

# **High-speed Camera Market with COVID-19 Impact Analysis, by Usage, Frame Rate (20,000–100,000 fps, >100,000 fps), Resolution (0–2 MP, 2–5 MP), Throughput, Component, Spectrum (Visible RGB, Infrared, and X-ray), Application, Region - Global Forecast to 2025**

<https://marketpublishers.com/r/H57BC8A7750EN.html>

Date: December 2020

Pages: 263

Price: US\$ 4,950.00 (Single User License)

ID: H57BC8A7750EN

## **Abstracts**

The high-speed camera market is expected to grow from USD 429 million in 2020 to USD 723 million by 2025; it is expected to grow at a CAGR of 11.0% during 2020–2025. High adoption of high-speed cameras in manufacturing and automotive industries, and continuous technological advancements in electronics, and automation are the key factors driving the growth of the high-speed camera market. High-speed imaging solutions, coupled with machine vision, are crucial in achieving the highest possible limits of two of the most focused upon manufacturing objectives—lean manufacturing and zero-defect manufacturing.

“The 0–2 MP resolution cameras segment is likely to be the largest contributor in the high-speed camera market during the forecast period”

The 0–2 MP resolution segment is anticipated to hold the largest market share during the forecast period. Adoption of high-speed cameras with 0–2 MP resolution in missile launch, projectile tracking, and components tracking in aerospace, defense, and military; products & materials testing; and fluid dynamics research has led to their increased demand. High-speed cameras with 0–2 MP resolution are the most affordable, owing to which their adoption has been significant.

“New high-speed cameras to account for the largest market size by 2020”

In industrial infrastructure, it is not preferred to adopt used high-speed cameras, nor it is favorable to take them on a rental basis because in industrial manufacturing plants applications, these cameras are persistently used to monitor and inspect production lines and ensure safety and production control.

Additionally, the need to procure high-speed cameras with the latest technologies and features to better support the testing processes in industries such as automotive and transportation and consumer electronics give extra impetus to the market for new high-speed cameras.

“The high-speed camera market in APAC to grow at the highest CAGR during the forecast period”

The market in APAC is expected to register the highest CAGR amongst all regions during the forecast period. Rapid industrialization and evolution of APAC countries as manufacturing hubs, particularly China and India, are expected to be the major drivers for the APAC market. Investments from all over the world into the region's industrial manufacturing plants are growing, creating an increased need for more efficient production line monitoring; this is expected to drive the APAC high-speed camera market.

In-depth interviews have been conducted with C-level executives, managers, and other executives from various key organizations operating in the high-speed camera market.

Break-up of profiles of primary participants for the report is given below:

By Company Type: Tier 1 – 40%, Tier 2 – 30%, and Tier 3 – 30%

By Designation: C-Level Executives – 40%, Directors – 40%, and Managers – 20%

By Region: North America - 40%, Europe – 20%, APAC – 30%, and RoW – 10%

Major players in the high-speed camera market are as follows:

Photron (Japan)

nac Image Technology (Japan)

Vision Research (US)

PCO AG (Germany)

Mikrotron GmbH (Germany)

Optronis (Germany)

Integrated Design Tools (US)

Monitoring Technology (US)

AOS Technologies (Switzerland)

Fastec Imaging (US).

### **Research Coverage:**

The report defines, describes, and forecasts the high-speed camera market based on usage, resolution, frame rate, throughput, spectrum, component, application, and geography. It also analyzes competitive developments such as product launches and developments, agreements, partnerships, collaborations, merger and acquisitions, and expansions carried out by key players to grow in the market.

### **Key Benefits of Buying the Report**

1. This report segments the high-speed camera market comprehensively and provides the closest approximations of the overall market size and that of the subsegments across different applications and regions.
2. The report would help stakeholders understand the pulse of the market and provide them with information on key drivers, restraints, challenges, and opportunities.
3. This report would help stakeholders understand their competitors better and gain more insights to enhance their position in the market. The competitive landscape section includes competitor ecosystem, product launches and developments, partnerships, and mergers and acquisitions carried out in the market in the recent past.

