

High Speed Cameras - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 120 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

The High Speed Cameras Market is expected to register a CAGR of 5.92% during the forecast period.

Key Highlights

- High-speed cameras are in high demand throughout sectors due to their superior characteristics over other cameras. The growing demand for highly detailed analysis, including combustion testing and flow visualization in aerospace, pyrotechnics, explosives, and ballistics, will likely drive up demand for high-speed cameras in the industrial sector.
- Furthermore, high-speed cameras with sophisticated capabilities such as auto-iris operation, a wide sensing range, and real-time capabilities are available. These technologies are increasingly being employed in intelligent transportation systems (ITS) to anticipate future collisions, decrease congestion, eliminate traffic difficulties, and improve passenger safety and convenience.
- In addition, increasing government expenditure in creating smart cities in several nations is expected to drive demand for smart and high-speed cameras for security and surveillance, contributing to market growth. For instance, in October 2022, Honeywell and Accelerator introduced the Honeywell Smart City Accelerator Project in the US market. This project will help communities actively plan for the future and build the capacity to support revolutionary initiatives. Honeywell is working with five districts in the United States to give in-kind assistance to speed the development of smart city strategy planning.
- Due to the lockdowns and trade restrictions caused by the COVID-19 outbreak, the market for high-speed cameras was hampered for a short period. However, the market is expected to flourish over the coming years due to increasing innovations such as infrared cameras, which use temperature detection to identify COVID-infected people.
- Moreover, the complete configuration necessary for the camera to perform properly includes equipment such as a camera microcontroller, lens, LED illumination, and software for process monitoring and management. Long product replacement cycles coupled with the high cost of the high-speed camera are a few factors restraining the high-speed camera market.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Intelligent Transportation Systems Initiative to Drive the Market

- Intelligent Transport System (ITS) aims to achieve traffic efficiency by minimizing traffic problems that enhance safety and comfort. It enriches users with prior information about traffic, local convenience, real-time running information, seat availability, etc., which reduces the travel time of commuters as well as enhances safety and comfort.
- Cameras, particularly high-performance machine vision cameras, are becoming more important in intelligent traffic systems. With features like real-time capability, broad sensor range, auto iris functionality, and day/night functionality, high-speed cameras help prevent potential accidents, keep traffic moving, and decrease the transportation sector's negative environmental impacts on society.
- The use of ITS to decrease traffic fatalities and improve traffic safety is a significant driver fueling the expansion of the intelligent transportation systems industry. The ongoing changes in the transport industry have highlighted the necessity for an optimized transportation infrastructure that might enhance road networks. Thus, the increasing need for road safety smart equipment will increase the demand for high-speed cameras over the coming years.
- Further, intelligent transportation is an essential component of any smart city. The Joint Transportation Management Center (JTMC), based in New York City, is the largest transportation center in North America. JTMC's Converged Security and Information Management (CSIM) installation covers hundreds of miles of the state arterial system and incorporates hundreds of cameras, vehicle detectors, variable message signs, and numerous highway advisory radios. Its mission is focused on around-the-clock coordination and communication to manage daily transportation incidents and reduce congestion on some of the busiest expressways in the world. This drives the market for high-speed cameras.
- Increasing investment by several governments to improve traffic management systems is expected to increase the demand for high-speed cameras over the coming years. For instance, in April 2022, to improve India's traffic situation, the Ministry of Electronics and Information Technology (MeitY) introduced numerous apps under the Intelligent Transportation System (ITS) as a part of the InTranSE- II initiative. According to the administration, onboard driver assistance and warning system (ODAWS) intends to enhance highway infrastructure as the number of cars and speeds on highways have grown, compounding safety problems.

Asia-Pacific to Register the Highest Growth

- Asia-Pacific region is expected to grow at a considerable pace throughout the forecast period. Rapidly increasing industrialization and the evolution of manufacturing hubs, particularly China and India, are expected to be significant drivers behind this growth. Investments from all over the world into the region's manufacturing sector are growing, creating an increased need for more efficient production line monitoring.
- Additionally, initiatives like the 'Make in India' program place India on the world map as a manufacturing hub and give global recognition to the Indian economy. According to India Brand Equity Foundation (IBEF), India is the world's third most demanding manufacturing location, with the potential to export commodities worth over USD 1 trillion by 2030. Such initiatives will drive the market for high-speed cameras in manufacturing sectors.
- High-speed cameras are increasingly being used in a wide range of industries, such as healthcare, automotive, food and beverage, and consumer electronics, and for tasks such as repairing, machinery diagnostics, analysis, and preventative maintenance. Industrial and automotive industries in India, China, and Japan are expected to use robots and computer vision capabilities more often, contributing to regional growth.
- High-speed cameras are also necessary for the proper use of the electronics and semiconductors sector, the food processing industry, and the development of top-tier research institutes and academia. Increasing investment in these industries will drive

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

the demand for high-speed cameras over the forecast period. For instance, in September 2022, India expects a cumulative commitment of at least USD 25 billion due to its bonus program designed to encourage domestic semiconductor production.

