJECTIVES

1.2 DEFINITION

1.2.1 INCLUSIONS AND EXCLUSIONS

1.3 STUDY SCOPE

1.3.1 MARKETS COVERED

FIGURE 1 INFRARED IMAGING MARKET SEGMENTATION

1.3.2 REGIONAL SCOPE

1.3.3 YEARS CONSIDERED

1.4 CURRENCY CONSIDERED

1.5 LIMITATIONS

1.6 SUMMARY OF CHANGES

1.7 STAKEHOLDERS

1.7.1 RECESSION IMPACT

2 RESEARCH METHODOLOGY

2.1 RESEARCH DATA

FIGURE 2 INFRARED IMAGING MARKET: RESEARCH DESIGN

2.1.1 SECONDARY AND PRIMARY RESEARCH

2.1.2 SECONDARY DATA

2.1.2.1 Major secondary sources

2.1.2.2 Secondary sources

2.1.3 PRIMARY DATA

2.1.3.1 Breakdown of primaries

2.1.3.2 Key data from primary sources

2.1.3.3 Key industry insights

2.2 MARKET SIZE ESTIMATION

FIGURE 3 PROCESS FLOW OF MARKET SIZE ESTIMATION

2.2.1 BOTTOM-UP APPROACH

2.2.1.1 Estimating market size using bottom-up approach (demand side)

FIGURE 4 INFRARED IMAGING MARKET: BOTTOM-UP APPROACH

2.2.2 TOP-DOWN APPROACH

FIGURE 5 INFRARED IMAGING MARKET: TOP-DOWN APPROACH

FIGURE 6 MARKET SIZE ESTIMATION METHODOLOGY: APPROACH (SUPPLY SIDE)—REVENUE GENERATED FROM SALE OF INFRARED IMAGING PRODUCTS

2.3 MARKET BREAKDOWN AND DATA TRIANGULATION

FIGURE 7 DATA TRIANGULATION

2.4 ASSUMPTIONS FOR RESEARCH STUDY

2.5 RESEARCH ASSUMPTIONS AND LIMITATIONS

TABLE 1 RESEARCH ASSUMPTIONS

2.5.1 RESEARCH LIMITATIONS

2.6 RISK ASSESSMENT

2.7 PARAMETERS CONSIDERED TO ANALYZE IMPACT OF RECESSION ON INFRARED IMAGING MARKET

3 EXECUTIVE SUMMARY

FIGURE 8 UNCOOLED INFRARED IMAGING SEGMENT TO HOLD MAJORITY OF MARKET SHARE IN 2023 AND 2028

FIGURE 9 LONG-WAVE INFRARED SEGMENT TO HOLD LARGEST MARKET SHARE IN 2023

FIGURE 10 SECURITY & SURVEILLANCE SEGMENT TO COMMAND INFRARED IMAGING MARKET IN 2023

FIGURE 11 NON-INDUSTRIAL SEGMENT TO HOLD LARGER SHARE OF INFRARED IMAGING MARKET IN 2028

FIGURE 12 ASIA PACIFIC TO BE FASTEST-GROWING MARKET FOR INFRARED IMAGING DURING FORECAST PERIOD

4 PREMIUM INSIGHTS

4.1 ATTRACTIVE GROWTH OPPORTUNITIES FOR PLAYERS IN INFRARED IMAGING MARKET

FIGURE 13 INCREASING ADOPTION OF INFRARED IMAGING TECHNOLOGY IN ASIA PACIFIC TO DRIVE MARKET GROWTH

4.2 INFRARED IMAGING MARKET, BY APPLICATION

FIGURE 14 MONITORING & INSPECTION TO REGISTER HIGHEST CAGR IN INFRARED IMAGING MARKET, BY APPLICATION, DURING FORECAST PERIOD