## Contents

### 1 INTRODUCTION

- 1.1 STUDY OBJECTIVES
- 1.2 MARKET DEFINITION AND SCOPE
  - 1.2.1 INCLUSIONS AND EXCLUSIONS
- 1.3 STUDY SCOPE
  - 1.3.1 YEARS CONSIDERED
- 1.4 CURRENCY AND PRICING
- 1.5 STAKEHOLDERS
- 1.6 SUMMARY OF CHANGES

### 2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
  - 2.1.1 SECONDARY DATA
    - 2.1.1.1 Major secondary sources
    - 2.1.1.2 Key data from secondary sources
  - 2.1.2 PRIMARY DATA
    - 2.1.2.1 Key data from primary sources
    - 2.1.2.2 Breakdown of primary interviews
  - 2.1.3 SECONDARY AND PRIMARY RESEARCH
    - 2.1.3.1 Key industry insights
- 2.2 MARKET SIZE ESTIMATION
  - 2.2.1 BOTTOM-UP APPROACH
  - 2.2.2 TOP-DOWN APPROACH
  - 2.2.3 MARKET PROJECTIONS
- 2.3 MARKET BREAKDOWN AND DATA TRIANGULATION
- 2.4 RESEARCH ASSUMPTIONS AND LIMITATIONS
  - 2.4.1 ASSUMPTIONS
  - 2.4.2 LIMITATIONS

