

North America Thermal Imaging Market Size and Forecast (2021 - 2031), Regional Share, Trend, and Growth Opportunity Analysis Report Coverage: By Product Type (Modules, Cameras, and Scopes), Application (LWIR, MWIR, and SWIR), Type (Handheld and Standstill), Technology (Cooled and Uncooled), and End-Use Industry (Automotive, Consumer, Industrial, Medical, Defense and Aerospace, and Others)

<https://marketpublishers.com/r/N0C5E38B1EF8EN.html>

Date: November 2025

Pages: 171

Price: US\$ 3,450.00 (Single User License)

ID: N0C5E38B1EF8EN

Abstracts

The North America Thermal Imaging Market is projected to grow significantly, reaching an estimated US\$ 2,613.6 million by 2031, up from US\$ 1,655.1 million in 2024. This growth represents a compound annual growth rate (CAGR) of 6.7% from 2024 to 2031.

Executive Summary and Market Analysis

The thermal imaging market in North America plays a crucial role in the global landscape, driven by increasing demands in surveillance and security, a robust automotive sector, rising investments in medical devices, and heightened adoption in military and defense applications. The region is home to several leading manufacturers and suppliers of thermal imaging technologies, which are responding to the growing market needs.

As crime rates rise, the demand for private security services is escalating, leading to a greater emphasis on personal safety, property protection, and asset security. Companies and individuals are increasingly seeking proactive security solutions. The

private security sector is well-equipped to meet these challenges, leveraging advanced technology and a commitment to customer satisfaction. For instance, in July 2024, Teledyne FLIR, a subsidiary of Teledyne Technologies, unveiled next-generation embedded software for its ITAR-free Boson+ thermal camera module, which enhances performance across various applications, including defense, firefighting, automotive, and surveillance.

Thermal imaging technology is also gaining traction in the automotive industry, supported by government initiatives aimed at fostering the development and testing of autonomous vehicles. These programs are designed to maintain regional competitiveness in the autonomous vehicle market, improve transportation safety, and accelerate technological advancements.

Strategic Insights

Market Segmentation

The North America Thermal Imaging Market can be segmented by various criteria:

Product Type: The market is divided into Modules, Cameras, and Scopes, with Cameras holding the largest market share in 2024.

Application: Segmented into LWIR (Long-Wave Infrared), MWIR (Mid-Wave Infrared), and SWIR (Short-Wave Infrared), with LWIR leading the market.

Type: Handheld and Standstill types are recognized, with Handheld devices dominating the market.

Technology: The market is categorized into Cooled and Uncooled technologies, with Cooled technology holding the largest share.

End Use Industry: The market includes sectors such as Automotive, Consumer, Industrial, Medical, Defense and Aerospace, and others, with Industrial applications leading in 2024.

Market Outlook

In April 2024, global military spending saw a significant increase due to ongoing

conflicts and geopolitical tensions, as reported by the Stockholm International Peace Research Institute (SIPRI). This shift in military strategy has prompted governments worldwide to allocate more funds to enhance their military capabilities, allowing for the procurement of advanced technologies and equipment. The US alone accounted for approximately 40% of global military spending in 2023, reflecting a consistent annual increase over the past decade.

Thermal imaging technology is extensively utilized in military and defense sectors for various applications, including border surveillance, law enforcement, and navigation systems. It enhances safety during low-light and nighttime operations, proving essential for military aviation in identifying and targeting threats. The reliability of military electronics is paramount, leading to the use of acoustic imaging for quality assurance before components are integrated into systems.

The increase in military budgets is directly linked to the demand for advanced surveillance and imaging technologies, which are vital for missions such as border patrol, maritime security, and intelligence gathering. These technologies provide real-time situational awareness and are crucial for detecting and tracking potential threats, thereby driving the growth of the thermal imaging market.

Country Insights

The North America Thermal Imaging Market is primarily segmented into the US, Canada, and Mexico, with the US holding the largest market share in 2024. Factors such as technological advancements, increasing security needs, and a rise in industrial applications are propelling the adoption of thermal imaging technologies in the US. For example, in November 2024, Teledyne FLIR was selected by Red Cat Holdings to supply advanced thermal imaging cameras for the US Army's new short-range reconnaissance drone, integrating its Hadron 640R+ longwave infrared camera module into the Black Widow unmanned aircraft system.