4.3 INFRARED IMAGING MARKET, BY WAVELENGTH

FIGURE 15 NEAR INFRARED SEGMENT DOMINATED INFRARED IMAGING MARKET IN 2022

4.4 INFRARED IMAGING MARKET IN NORTH AMERICA, BY COUNTRY AND APPLICATION

FIGURE 16 US AND SECURITY & SURVEILLANCE APPLICATIONS TO HOLD LARGEST SHARE OF NORTH AMERICAN MARKET IN 2028

4.5 INFRARED IMAGING MARKET, BY VERTICAL

FIGURE 17 NON-INDUSTRIAL SEGMENT TO RECORD HIGHER CAGR FROM 2023 TO 2028

4.6 INFRARED IMAGING MARKET, BY COUNTRY

FIGURE 18 CHINA TO REGISTER HIGHEST CAGR IN INFRARED IMAGING MARKET DURING FORECAST PERIOD

5 MARKET OVERVIEW

5.1 INTRODUCTION

5.2 MARKET DYNAMICS

FIGURE 19 DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES: INFRARED IMAGING MARKET

5.2.1 DRIVERS

FIGURE 20 ANALYSIS OF IMPACT OF DRIVERS ON INFRARED IMAGING MARKET

5.2.1.1 Increasing use of infrared imaging products in security & surveillance applications

FIGURE 21 MILITARY EXPENDITURE IN US, 2021 VS. 2022 (USD BILLION)

5.2.1.2 Rising adoption of infrared cameras in quality control and inspection applications

5.2.1.3 Growing popularity of uncooled infrared cameras

5.2.1.4 Boosting demand for SWIR cameras in machine vision applications

5.2.2 RESTRAINTS

FIGURE 22 ANALYSIS OF IMPACT OF RESTRAINTS ON INFRARED IMAGING MARKET

5.2.2.1 Stringent import and export regulations for selling infrared cameras in US

5.2.2.2 Limitations associated with image resolution and sensitivity of infrared cameras

5.2.3 OPPORTUNITIES

FIGURE 23 ANALYSIS OF IMPACT OF OPPORTUNITIES ON INFRARED IMAGING MARKET

5.2.3.1 Emerging applications of IR imaging technology in automotive sector

5.2.3.2 Newer application areas of SWIR cameras

5.2.3.3 Integration of infrared imaging technology into consumer electronics

5.2.4 CHALLENGES

FIGURE 24 ANALYSIS OF IMPACT OF CHALLENGES ON INFRARED IMAGING MARKET

5.2.4.1 High cost associated with infrared cameras

5.2.4.2 Designing highly accurate IR imaging products

5.2.4.3 Integration and compatibility challenges pertaining to infrared imaging technology

5.3 VALUE CHAIN ANALYSIS

FIGURE 25 VALUE CHAIN ANALYSIS: INFRARED IMAGING MARKET

5.4 INFRARED IMAGING ECOSYSTEM

FIGURE 26 INFRARED IMAGING ECOSYSTEM

5.5 REVENUE SHIFT AND NEW REVENUE POCKETS FOR PLAYERS IN INFRARED IMAGING MARKET

FIGURE 27 REVENUE SHIFT IN INFRARED IMAGING MARKET

5.6 PRICING ANALYSIS

TABLE 2 AVERAGE SELLING PRICE OF INFRARED CAMERAS OFFRED BY TOP COMPANIES (USD)

5.6.1 AVERAGE SELLING PRICE OF INFRARED IMAGING PRODUCTS OFFERED BY KEY PLAYERS

FIGURE 28 AVERAGE SELLING PRICE OF LWIR CAMERA, BY KEY PLAYER

5.7 TECHNOLOGY TRENDS

5.7.1 USE OF IR IMAGING TECHNOLOGY TO ANALYZE ORGANIC COMPOST

5.7.2 IMPLEMENTATION OF VIBRATIONAL SPECTROSCOPIC TECHNIQUES TO ANALYZE TEA QUALITY AND SAFETY

5.7.3 ADOPTION OF THERMAL CAMERAS IN SECURITY AND INSPECTION APPLICATIONS

5.7.4 TRANSFORMATION IN INFRARED IMAGING TECHNOLOGY WITH CLOUD INTEGRATION

5.7.5 ADVANCEMENTS IN AI-BASED INFRARED IMAGING

5.8 PORTER'S FIVE FORCES ANALYSIS

TABLE 3 IMPACT OF FORCES ON INFRARED IMAGING MARKET

FIGURE 29 PORTER'S FIVE FORCES ANALYSIS

5.8.1 THREAT OF NEW ENTRANTS

5.8.2 THREAT OF SUBSTITUTES

5.8.3 BARGAINING POWER OF SUPPLIERS

5.8.4 BARGAINING POWER OF BUYERS

5.8.5 INTENSITY OF COMPETITIVE RIVALRY

5.9 KEY STAKEHOLDERS IN BUYING PROCESS AND BUYING CRITERIA

5.9.1 KEY STAKEHOLDERS IN BUYING PROCESS

FIGURE 30 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS, BY APPLICATION

TABLE 4 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR APPLICATIONS (%)