### 3 EXECUTIVE SUMMARY

#### TABLE 1 RECOVERY SCENARIOS OF GLOBAL ECONOMY

- 3.1 REALISTIC SCENARIO
- 3.2 OPTIMISTIC SCENARIO
- 3.3 PESSIMISTIC SCENARIO

## 4 PREMIUM INSIGHTS

### 4.1 HIGH-SPEED CAMERA MARKET OPPORTUNITIES

### 4.2 HIGH-SPEED CAMERA MARKET, BY FRAME RATE

### 4.3 HIGH-SPEED CAMERA MARKET IN NORTH AMERICA, BY SPECTRUM AND COUNTRY

### 4.4 HIGH-SPEED CAMERA MARKET, BY COUNTRY

### 4.5 HIGH-SPEED CAMERA MARKET IN APAC, BY COUNTRY

## 5 MARKET OVERVIEW

### 5.1 INTRODUCTION

### 5.2 MARKET DYNAMICS

#### 5.2.1 DRIVERS

5.2.1.1 Increasing use of high-speed infrared cameras, especially for high-speed scanning of people to detect COVID-19

5.2.1.2 Growing demand for high-speed cameras from entertainment & media and sports industries

#### TABLE 2 VIEWS OF DIFFERENT SHOWS BROADCASTED BY DISCOVERY CHANNEL

5.2.1.3 Surging adoption of high-speed cameras in manufacturing and automotive industries

#### TABLE 3 REGULATIONS RELATED TO AUTOMOTIVE INDUSTRY

#### 5.2.2 RESTRAINTS

5.2.2.1 High setup cost for industrial usage

#### 5.2.3 OPPORTUNITIES

5.2.3.1 Emerging applications of high-speed cameras

#### 5.2.4 CHALLENGES

5.2.4.1 Increased need to integrate artificial intelligence (AI) with high-speed cameras

5.2.4.2 Slow data offloading speed

5.2.4.3 Escalated requirement for high storage capacity to store large volume of data generated by high-speed cameras

#### TABLE 4 FRAME RATES

### 5.3 TARIFFS & REGULATIONS

#### 5.3.1 TARIFF AND HISTORIC COMMODITIZATION

#### TABLE 5 MFN TARIFFS FOR VARIOUS COMPONENTS OF HIGH-SPEED CAMERAS EXPORTED BY US

#### TABLE 6 MFN TARIFFS FOR VARIOUS COMPONENTS OF HIGH-SPEED CAMERAS

## EXPORTED BY CHINA

### 5.3.2 SAFETY REGULATIONS FOR USE OF X-RAY CAMERAS OR RADIOGRAPHY CAMERAS

## 5.4 USE CASES

### 5.4.1 BIOCHEMISTRY

5.4.1.1 High-speed photography in high-throughput biochemistry

### 5.4.2 EXPLOSIVES

5.4.2.1 High-speed imaging used for analyzing fluid-desensitized detonators

### 5.4.3 AUTOMOTIVE

5.4.3.1 High-speed cameras used to analyze crash tests

5.4.3.2 High resolution high-speed cameras capture strain on and displacement of tire

### 5.4.4 AEROSPACE & DEFENSE INDUSTRY

5.4.4.1 Virtual engineering labs use high-speed cameras offered by Photron for aviation research

5.4.4.2 Cameras were recently used during drop test of airplane fuselage

### 5.4.5 HEALTHCARE

5.4.5.1 High-speed cameras required for high-throughput nanoscale nuclear architecture mapping

### 5.4.6 METALS & MINING

5.4.6.1 Capturing nanoscale behavior of fast-moving ferrofluids

## 5.5 AVERAGE SELLING PRICE BASED ON APPLICATIONS

### TABLE 7 FEW ENTRY-LEVEL MODELS OF HIGH-SPEED CAMERAS AND THEIR COSTS

### TABLE 8 PRICE RANGE OF HIGH-SPEED CAMERAS, BY APPLICATION

## 6 INDUSTRY TRENDS

### 6.1 INTRODUCTION

### 6.2 EVOLUTION

### 6.3 TECHNOLOGY ANALYSIS

6.3.1 INTEGRATION OF HIGH-SPEED CAMERAS AND CLOUD COMPUTING

6.3.2 WIRELESS CONTROL IN HIGH-SPEED CAMERAS (COMPLEMENTARY TECHNOLOGY)

6.3.3 AI-ENABLED HIGH-SPEED CAMERAS (ADJACENT TECHNOLOGY)

### 6.4 SUPPLY CHAIN ANALYSIS

### TABLE 9 KEY PLAYERS AND THEIR ROLE IN ECOSYSTEM

### 6.5 ECOSYSTEM/MARKET MAP

### 6.6 PATENT ANALYSIS

**TABLE 10 IMPORTANT INNOVATIONS AND PATENTS REGISTRATION****6.7 TRADE ANALYSIS****TABLE 11 NUMBER OF IMAGE SENSORS SHIPPED, BY TECHNOLOGY, 2017–2025  
(MILLION UNITS)****TABLE 12 NUMBER OF IMAGE SENSORS SHIPPED, BY REGION, 2017–2025  