Thermal cameras are also widely used in industrial settings for applications like electrical fault detection and predictive maintenance, which help mitigate safety risks and reduce costly downtimes.

Company Profiles

Key players in the Thermal Imaging Market include Fluke Corp, L3Harris Technologies Inc, Safran SA, Teledyne FLIR LLC, Testo SE & Co. KGaA, Leonardo S.p.A., UNI-

TREND TECHNOLOGY (CHINA) CO., LTD., Hangzhou Microimage Software Co., Ltd., SDT International SA/NV, and Megger Group Limited. These companies are actively pursuing strategies such as expansion, product innovation, and mergers and acquisitions to enhance their market presence and offer cutting-edge products to consumers.

Contents

1. INTRODUCTION

- 1.1 Report Guidance
- 1.2 Market Segmentation

2. EXECUTIVE SUMMARY

- 2.1 Key Insights
- 2.2 Market Attractiveness

3. RESEARCH METHODOLOGY

- 3.1 Secondary Research
- 3.2 Primary Research
 - 3.2.1 Hypothesis formulation:
 - 3.2.2 Macroeconomic factor analysis:
 - 3.2.3 Developing base number:
 - 3.2.4 Data Triangulation:
 - 3.2.5 Country-level data:

4. THERMAL IMAGING MARKET LANDSCAPE

- 4.1 Market Overview
- 4.2 PEST Analysis
- 4.3 Ecosystem Analysis
 - 4.3.1 Raw Material Suppliers
 - 4.3.2 Manufacturers
 - 4.3.3 Distributors or Suppliers
 - 4.3.4 End-Use Industry
 - 4.3.5 List of Vendors in the Value Chain

5. NORTH AMERICA THERMAL IMAGING MARKET - KEY MARKET DYNAMICS

- 5.1 Market Drivers
- 5.2 Market Restraints
- 5.3 Market Opportunities
- 5.4 Future Trends