5.9.2 BUYING CRITERIA

FIGURE 31 KEY BUYING CRITERIA FOR APPLICATIONS**TABLE 5 KEY BUYING CRITERIA FOR APPLICATIONS****5.10 CASE STUDY ANALYSIS**

5.10.1 ROCKWOOL GROUP USED TELEDYNE FLIR'S THERMAL IMAGING TECHNOLOGY TO EVALUATE INSULATION EFFECTIVENESS AND PROVIDE COMPREHENSIVE BUILDING ANALYSIS

5.10.2 VICENZA COURT RESOLVED CONSTRUCTION DISPUTE BY HIRING SERVICES OF THERMAL IMAGING EXPERTS FROM MULTITES SRL

5.10.3 HIGHLAND HELICOPTERS DEPLOYED THERMAL CAMERAS FROM INFRATEC TO COMBAT WILDFIRES

5.11 TRADE ANALYSIS

5.11.1 IMPORT SCENARIO OF MAGNETIC OR OPTICAL READERS

TABLE 6 IMPORT DATA OF PRODUCTS COVERED UNDER HS CODE 847190, BY COUNTRY, 2018–2022 (USD MILLION)

5.11.2 EXPORT SCENARIO OF MAGNETIC OR OPTICAL READERS

TABLE 7 EXPORT DATA OF PRODUCTS COVERED UNDER HS CODE 902750, BY COUNTRY, 2018–2022 (USD MILLION)

5.12 PATENT ANALYSIS

TABLE 8 PATENTS PERTAINING TO INFRARED IMAGING MARKET, 2020–2022

5.13 KEY CONFERENCES AND EVENTS, 2023–2024

TABLE 9 INFRARED IMAGING MARKET: LIST OF CONFERENCES AND EVENTS

5.14 TARIFF ANALYSIS

TABLE 10 MFN TARIFF FOR HS CODE 902750-COMPLIANT PRODUCTS EXPORTED BY US

TABLE 11 MFN TARIFF FOR HS CODE 902750-COMPLIANT PRODUCTS EXPORTED BY CHINA

TABLE 12 MFN TARIFF FOR HS CODE 902750-COMPLIANT PRODUCTS EXPORTED BY INDIA

5.15 STANDARDS AND REGULATORY LANDSCAPE

5.15.1 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 13 NORTH AMERICA: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 14 EUROPE: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 15 ASIA PACIFIC: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 16 ROW: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

5.15.2 GOVERNMENT REGULATIONS

5.15.3 REGULATORY LANDSCAPE

5.15.4 GOVERNMENT REGULATIONS

5.15.4.1 US

5.15.4.2 Europe

5.15.4.3 India

6 INFRARED IMAGING DEVICES

6.1 INTRODUCTION

6.2 PORTABLE

6.2.1 USE OF PORTABLE CAMERAS FOR CONVENIENCE AND EFFORTLESS IMAGING

6.2.2 AERIAL

6.2.2.1 Deployment of aerial cameras for thermographic view and improved visibility of objects to be monitored or inspected

6.2.3 HANDHELD

6.2.3.1 Implementation of handheld cameras in buildings to inspect heat loss and detect insulation issues

6.3 FIXED

6.3.1 ADOPTION OF FIXED CAMERAS TO ENSURE CONSISTENT AND RELIABLE IMAGING OUTPUT

7 INFRARED IMAGING MARKET, BY TECHNOLOGY

7.1 INTRODUCTION

FIGURE 32 INFRARED IMAGING MARKET, BY TECHNOLOGY

FIGURE 33 UNCOOLED INFRARED IMAGING TECHNOLOGY TO DOMINATE MARKET THROUGHOUT FORECAST PERIOD

TABLE 17 INFRARED IMAGING MARKET, BY TECHNOLOGY, 2019–2022 (USD MILLION)

TABLE 18 INFRARED IMAGING MARKET, BY TECHNOLOGY, 2023–2028 (USD MILLION)