High Speed Cameras Industry Overview

The high-speed camera market is highly competitive due to the presence of several international players who dominates the global market. Some of the key players are Photron LTD., Olympus Corporation, NAC Image Technology, Mikrotron GMBH, and PCO AG, among others. These key players have adopted strategies such as product portfolio expansion, mergers and acquisitions, agreements, geographical expansion, and collaborations to enhance their high-speed camera market share.

In September 2022, the Technology Department of the Science and Technology Facilities Council (STFC) collaborated with Cordin Scientific Imaging to produce a next-generation hyperspeed camera sensor. The new device, created in collaboration with Cordin Scientific Imaging, would capture images up to four times faster than those currently available on the market, giving researchers fresh perspectives on physical and life studies phenomena that were previously too rapid to observe.

In August 2022, the Mayor of New York City declared the expansion of the city's speed camera program, which will help protect citizens. According to the officials, the capital's 2,000 speed cameras in 750 educational zones will be functioning 24 hours a day, seven days a week.

In February 2022, Aper-Oculus, a novel high-camera development kit, was made available on the Crowd Supply website. The free software design is a carrier system for Xilinx's Kria SOM, which was developed to give creators and experts a small and modular alternative for high-speed electronic format.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

Table of Contents:

1 INTRODUCTION

- 1.1 Study Deliverables
- 1.2 Study Assumptions
- 1.3 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET DYNAMICS

- 4.1 Market Overview
- 4.2 Introduction to Market Drivers and Restraints
- 4.3 Market Drivers
 - 4.3.1 Increasing Adoption of High Speed Camera in Manufacturing Sector
- 4.4 Market Restraints
 - 4.4.1 High Cost of High Speed Cameras
- 4.5 Industry Value Chain Analysis

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

4.6 Industry Attractiveness - Porter's Five Forces Analysis

4.6.1 Threat of New Entrants

4.6.2 Bargaining Power of Buyers

4.6.3 Bargaining Power of Suppliers

4.6.4 Threat of Substitute Products

4.6.5 Intensity of Competitive Rivalry

5 MARKET SEGMENTATION

5.1 By Component

5.1.1 Image Sensors

5.1.2 Lens

5.1.3 Battery

5.1.4 Memory Systems

5.2 By Frame Rate

5.2.1 1,000-5,000

5.2.2 5,001-20,000

5.2.3 20,001-100,000

5.2.4 Greater Than 100,000

5.3 By Application

5.3.1 Entertainment & Media

5.3.2 Sports

5.3.3 Consumer Electronics

5.3.4 Research & Design

5.3.5 Industrial Manufacturing

5.3.6 Military & Defense

5.3.7 Aerospace

5.3.8 Other Applications

5.4 Geography

5.4.1 North America

5.4.1.1 United States

5.4.1.2 Canada

5.4.2 Europe

5.4.2.1 United Kingdom

5.4.2.2 Germany

5.4.2.3 France

5.4.2.4 Rest of Europe

5.4.3 Asia-Pacific

5.4.3.1 China

5.4.3.2 Japan

5.4.3.3 India

5.4.3.4 Rest of Asia-Pacific

5.4.4 Rest of the World

5.4.4.1 Latin America

5.4.4.2 Middle East & Africa

6 COMPETITIVE LANDSCAPE

6.1 Company Profiles

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 6.1.1 Photron LTD.
- 6.1.2 Olympus Corporation
- 6.1.3 NAC Image Technology
- 6.1.4 Mikrotron GMBH
- 6.1.5 PCO AG
- 6.1.6 Weisscam
- 6.1.7 Vision Research Inc.
- 6.1.8 Optronis GMBH
- 6.1.9 Motion Capture Technologies
- 6.1.10 Del Imaging Systems, LLC
- 6.1.11 Ix-Cameras Inc.

7 MARKET OPPORTUNITIES AND FUTURE TRENDS

8 INVESTMENT ANALYSIS

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

High Speed Cameras - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 120 pages | Mordor Intelligence

To place an Order with Scotts International:

- ☐ - Print this form
- ☐ - Complete the relevant blank fields and sign
- ☐ - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2026-03-01
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com



Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com
www.scotts-international.com