

Mid-IR Photodetectors and Systems: Applications & Markets

Leaders in MIR Single Photodetectors manufacturing recently unveiled investment projects. In this Market Brief, we present new emerging applications driving these decisions as well as market development forecast and circumstances.

REPORT OUTLINE

- Title: Mid-IR Photodetectors and Systems : Applications & Markets
- PDF
- 50 slides
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KEY FEATURES OF THE REPORT

- Value chain and applications of Mid-IR Photodetectors & systems
- Mid-IR Photodetectors Market - Units 2017-2025
- Mid-IR Photodetectors Market - Revenues 2017 - 2025
- Mid-IR systems Market - Revenues 2017 - 2025
- Opportunities for Mid-IR photodetectors

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- Cascade Laser Components & Systems: Technology and Market trends
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A MARKET DRIVEN BY NEW KEY TECHNOLOGIES AND APPLICATIONS

Mid-IR has been used since a long time to carry out qualitative and quantitative analyzes of organic and inorganic samples. In fact, the Mid-IR spectral region, from 3 to 20 μm, is called the molecular-fingerprint region. The mid-IR region has several windows of transparency in Earth’s atmosphere (3-5 and 8-14 μm) that are important for remote sensing applications.

Besides analytical instruments and defense systems, MIR spectral region begin to be used in new applications (e.g. industrial and biomedical sectors) but the adoption remained low for two main reasons: the high cost of components and the need to cool or stabilize in temperature.

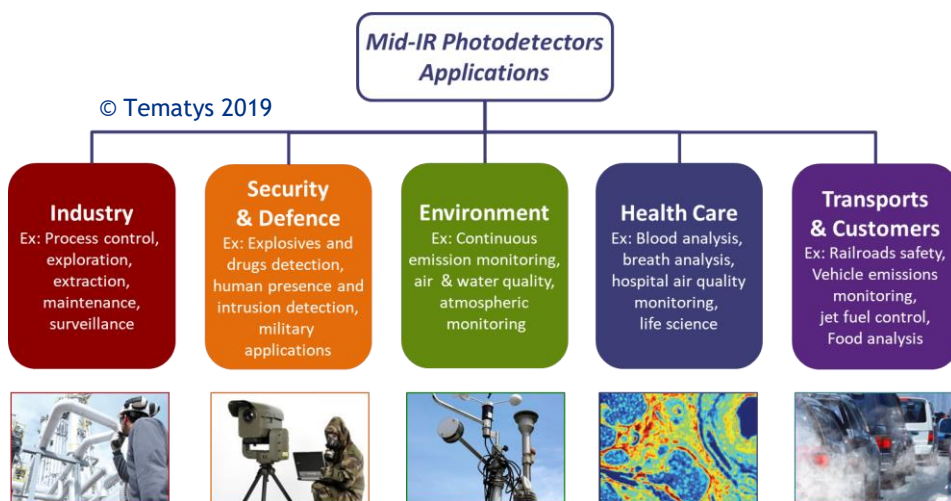
But the Mid-IR Photodetectors market is at a turning point. The past years has seen significant progress in the development of novel mid-IR photodetectors.

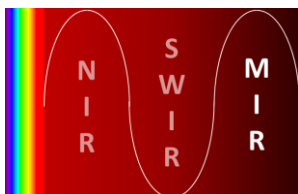
The use of alternatives to HgCdTe, such as III-V materials have been extensively studied to build room temperature detectors at lower cost and higher sensitivity. Moreover, some market leaders recently unveiled investments projects.

These achievements will lead to adoption of MIR photodetectors for a wide range of new applications.

The report provides a detailed market analysis & forecasts from 2017 to 2025 as well as an analysis by market segment.

Main existing and potential applications of Mid-IR photodetectors based systems





AUTHOR



Dr. Thierry Robin has over 20 years' experience in both technical innovation and marketing in the photonics industry, running more than fifty projects in optics and photonics with prominent players in various sectors.

Cofounder of TEMATYS, he is an expert in optical devices, components and systems.

Thierry graduated from *École Polytechnique*, Paris (France). He holds a master's degree from *École Normale Supérieure*, Paris (France) and a PhD from the Physics Center of *Ecole Polytechnique*.

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Mid-IR Photodetectors and Systems: Applications & Markets

OBJECTIVES OF THE REPORT

- Understand the current Mid-IR single Photodetectors market
- Understand the Value chain and Identify Mid-IR Photodetectors & systems applications
- Provide market analysis and forecast until 2025 for Mid-IR Photodetectors
- Provide market forecast for Mid-IR systems in each application field
- Determine opportunities for Mid-IR Photodetectors

TABLE OF CONTENT

1. Introduction
 - Study Goals and Objectives
 - Information Sources and Methodology
 - Glossary
2. Brief Review of Mid-IR Technologies
 - Mid-IR sources Technologies
 - Mid-IR detectors Technologies
3. Mid-IR Photodetectors Market
 - Mid-IR Players along the Value Chain
 - Mid-IR Photodetectors Market in terms of units
 - Mid-IR Photodetectors Market in terms of volumes (M€)
4. Mid-IR Systems Market and Applications
 - Classification of Mid-IR Photodetectors based Systems
 - Fourier-Transform IR Analytical Systems
 - Mid-IR Laser Sensing Systems - Focus on Gas detection
 - Thermal sensing systems
 - Other Active Sensing Systems
 - Mid-IR Systems Market in terms of volumes (M€) and breakdown per application field
5. Conclusion
 - General conclusions
 - Opportunities for Mid-IR photodetectors
6. Annex
 - Plans for investments in infrared detectors fabrication

Mid-IR Photodetectors and Systems: Market Study

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