7.2 COOLED INFRARED IMAGING

7.2.1 LIMITED APPLICATIONS DUE TO HIGH COST AND LONG STARTUP TIME

TABLE 19 COOLED INFRARED IMAGING: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 20 COOLED INFRARED IMAGING: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

7.3 UNCOOLED INFRARED IMAGING

7.3.1 INCREASED USE IN HIGH-VOLUME APPLICATIONS OWING TO LOW COST AND EASY INSTALLATION

TABLE 21 UNCOOLED INFRARED IMAGING: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 22 UNCOOLED INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

8 INFRARED IMAGING MARKET, BY WAVELENGTH

8.1 INTRODUCTION

FIGURE 34 INFRARED IMAGING MARKET, BY WAVELENGTH

FIGURE 35 SHORT-WAVE INFRARED SEGMENT TO WITNESS HIGHEST CAGR IN INFRARED IMAGING MARKET DURING FORECAST PERIOD

TABLE 23 INFRARED IMAGING MARKET, BY WAVELENGTH, 2019–2022 (USD MILLION)

TABLE 24 INFRARED IMAGING MARKET, BY WAVELENGTH, 2023–2028 (USD MILLION)

8.2 NEAR INFRARED (NIR)

8.2.1 HIGH ADOPTION OF NIR CCTV CAMERAS FOR SECURITY & SURVEILLANCE TO DRIVE MARKET

TABLE 25 NEAR INFRARED: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 26 NEAR INFRARED: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 27 NEAR INFRARED: INFRARED IMAGING MARKET, BY VERTICAL, 2019–2022 (USD MILLION)

TABLE 28 NEAR INFRARED: INFRARED IMAGING MARKET, BY VERTICAL, 2023–2028 (USD MILLION)

8.3 SHORT-WAVE INFRARED (SWIR)

8.3.1 INCREASED USE OF SWIR IMAGING TECHNOLOGY IN NON-DESTRUCTIVE TESTING TO DRIVE MARKET

TABLE 29 SHORT-WAVE INFRARED: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 30 SHORT-WAVE INFRARED: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 31 SHORT-WAVE INFRARED: INFRARED IMAGING MARKET, BY VERTICAL, 2019–2022 (USD MILLION)

TABLE 32 SHORT-WAVE INFRARED: INFRARED IMAGING MARKET, BY

VERTICAL, 2023–2028 (USD MILLION)

8.4 MID-WAVE INFRARED (MWIR)

8.4.1 RAPID TECHNOLOGICAL ADVANCEMENTS IN MWIR TO BOOST SEGMENTAL GROWTH

FIGURE 36 SECURITY & SURVEILLANCE APPLICATIONS TO ACCOUNT FOR LARGEST SHARE OF MID-WAVE INFRARED IMAGING MARKET IN 2028

TABLE 33 MID-WAVE INFRARED: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 34 MID-WAVE INFRARED: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 35 MID-WAVE INFRARED: INFRARED IMAGING MARKET, BY VERTICAL, 2019–2022 (USD MILLION)

TABLE 36 MID-WAVE INFRARED: INFRARED IMAGING MARKET, BY VERTICAL, 2023–2028 (USD MILLION)

8.5 LONG-WAVE INFRARED (LWIR)

8.5.1 SIGNIFICANT USE OF LWIR CAMERAS IN WEARABLES, DRONES, AND HANDHELD DEVICES TO FUEL SEGMENTAL GROWTH

TABLE 37 LONG-WAVE INFRARED: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 38 LONG-WAVE INFRARED: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 39 LONG-WAVE INFRARED: INFRARED IMAGING MARKET, BY VERTICAL, 2019–2022 (USD MILLION)

TABLE 40 LONG-WAVE INFRARED: INFRARED IMAGING MARKET, BY VERTICAL, 2023–2028 (USD MILLION)

9 INFRARED IMAGING MARKET, BY APPLICATION

9.1 INTRODUCTION

FIGURE 37 INFRARED IMAGING MARKET, BY APPLICATION

FIGURE 38 MONITORING & INSPECTION SEGMENT TO WITNESS HIGHEST CAGR IN INFRARED IMAGING MARKET, BY APPLICATION, DURING FORECAST PERIOD

TABLE 41 INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 42 INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