(MILLION UNITS)****6.7.1 IMPORT SCENARIO FOR VARIOUS COMPONENTS RELATED TO HIGH-  
SPEED CAMERAS****6.7.2 EXPORT SCENARIO FOR VARIOUS COMPONENTS RELATED TO HIGH-  
SPEED CAMERAS****7 HIGH-SPEED CAMERA MARKET, BY USAGE****7.1 INTRODUCTION****TABLE 13 HIGH-SPEED CAMERA MARKET, BY USAGE, 2017–2019 (USD MILLION)****TABLE 14 HIGH-SPEED CAMERA MARKET, BY USAGE, 2020–2025 (USD MILLION)****TABLE 15 HIGH-SPEED CAMERA MARKET, BY USAGE, 2017–2019 (UNITS)****TABLE 16 HIGH-SPEED CAMERA MARKET, BY USAGE, 2020–2025 (UNITS)****7.2 RENTAL HIGH-SPEED CAMERAS****7.2.1 EASY AVAILABILITY OF AFFORDABLE HIGH-SPEED INDUSTRIAL  
CAMERAS ON RENTAL BASIS FOR SHORT-TERM PROJECTS SPURS MARKET  
GROWTH****TABLE 17 RENTAL CATALOGUE OF PHANTOM CAMERAS****TABLE 18 HIGH-SPEED CAMERA MARKET FOR RENTAL CAMERAS, BY  
APPLICATION, 2017–2019 (USD THOUSAND)****TABLE 19 HIGH-SPEED CAMERA MARKET FOR RENTAL CAMERAS, BY  
APPLICATION, 2020–2025 (USD THOUSAND)****7.3 USED HIGH-SPEED CAMERAS****7.3.1 BUDGETARY CONSTRAINTS OF VARIOUS SMALL-SCALE COMPANIES  
BOOST DEMAND FOR USED HIGH-SPEED CAMERAS****TABLE 20 COST OF USED HIGH-SPEED CAMERAS, BY MARKET PLAYERS****TABLE 21 HIGH-SPEED CAMERA MARKET FOR USED CAMERAS, BY  
APPLICATION, 2017–2019 (USD THOUSAND)****TABLE 22 HIGH-SPEED CAMERA MARKET FOR USED CAMERAS, BY  
APPLICATION, 2020–2025 (USD THOUSAND)****7.4 NEW HIGH-SPEED CAMERAS****7.4.1 INCREASED NEED FOR IMAGERY PRODUCTS BASED ON LATEST  
TECHNOLOGIES TO PROPEL GROWTH OF MARKET FOR NEW HIGH-SPEED  
CAMERAS**



TABLE 23 COST OF NEW HIGH-SPEED CAMERA, BY MARKET PLAYERS

TABLE 24 HIGH-SPEED CAMERA MARKET FOR NEW CAMERAS, BY APPLICATION, 2017–2019 (USD MILLION)

TABLE 25 HIGH-SPEED CAMERA MARKET FOR NEW CAMERAS, BY APPLICATION, 2020–2025 (USD MILLION)

7.5 COVID-19 IMPACT ON HIGH-SPEED CAMERA MARKET, BY USAGE

7.5.1 MOST AFFECTED USAGE TYPE

7.5.2 LEAST AFFECTED USAGE TYPE

## **8 HIGH-SPEED CAMERA MARKET, BY FRAME RATE**

### **8.1 INTRODUCTION**

TABLE 26 HIGH-SPEED CAMERA MARKET, BY FRAME RATE (FPS), 2017–2019 (USD MILLION)

TABLE 27 HIGH-SPEED CAMERA MARKET, BY FRAME RATE (FPS), 2020–2025 (USD MILLION)

TABLE 28 HIGH-SPEED CAMERA MARKET, BY FRAME RATE (FPS), 2017–2019 (UNITS)

TABLE 29 HIGH-SPEED CAMERA MARKET, BY FRAME RATE (FPS), 2020–2025 (UNITS)

### **8.2 FRAME RATE: 1,000–5,000 FPS**

8.2.1 1,000–5,000 FPS HIGH-SPEED CAMERAS INCREASINGLY USED IN AUTOMOTIVE, SPORTS, AND ENTERTAINMENT & MEDIA APPLICATIONS

TABLE 30 MODELS OF 1,000–5,000 FPS HIGH-SPEED CAMERAS, BY MARKET PLAYER

TABLE 31 1,000–5,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2017–2019 (USD MILLION)

TABLE 32 1,000–5,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2020–2025 (USD MILLION)

TABLE 33 1,000–5,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2017–2019 (UNITS)

TABLE 34 1,000–5,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2020–2025 (UNITS)

TABLE 35 1,000–5,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2017–2019 (USD THOUSAND)

TABLE 36 1,000–5,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2020–2025 (USD THOUSAND)

TABLE 37 1,000–5,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2017–2019 (UNITS)



TABLE 38 1,000–5,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2020–2025 (UNITS)