5.5 Impact of Drivers and Restraints:

6. THERMAL IMAGING MARKET - NORTH AMERICA MARKET ANALYSIS

6.1 North America Thermal Imaging Market Revenue (US\$ Million), 2024 - 2031

6.2 North America Thermal Imaging Market Forecast and Analysis

7. NORTH AMERICA THERMAL IMAGING MARKET REVENUE ANALYSIS - BY PRODUCT TYPE

7.1 Modules

7.1.1 Overview

7.1.2 Modules: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

7.2 Cameras

7.2.1 Overview

7.2.2 Cameras: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

7.3 Scopes

7.3.1 Overview

7.3.2 Scopes: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

8. NORTH AMERICA THERMAL IMAGING MARKET REVENUE ANALYSIS - BY APPLICATION

8.1 LWIR

8.1.1 Overview

8.1.2 LWIR: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

8.2 MWIR

8.2.1 Overview

8.2.2 MWIR: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

8.3 SWIR

8.3.1 Overview

8.3.2 SWIR: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

9. NORTH AMERICA THERMAL IMAGING MARKET REVENUE ANALYSIS - BY TYPE

9.1 Handheld

9.1.1 Overview

9.1.2 Handheld: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

9.2 Standstill

9.2.1 Overview

9.2.2 Standstill: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

10. NORTH AMERICA THERMAL IMAGING MARKET REVENUE ANALYSIS - BY TECHNOLOGY

10.1 Cooled

10.1.1 Overview

10.1.2 Cooled: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

10.2 Uncooled

10.2.1 Overview

10.2.2 Uncooled: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

11. NORTH AMERICA THERMAL IMAGING MARKET REVENUE ANALYSIS - BY END USE INDUSTRY

11.1 Automotive

11.1.1 Overview

11.1.2 Automotive: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

11.2 Consumer

11.2.1 Overview

11.2.2 Consumer: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

11.3 Industrial

11.3.1 Overview

11.3.2 Industrial: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

11.4 Medical

11.4.1 Overview

11.4.2 Medical: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

11.5 Defense and Aerospace

11.5.1 Overview

11.5.2 Defense and Aerospace: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

11.6 Others

11.6.1 Overview

11.6.2 Others: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

12. NORTH AMERICA THERMAL IMAGING MARKET - COUNTRY ANALYSIS

12.1 North America

12.1.1 North America Thermal Imaging Market Revenue and Forecast and Analysis - by Country

12.1.1.1 North America Thermal Imaging Market Revenue and Forecast and Analysis - by Country

12.1.2.2 US: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

12.1.2.2.1 US: North America Thermal Imaging Market Share - by Product Type

12.1.2.2.2 US: North America Thermal Imaging Market Share - by Application

12.1.2.2.3 US: North America Thermal Imaging Market Share - by Type

12.1.2.2.4 US: North America Thermal Imaging Market Share - by Technology

12.1.2.2.5 US: North America Thermal Imaging Market Share - by End Use Industry

12.2.3.3 Canada: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

12.2.3.3.1 Canada: North America Thermal Imaging Market Share - by Product Type

12.2.3.3.2 Canada: North America Thermal Imaging Market Share - by Application

12.2.3.3.3 Canada: North America Thermal Imaging Market Share - by Type

12.2.3.3.4 Canada: North America Thermal Imaging Market Share - by Technology

12.2.3.3.5 Canada: North America Thermal Imaging Market Share - by End Use Industry

12.3.4.4 Mexico: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

12.3.4.4.1 Mexico: North America Thermal Imaging Market Share - by Product Type

- 12.3.4.4.2 Mexico: North America Thermal Imaging Market Share - by Application
- 12.3.4.4.3 Mexico: North America Thermal Imaging Market Share - by Type
- 12.3.4.4.4 Mexico: North America Thermal Imaging Market Share - by Technology
- 12.3.4.4.5 Mexico: North America Thermal Imaging Market Share - by End Use

Industry

13 COMPETITIVE LANDSCAPE

- 13.1 Heat Map Analysis by Key Players
- 13.2 Company Positioning & Concentration

14 INDUSTRY LANDSCAPE

- 14.1 Overview
- 14.2 New Product Development
- 14.3 Merger and Acquisition
- 14.4 Other Strategic Developments

15 COMPANY PROFILES

- 15.1 Fluke Corp
 - 15.1.1 Key Facts
 - 15.1.2 Business Description
 - 15.1.3 Products and Services
 - 15.1.4 Financial Overview
 - 15.1.5 SWOT Analysis
 - 15.1.6 Key Developments
- 15.2 L3Harris Technologies Inc
 - 15.2.1 Key Facts
 - 15.2.2 Business Description
 - 15.2.3 Products and Services
 - 15.2.4 Financial Overview
 - 15.2.5 SWOT Analysis
 - 15.2.6 Key Developments
- 15.3 Safran SA
 - 15.3.1 Key Facts
 - 15.3.2 Business Description
 - 15.3.3 Products and Services
 - 15.3.4 Financial Overview

- 15.3.5 SWOT Analysis
- 15.3.6 Key Developments
- 15.4 Teledyne FLIR LLC
 - 15.4.1 Key Facts
 - 15.4.2 Business Description
 - 15.4.3 Products and Services
 - 15.4.4 Financial Overview
 - 15.4.5 SWOT Analysis
 - 15.4.6 Key Developments
- 15.5 Testo SE & Co. KGaA
 - 15.5.1 Key Facts
 - 15.5.2 Business Description
 - 15.5.3 Products and Services
 - 15.5.4 Financial Overview
 - 15.5.5 SWOT Analysis
 - 15.5.6 Key Developments
- 15.6 Leonardo S.p.A.
 - 15.6.1 Key Facts
 - 15.6.2 Business Description
 - 15.6.3 Products and Services
 - 15.6.4 Financial Overview
 - 15.6.5 SWOT Analysis
 - 15.6.6 Key Developments
- 15.7 UNI-TREND TECHNOLOGY (CHINA) CO., LTD.
 - 15.7.1 Key Facts
 - 15.7.2 Business Description
 - 15.7.3 Products and Services
 - 15.7.4 Financial Overview
 - 15.7.5 SWOT Analysis
 - 15.7.6 Key Developments
- 15.8 Hangzhou Microimage Software Co., Ltd.
 - 15.8.1 Key Facts
 - 15.8.2 Business Description
 - 15.8.3 Products and Services
 - 15.8.4 Financial Overview
 - 15.8.5 SWOT Analysis
 - 15.8.6 Key Developments
- 15.9 SDT International SA/NV
 - 15.9.1 Key Facts