9.2 SECURITY & SURVEILLANCE

9.2.1 SURGING DEMAND FOR INFRARED IMAGING CAMERAS DUE TO INCREASED TERRORISM TO DRIVE MARKET

TABLE 43 SECURITY & SURVEILLANCE: INFRARED IMAGING MARKET, BY TECHNOLOGY, 2019–2022 (USD MILLION)

TABLE 44 SECURITY & SURVEILLANCE: INFRARED IMAGING MARKET, BY TECHNOLOGY, 2023–2028 (USD MILLION)

TABLE 45 SECURITY & SURVEILLANCE: INFRARED IMAGING MARKET, BY WAVELENGTH, 2019–2022 (USD MILLION)

TABLE 46 SECURITY & SURVEILLANCE: INFRARED IMAGING MARKET, BY WAVELENGTH, 2023–2028 (USD MILLION)

TABLE 47 SECURITY & SURVEILLANCE: INFRARED IMAGING MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 48 SECURITY & SURVEILLANCE: INFRARED IMAGING MARKET, BY REGION, 2023–2028 (USD MILLION)

9.3 MONITORING & INSPECTION

TABLE 49 MONITORING & INSPECTION: INFRARED IMAGING MARKET, BY TECHNOLOGY, 2019–2022 (USD MILLION)

TABLE 50 MONITORING & INSPECTION: INFRARED IMAGING MARKET, BY TECHNOLOGY, 2023–2028 (USD MILLION)

TABLE 51 MONITORING & INSPECTION: INFRARED IMAGING MARKET, BY WAVELENGTH, 2019–2022 (USD MILLION)

TABLE 52 MONITORING & INSPECTION: INFRARED IMAGING MARKET, BY WAVELENGTH, 2023–2028 (USD MILLION)

TABLE 53 MONITORING & INSPECTION: INFRARED IMAGING MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 54 MONITORING & INSPECTION: INFRARED IMAGING MARKET, BY REGION, 2023–2028 (USD MILLION)

9.3.1 CONDITION MONITORING

9.3.1.1 Increased use of IR cameras to detect faults in electrical and mechanical equipment to drive segmental growth

9.3.2 STRUCTURAL HEALTH MONITORING

9.3.2.1 High adoption of early warning systems to monitor potentially risky structures to drive market

9.3.3 QUALITY CONTROL

9.3.3.1 Significant demand for high-quality and high-performance products to promote use of infrared imaging cameras

9.4 DETECTION

TABLE 55 DETECTION: INFRARED IMAGING MARKET, BY TECHNOLOGY, 2019–2022 (USD MILLION)

TABLE 56 DETECTION: INFRARED IMAGING MARKET, BY TECHNOLOGY, 2023–2028 (USD MILLION)

TABLE 57 DETECTION: INFRARED IMAGING MARKET, BY WAVELENGTH, 2019–2022 (USD MILLION)

TABLE 58 DETECTION: INFRARED IMAGING MARKET, BY WAVELENGTH, 2023–2028 (USD MILLION)

TABLE 59 DETECTION: INFRARED IMAGING MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 60 DETECTION: INFRARED IMAGING MARKET, BY REGION, 2023–2028 (USD MILLION)

9.4.1 GAS DETECTION

9.4.1.1 Use of infrared imaging cameras to monitor gas leaks and emissions in real time to fuel market growth

9.4.2 FIRE/FLARE DETECTION

9.4.2.1 Rising adoption of infrared imaging cameras to detect smoke and temperature differences during firefighting to drive market

9.4.3 BODY TEMPERATURE MEASUREMENT

9.4.3.1 Growing use of IR-enabled body temperature detectors owing to increased international travel and migration to boost segmental growth

10 INFRARED IMAGING MARKET, BY VERTICAL

10.1 INTRODUCTION

FIGURE 39 INFRARED IMAGING MARKET, BY VERTICAL

FIGURE 40 NON-INDUSTRIAL SEGMENT TO COMMAND INFRARED IMAGING MARKET DURING FORECAST PERIOD

TABLE 61 INFRARED IMAGING MARKET, BY VERTICAL, 2019–2022 (USD MILLION)

TABLE 62 INFRARED IMAGING MARKET, BY VERTICAL, 2023–2028 (USD MILLION)

10.2 INDUSTRIAL

TABLE 63 INDUSTRIAL: INFRARED IMAGING MARKET, BY WAVELENGTH, 2019–2022 (USD MILLION)

