



Hyperspectral and Multispectral Imaging 2025: Technologies, Applications and Market Trends

In a largely revised new edition, TEMATYS highlights the latest trends:

- *Multispectral cameras have started to appear in smartphones.*
- *Fundraising and M&A accelerated.*
- *More than a dozen Chinese companies are offering products.*
- *Hyperspectral cameras are being integrated into operational EO/IR defense systems.*
- *Promising new applications emerged in Environment, New Space, Mining & Geology, Semiconductor inspection, Healthcare, and more.*
- *AI is enabling applications to be developed more quickly.*

REPORT OUTLINE

- Title: Hyperspectral & Multispectral Imaging 2025: Technologies, Applications and Market Trends
- 200+ slides (PDF)
- € 5 990 - Corporate license

KEY FEATURES OF THE REPORT

- Overview of the drivers and trends that influence the Spectral imaging market
- Market revenue and unit breakdown between multispectral and hyperspectral cameras
- Spectral imaging cameras market and forecast by applications 2020-2030
- Presentation of the main spectral imaging technologies and their applications
- Detailed analysis of most promising applications

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REPORT'S OBJECTIVES

The goal of this report is to provide a comprehensive analysis of the global **hyperspectral and multispectral imaging market**.

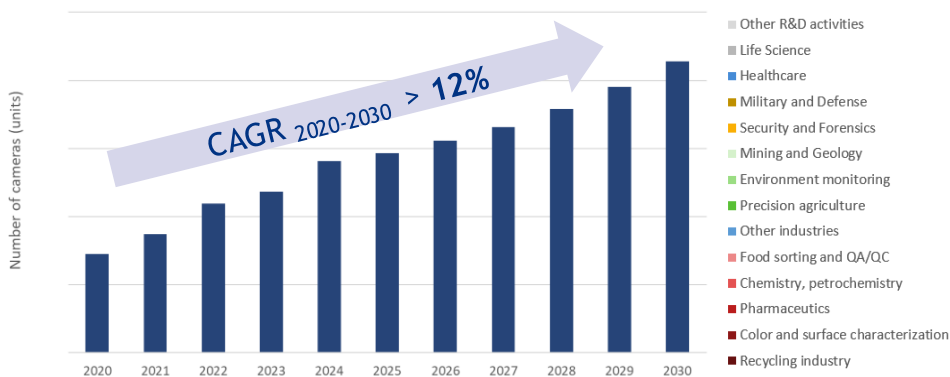
It breaks down the market by key application segments (including Recycling, Color and Surface characterization, Pharmaceuticals, Environment, Agriculture, Mining and geology, Security, Defense, Live Science, Consumer) and examines the main drivers shaping its evolution.

These include industrial and technological trends, challenges arising from increased competition, and relevant macroeconomic factors.

The report also presents detailed market figures in terms of **revenues and units sold from 2020 to 2024, along with forecasts for 2025-2030**.

By reviewing market dynamics and emerging opportunities, this report aims to clarify how spectral imaging technologies are progressing from their origins in satellite and aerial Earth observation toward broader industrial adoption.

Hyperspectral and multispectral cameras market by application 2020-2030



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Note: The space (satellite-based imaging) and the consumer markets are not included in this market forecast. These markets are described separately.



INFORMATION SOURCES

- In-house knowledge of multispectral and hyperspectral imaging technologies, their applications and their markets.
- Market data based on financial & business analysis of 70+ camera manufacturers.
- Interviews with key companies and industry experts that are involved in the multispectral and hyperspectral imaging business.
- Literature research.
- Participation in international conferences and exhibitions.

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PROMISING NEW APPLICATIONS ARE EMERGING IN VARIOUS SECTORS

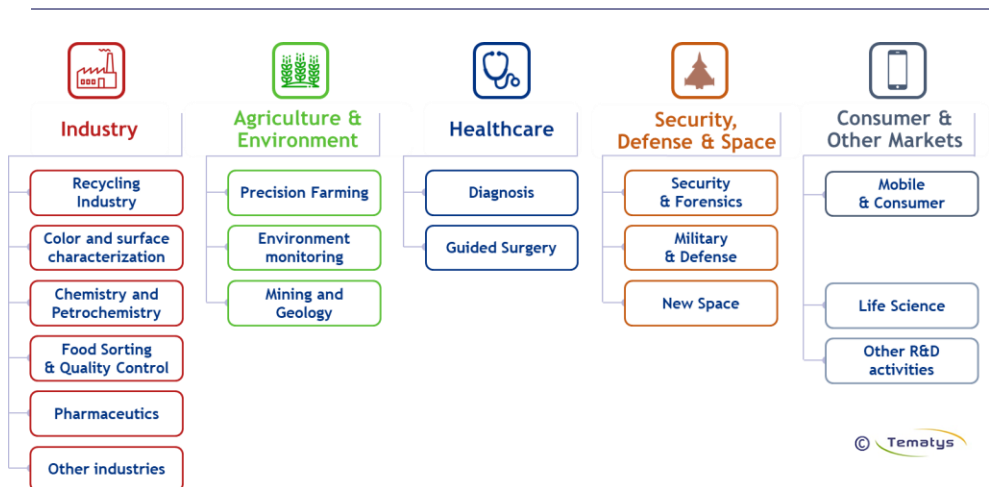
A further objective is to highlight the major trends, innovations, and forces that are accelerating the expansion of hyperspectral and multispectral imaging into new sectors.

These include falling hardware costs, sensor miniaturization, platform diversification (e.g., drones, UAVs, smallsats), and the development of robust and user-friendly data-analysis methods.

AI (particularly machine learning and deep learning) now plays a central role in enabling faster interpretation of large spectral datasets, real-time decision-making, and broader use by non-experts.

As a result, promising applications are emerging across environmental and resource monitoring, geology and mining, semiconductor inspection, healthcare, defense, and a growing set of consumer-facing uses such as mobile-device-based spectral sensing, food-quality checking, and cosmetics. Meanwhile, a full ecosystem is taking shape in the new space sector.

Together, these advancements signal a turning point that is likely to drive wider deployment of hyperspectral and multispectral imaging technologies in both in-field and in-line applications.



Segmentation of Spectral Imaging Applications

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