- 15.9.2 Business Description
- 15.9.3 Products and Services
- 15.9.4 Financial Overview
- 15.9.5 SWOT Analysis
- 15.9.6 Key Developments
- 15.10 Megger Group Limited
 - 15.10.1 Key Facts
 - 15.10.2 Business Description
 - 15.10.3 Products and Services
 - 15.10.4 Financial Overview
 - 15.10.5 SWOT Analysis
 - 15.10.6 Key Developments

16. APPENDIX

- 16.1 About The Insight Partners

List Of Tables

LIST OF TABLES

Table 1. North America Thermal Imaging Market Segmentation

Table 2. List of Vendors

Table 3. North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Table 4. North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Product Type

Table 5. North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Application

Table 6. North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Type

Table 7. North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Technology

Table 8. North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by End Use Industry

Table 9. North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Country

Table 10. US: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Product Type

Table 11. US: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Application

Table 12. US: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Type

Table 13. US: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Technology

Table 14. US: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by End Use Industry

Table 15. Canada: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Product Type

Table 16. Canada: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Application

Table 17. Canada: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Type

Table 18. Canada: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Technology

Table 19. Canada: North America Thermal Imaging Market - Revenue and Forecast,

2021 - 2031 (US\$ Million) - by End Use Industry

Table 20. Mexico: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Product Type

Table 21. Mexico: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Application

Table 22. Mexico: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Type

Table 23. Mexico: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Technology

Table 24. Mexico: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by End Use Industry

Table 25. Heat Map Analysis by Key Players

List Of Figures

LIST OF FIGURES

Figure 1. North America Thermal Imaging Market Segmentation - Country

Figure 2. PEST Analysis

Figure 3. Ecosystem: Thermal Imaging Market

Figure 4. North America Thermal Imaging Market - Key Market Dynamics

Figure 5. Impact Analysis of Drivers and Restraints

Figure 6. North America Thermal Imaging Market Revenue (US\$ Million), 2024 - 2031

Figure 7. North America Thermal Imaging Market Share (%) - by Product Type, 2024 and 2031

Figure 8. Modules: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 9. Cameras: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 10. Scopes: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 11. North America Thermal Imaging Market Share (%) - by Application, 2024 and 2031

Figure 12. LWIR: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 13. MWIR: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 14. SWIR: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 15. North America Thermal Imaging Market Share (%) - by Type, 2024 and 2031

Figure 16. Handheld: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 17. Standstill: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 18. North America Thermal Imaging Market Share (%) - by Technology, 2024 and 2031

Figure 19. Cooled: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 20. Uncooled: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 21. North America Thermal Imaging Market Share (%) - by End Use Industry, 2024 and 2031

Figure 22. Automotive: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 23. Consumer: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 24. Industrial: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 25. Medical: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 26. Defense and Aerospace: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 27. Others: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 28. North America Thermal Imaging Market Breakdown by Key Countries, 2024 and 2031 (%)

Figure 29. US: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 30. Canada: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 31. Mexico: North America Thermal Imaging Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 32. Company Positioning & Concentration

I would like to order

Product name: North America Thermal Imaging Market Size and Forecast (2021 - 2031), Regional Share, Trend, and Growth Opportunity Analysis Report Coverage: By Product Type (Modules, Cameras, and Scopes), Application (LWIR, MWIR, and SWIR), Type (Handheld and Standstill), Technology (Cooled and Uncooled), and End-Use Industry (Automotive, Consumer, Industrial, Medical, Defense and Aerospace, and Others)

Product link: <https://marketpublishers.com/r/N0C5E38B1EF8EN.html>

Price: US\$ 3,450.00 (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/N0C5E38B1EF8EN.html>