TABLE 64 INDUSTRIAL: INFRARED IMAGING MARKET, BY WAVELENGTH, 2023–2028 (USD MILLION)

10.2.1 AUTOMOTIVE

10.2.1.1 Integration of infrared imaging technology into ADAS to drive market

10.2.2 AEROSPACE

10.2.2.1 Utilization of advanced vision systems in aerospace industry to boost demand for IR imaging technology

10.2.3 ELECTRONICS & SEMICONDUCTOR

10.2.3.1 Growing use of SWIR cameras to inspect semiconductor materials to fuel market growth

10.2.4 OIL & GAS

10.2.4.1 Growing focus of oil & gas companies on predictive maintenance to boost demand for IR imaging products

10.2.5 FOOD & BEVERAGES

10.2.5.1 Increasing adoption of hyperspectral imaging to identify potential food safety risks to boost demand for IR products

10.2.6 GLASS

10.2.6.1 High adoption of SWIR cameras by glass manufacturers to minimize scrap to drive market

10.2.7 OTHERS

10.3 NON-INDUSTRIAL

TABLE 65 NON-INDUSTRIAL: INFRARED IMAGING MARKET, BY WAVELENGTH, 2019–2022 (USD MILLION)

TABLE 66 NON-INDUSTRIAL: INFRARED IMAGING MARKET, BY WAVELENGTH, 2023–2028 (USD MILLION)

10.3.1 MILITARY & DEFENSE

10.3.1.1 Rising demand for vision enhancement technology in battlefield environments to contribute to market growth

10.3.2 CIVIL INFRASTRUCTURE

10.3.2.1 Deployment of infrared imaging cameras in residential and commercial buildings and transportation infrastructure to drive market

10.3.3 MEDICAL

10.3.3.1 Adoption of infrared imaging cameras in newer medical applications to fuel market growth

10.3.4 SCIENTIFIC RESEARCH

10.3.4.1 Emerging applications of spectroscopy in scientific research to support market growth

11 GEOGRAPHIC ANALYSIS

11.1 INTRODUCTION

FIGURE 41 ASIA PACIFIC TO WITNESS HIGHEST CAGR IN INFRARED IMAGING MARKET DURING FORECAST PERIOD

TABLE 67 INFRARED IMAGING MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 68 INFRARED IMAGING MARKET, BY REGION, 2023–2028 (USD MILLION)

11.2 NORTH AMERICA

FIGURE 42 NORTH AMERICA: INFRARED IMAGING MARKET SNAPSHOT

TABLE 69 NORTH AMERICA: INFRARED IMAGING MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 70 NORTH AMERICA: INFRARED IMAGING MARKET, BY COUNTRY,
2023–2028 (USD MILLION)

TABLE 71 NORTH AMERICA: INFRARED IMAGING MARKET, BY APPLICATION,
2019–2022 (USD MILLION)

TABLE 72 NORTH AMERICA: INFRARED IMAGING MARKET, BY APPLICATION,
2023–2028 (USD MILLION)

11.2.1 US

11.2.1.1 Increased utilization of infrared imaging in civil infrastructure projects to fuel
market growth

TABLE 73 US: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD
MILLION)

TABLE 74 US: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD
MILLION)

11.2.2 CANADA

11.2.2.1 Increasing use of infrared imaging cameras in security & surveillance to
support market growth

TABLE 75 CANADA: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022
(USD MILLION)

TABLE 76 CANADA: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

11.2.3 MEXICO

11.2.3.1 Enhanced focus on adopting security measures to boost demand for infrared
imaging technology

TABLE 77 MEXICO: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022
(USD MILLION)

TABLE 78 MEXICO: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

11.2.4 NORTH AMERICA: RECESSION IMPACT

11.3 EUROPE

FIGURE 43 EUROPE: INFRARED IMAGING MARKET SNAPSHOT

TABLE 79 EUROPE: INFRARED IMAGING MARKET, BY COUNTRY, 2019–2022
(USD MILLION)

TABLE 80 EUROPE: INFRARED IMAGING MARKET, BY COUNTRY, 2023–2028
(USD MILLION)

TABLE 81 EUROPE: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022
(USD MILLION)

TABLE 82 EUROPE: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

11.3.1 GERMANY

11.3.1.1 Booming automotive sector to accelerate infrared imaging technology demand

TABLE 83 GERMANY: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 84 GERMANY: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

