

Thermal Imaging Market with COVID-19 Impact and Analysis, by Product Type (Modules, Cameras, Scopes), Type (Handheld and Standstill), Technology(Cooled, Uncooled), Application, Wavelength(SWIR, MWIR, LWIR), Vertical, and Region - Global Forecast to 2026

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Abstracts

The global thermal imaging market is estimated to be valued at USD 3.6 billion in 2021 and is expected to reach USD 4.7 billion by 2026, growing at a CAGR of 5.5% during the forecast period. The key factors driving the growth of the global thermal imaging market include Increasing government expenditure on the aerospace & defense sector boosting the growth of the thermal imaging market, Increasing adoption of thermal imaging in the automotive industry, growing R&D investments by companies, governments, and capital firms for developing innovative thermal imaging solutions, and others.

The outbreak and spread of COVID-19 have led to a slowdown in global economic growth. It has adversely affected several industries, including the thermal imaging industry. Companies are planning and working on keeping their businesses operational. Manufacturing and distributing products are the key challenges faced by companies. Several countries worldwide have imposed or prolonged lockdowns to contain the spread of the pandemic, which has resulted in disruptions in the supply chain of the thermal imaging market.

Thermal cameras segment to account for the largest share of thermal imaging market during the forecast period

On the basis of product types, the thermal imaging market has been segmented into three categories—thermal cameras, thermal scopes, and thermal modules. The thermal cameras segment held the largest share of the thermal imaging market in 2020 and is expected to continue this growth during the forecast period. Several reasons, such as an electronic image of high-quality precision produced in less time and the availability in different types (handheld, mounted, and standalone) and various micro- and nano-sizes, contribute to this dominance.

Security and surveillance segment to account for the largest share of thermal imaging market during the forecast period

Based on applications, the thermal imaging market has been segmented into security and surveillance, monitoring and inspection, and detection and measurement. The security and surveillance segment held the largest share of the thermal imaging market during the forecast period. Rapid urbanization increases the demand for advanced thermal imaging solutions for security and surveillance applications. The rising conflicts and terrorist activities among countries also increase the demand for well-equipped systems to monitor the country's borders from the illegal intrusion of enemies and protect the country from them.

North America to account for the largest share of thermal imaging market during the forecast period

Among all regions, North America accounted for the largest share of the thermal imaging market and is expected to continue this growth during the forecast period. The region is home to the major producers of thermal imaging components, such as thermal cameras, scopes, and modules. The US is the major contributor to this region and accounts for ~89% of the total thermal imaging market share in North America. The growth of the thermal imaging market in this region is attributed to the presence of numerous manufacturers and distributors, the low cost of thermal imaging components, and the increasing government expenditure in the aerospace & defense sector.

Breakdown of primary participants:

By Company Type: Tier 1 = 18%, Tier 2 = 22%, and Tier 3 = 60%

By Designation: C-Level Executives = 21%, Managers = 35%, and Others = 44%

By Region: North America = 45%, Europe = 20%, APAC = 30%, and RoW = 5%

Some of the key companies operating in the market are FLIR Systems (US), Fluke Corporation (US), Leonardo (Italy), L3HARRIS TECHNOLOGIES (US), United Technologies (US), Axis Communications (Sweden), BAE Systems (UK), Opgal (Israel), Testo (Germany), Xenics (Belgium), Thermoteknix Systems (UK), and so on.

Research Coverage:

In this report, the thermal imaging market has been segmented on the basis of Type, Product Type, Technology, Wavelength, Vertical, Application, and Geography. It also discusses the market dynamics such as drivers, restraints, opportunities, and challenges, along with the impact of COVID-19 on the market and its segments. The report gives a detailed view of the market across four main regions—North America, Europe, APAC, and RoW. Value chain analysis has been included in the report, along with the description of each stage of the chain.

Key Benefits to Buy the Report:

This report includes statistics for the thermal imaging market based on Type, Product Type, Technology, Wavelength, Vertical, Application, and Geography, along with their respective market sizes.

Value chain analysis and key industry trends have been provided for the market.

Major drivers, restraints, opportunities, and challenges for the thermal imaging market have been provided in detail in this report.

This report would help stakeholders to understand their competitors better and gain more insights to enhance their position in the market. The competitive landscape section includes the competitor ecosystem and the recent development strategies adopted by the key players in the market, such as product launches/developments, contracts/collaborations/agreements/acquisitions.

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About

According to the new market research report on "Thermal Imaging Market by Type (Cameras, Modules, Scopes), Application (Security & Surveillance, Monitoring & Inspection, Detection), Vertical (Aerospace & Defense, Industrial, Healthcare & Life Sciences), and Geography - Global Forecast to 2023", this market is expected to be worth USD 4.04 Billion by 2023 from USD 2.72 Billion in 2017, at a CAGR of 6.73% between 2018 and 2023. Reduction in the price of thermal imaging products, the increasing adoption of thermal imaging in perimeter security, and penetration in machine vision applications are driving the growth of this market.

The key players in this industry are:

FLIR Systems (US),

Fortive (US),

Axis Communications (Sweden),

Leonardo (Italy),

BAE Systems (UK),

L3 Technologies (US),

United Technologies (US),

Sofradir (France),

Testo (Germany),

Xenics (Belgium), and

Seek Thermal (US), among others.

The report profiles the most promising players in the thermal imaging market. The competitive landscape of the market presents an interesting picture of the strategies

adopted by a large number of players.

Thermal imaging cameras to hold largest market share during forecast period

Owing to the increase in need for thermal inspections and monitoring in residential and commercial sectors, the use of thermal imaging cameras is on the rise. A thermal imaging camera provides insights into home insulation systems, locates air leaks, spots inadequate insulations, and so on. Additionally, these cameras have been used in perimeter security and tracking applications in most countries around the globe. Cameras accounted for the largest share of ~52% of the overall thermal imaging market in 2017.

Thermal imaging market for monitoring and inspection application to grow at highest CAGR during forecast period

The market for the monitoring and inspection application is expected to grow at the highest CAGR owing to the penetration of low-cost and high-quality thermal imaging cameras in home automation, medical, food processing, and ADAS. Moreover, miniaturized camera modules are used by most of the OEMs for their customized solutions, resulting in their increased growth.

Aerospace & defense vertical to hold largest share of thermal imaging market during forecast period

The thermal imaging market is dominated by the aerospace & defense vertical owing to the growing need for border security for law enforcement. Moreover, thermal imaging scopes and defense solutions conform to the strictest military standards for deployment (land, sea, and air). These solutions are used for thermal scopes, weapon sights and stations, gimbals, UAVs, naval observation, IR sensors, and driver vision enhancers (DVEs) for tanks and military vehicles.

North America to hold largest share of thermal imaging market during forecast period

North America is likely to continue to lead the thermal imaging market; it accounted for the largest share of the global thermal imaging market in 2017. Growing demand for smartphone-based devices and the increasing adoption of thermal imaging in commercial and home automation are driving the growth of the thermal imaging market in the region. Owing to the presence of thermal imaging product manufacturers and

R&D centers in the region, demand for thermal imaging is high in North America.

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