11.3.2 UK

11.3.2.1 Medical and pharmaceutical companies to contribute most to market growth
TABLE 85 UK: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 86 UK: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

11.3.3 FRANCE

11.3.3.1 Technology advancements in automotive sector to propel market growth
TABLE 87 FRANCE: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 88 FRANCE: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

11.3.4 REST OF EUROPE

TABLE 89 REST OF EUROPE: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 90 REST OF EUROPE: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

11.3.5 EUROPE: RECESSION IMPACT

11.4 ASIA PACIFIC

FIGURE 44 ASIA PACIFIC: INFRARED IMAGING MARKET SNAPSHOT

TABLE 91 ASIA PACIFIC: INFRARED IMAGING MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 92 ASIA PACIFIC: INFRARED IMAGING MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 93 ASIA PACIFIC: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 94 ASIA PACIFIC: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

11.4.1 CHINA

11.4.1.1 Rising demand for security and surveillance solutions for border control to drive market

TABLE 95 CHINA: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 96 CHINA: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

11.4.2 JAPAN

11.4.2.1 High reliance of consumer electronics, automotive, and healthcare sectors on infrared imaging technology to accelerate market growth

TABLE 97 JAPAN: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022
(USD MILLION)

TABLE 98 JAPAN: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

11.4.3 INDIA

11.4.3.1 Increasing use of IR imaging technology in predictive maintenance and quality control applications to support market growth

TABLE 99 INDIA: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022
(USD MILLION)

TABLE 100 INDIA: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

11.4.4 REST OF ASIA PACIFIC

TABLE 101 REST OF ASIA PACIFIC: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 102 REST OF ASIA PACIFIC: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

11.4.5 ASIA PACIFIC: RECESSION IMPACT

11.5 REST OF THE WORLD

TABLE 103 ROW: INFRARED IMAGING MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 104 ROW: INFRARED IMAGING MARKET, BY REGION, 2023–2028 (USD MILLION)

TABLE 105 ROW: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022
(USD MILLION)

TABLE 106 ROW: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

11.5.1 SOUTH AMERICA

11.5.1.1 High demand from medical and sports industries to support market growth

TABLE 107 SOUTH AMERICA: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 108 SOUTH AMERICA: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

11.5.2 MIDDLE EAST & AFRICA

11.5.2.1 Thriving oil & gas industry to contribute to market growth

TABLE 109 MIDDLE EAST & AFRICA: INFRARED IMAGING MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 110 MIDDLE EAST & AFRICA: INFRARED IMAGING MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

11.5.3 REST OF THE WORLD: RECESSION IMPACT

12 COMPETITIVE LANDSCAPE

12.1 OVERVIEW

12.2 STRATEGIES ADOPTED BY KEY PLAYERS IN INFRARED IMAGING MARKET

TABLE 111 OVERVIEW OF STRATEGIES FOLLOWED BY KEY PLAYERS IN INFRARED IMAGING MARKET

12.3 MARKET SHARE ANALYSIS, 2022

TABLE 112 INFRARED IMAGING MARKET: MARKET SHARE ANALYSIS (2022)

12.4 REVENUE ANALYSIS OF KEY PLAYERS IN INFRARED IMAGING MARKET

FIGURE 45 FIVE-YEAR REVENUE ANALYSIS OF KEY PLAYERS IN INFRARED IMAGING MARKET

12.4.1 KEY PLAYERS IN INFRARED IMAGING MARKET, 2022

12.5 COMPANY EVALUATION MATRIX, 2022

12.5.1 STARS

12.5.2 PERVASIVE PLAYERS

12.5.3 EMERGING LEADERS

12.5.4 PARTICIPANTS

FIGURE 46 INFRARED IMAGING MARKET (GLOBAL): COMPANY EVALUATION MATRIX, 2022

12.6 COMPETITIVE BENCHMARKING

12.6.1 COMPANY FOOTPRINT, BY VERTICAL

12.6.2 COMPANY FOOTPRINT, BY REGION

12.6.3 OVERALL COMPANY FOOTPRINT

12.7 STARTUPS/SMALL AND MEDIUM-SIZED ENTERPRISES (SMES) EVALUATION MATRIX, 2022

12.7.1 PROGRESSIVE COMPANIES

12.7.2 RESPONSIVE COMPANIES

12.7.3 DYNAMIC COMPANIES

12.7.4 STARTING BLOCKS

FIGURE 47 INFRARED IMAGING MARKET (GLOBAL): STARTUPS/SMES EVALUATION MATRIX, 2022

12.7.5 COMPETITIVE BENCHMARKING OF KEY STARTUPS/SMES

TABLE 113 INFRARED IMAGING MARKET: DETAILED LIST OF KEY

STARTUPS/SMES

TABLE 114 INFRARED IMAGING MARKET: COMPETITIVE BENCHMARKING OF KEY STARTUPS/SMES (VERTICAL FOOTPRINT)

TABLE 115 INFRARED IMAGING MARKET: COMPETITIVE BENCHMARKING OF KEY STARTUPS/SMES (REGION FOOTPRINT)

12.8 COMPETITIVE SCENARIOS AND TRENDS

12.8.1 DEALS

TABLE 116 INFRARED IMAGING MARKET: DEALS, 2021–2023

TABLE 117 INFRARED IMAGING MARKET: PRODUCT LAUNCHES, 2021–2023

13 COMPANY PROFILES

13.1 KEY PLAYERS

(Business Overview, Products/Services/Solutions Offered, Recent Developments, and MnM View)*

13.1.1 TELEDYNE FLIR LLC

TABLE 118 TELEDYNE FLIR LLC: COMPANY OVERVIEW

FIGURE 48 TELEDYNE FLIR LLC: COMPANY SNAPSHOT

13.1.2 FLUKE CORPORATION

TABLE 119 FLUKE CORPORATION: COMPANY OVERVIEW

FIGURE 49 FLUKE CORPORATION: COMPANY SNAPSHOT

13.1.3 RAYTHEON TECHNOLOGIES CORPORATION

TABLE 120 RAYTHEON TECHNOLOGIES CORPORATION: COMPANY OVERVIEW

FIGURE 50 RAYTHEON TECHNOLOGIES CORPORATION: COMPANY SNAPSHOT

13.1.4 LEONARDO DRS

TABLE 121 LEONARDO DRS: COMPANY OVERVIEW

13.1.5 AXIS COMMUNICATIONS AB

TABLE 122 AXIS COMMUNICATIONS AB: COMPANY OVERVIEW

FIGURE 51 AXIS COMMUNICATIONS AB: COMPANY SNAPSHOT

13.1.6 XENICS NV.

TABLE 123 XENICS NV.: COMPANY OVERVIEW

13.1.7 OPGAL OPTRONIC INDUSTRIES LTD.

TABLE 124 OPGAL OPTRONIC INDUSTRIES LTD.: COMPANY OVERVIEW

13.1.8 NEW IMAGING TECHNOLOGIES

TABLE 125 NEW IMAGING TECHNOLOGIES: COMPANY OVERVIEW

13.1.9 ALLIED VISION TECHNOLOGIES GMBH

TABLE 126 ALLIED VISION TECHNOLOGIES: COMPANY OVERVIEW

13.1.10 L3HARRIS TECHNOLOGIES, INC.

TABLE 127 L3HARRIS TECHNOLOGIES, INC.: COMPANY OVERVIEW

FIGURE 52 L3HARRIS TECHNOLOGIES, INC.: COMPANY SNAPSHOT

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

13.2 OTHER KEY PLAYERS

13.2.1 LYNRED

13.2.2 INTEVAC, INC.

13.2.3 ZHEJIANG DALI TECHNOLOGY CO., LTD.

13.2.4 C-THERMAL

13.2.5 IRCAMERAS LLC

13.2.6 HGH

13.2.7 RAPTOR PHOTONICS

13.2.8 EPISENSORS

13.2.9 INFRATEC GMBH

13.2.10 PRINCETON INFRARED TECHNOLOGIES, INC.

13.2.11 SIERRA-OLYMPIA TECH.

13.2.12 COX CO., LTD.

13.2.13 TONBO IMAGING

13.2.14 OPTOTHERM, INC.

13.2.15 SEEK THERMAL

13.2.16 INFRARED CAMERAS, INC.

14 APPENDIX

14.1 DISCUSSION GUIDE

14.2 KNOWLEDGESTORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL

14.3 CUSTOMIZATION OPTIONS

14.4 RELATED REPORTS

14.5 AUTHOR DETAILS

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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