8.3 FRAME RATE: >5,000–20,000 FPS

8.3.1 >5,000–20,000 FPS CAMERAS HAVE HIGH DEMAND FROM ENTERTAINMENT & MEDIA INDUSTRY

TABLE 39 MODELS OF >5,000–20,000 FPS HIGH-SPEED CAMERAS, BY MARKET PLAYER

TABLE 40 >5,000–20,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2017–2019 (USD MILLION)

TABLE 41 >5,000–20,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2020–2025 (USD MILLION)

TABLE 42 >5,000–20,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2017–2019 (UNITS)

TABLE 43 >5,000–20,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2020–2025 (UNITS)

TABLE 44 >5,000–20,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2017–2019 (USD THOUSAND)

TABLE 45 >5,000–20,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2020–2025 (USD THOUSAND)

TABLE 46 >5,000–20,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2017–2019 (UNITS)

TABLE 47 >5,000–20,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2020–2025 (UNITS)

8.4 FRAME RATE: >20,000–100,000 FPS

8.4.1 USE OF >20,000–100,000 FPS CAMERAS IN PRODUCTION LINE MONITORING AND MAINTENANCE AND MATERIAL TESTING APPLICATIONS TO PROPEL MARKET GROWTH

TABLE 48 MODELS OF >20,000–100,000 FPS HIGH-SPEED CAMERA, BY MARKET PLAYER

TABLE 49 >20,000–100,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2017–2019 (USD MILLION)

TABLE 50 >20,000–100,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2020–2025 (USD MILLION)

TABLE 51 >20,000–100,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2017–2019 (UNITS)

TABLE 52 >20,000–100,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2020–2025 (UNITS)

TABLE 53 >20,000–100,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2017–2019 (USD MILLION)

TABLE 54 >20,000–100,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2020–2025 (USD MILLION)

TABLE 55 >20,000–100,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2017–2019 (UNITS)

TABLE 56 >20,000–100,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2020–2025 (UNITS)

8.5 FRAME RATE: >100,000 FPS

8.5.1 NEED FOR HIGHLY DETAILED ANALYSIS IN EXPLOSIVES AND BALLISTICS APPLICATIONS TO SURGE DEMAND FOR > 100,000 FPS HIGH-SPEED CAMERAS

TABLE 57 MODELS OF > 100,000 FPS HIGH-SPEED CAMERAS WITH FRAME RATE

TABLE 58 >100,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2017–2019 (USD MILLION)

TABLE 59 >100,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2020–2025 (USD MILLION)

TABLE 60 >100,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2017–2019 (UNITS)

TABLE 61 >100,000 FPS HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2020–2025 (UNITS)

TABLE 62 >100,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2017–2019 (USD THOUSAND)

TABLE 63 >100,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2020–2025 (USD THOUSAND)

TABLE 64 >100,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2017–2019 (UNITS)

TABLE 65 >100,000 FPS HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2020–2025 (UNITS)

## **9 HIGH-SPEED CAMERA MARKET, BY RESOLUTION**

### **9.1 INTRODUCTION**

TABLE 66 HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2017–2019 (USD MILLION)

TABLE 67 HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2020–2025 (USD MILLION)

TABLE 68 HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2017–2019 (UNITS)

TABLE 69 HIGH-SPEED CAMERA MARKET, BY RESOLUTION, 2020–2025 (UNITS)

### **9.2 0–2 MP**

9.2.1 HIGH-SPEED CAMERAS WITH 0–2 MP RESOLUTIONS ARE COST-

## EFFICIENT IMAGING SOLUTIONS

### TABLE 70 HIGH-SPEED CAMERAS WITH 0–2 MP RESOLUTIONS, BY MARKET PLAYER

#### TABLE 71 0–2 MP HIGH-SPEED CAMERA MARKET, BY FRAME RATE, 2017–2019 (USD MILLION)

#### TABLE 72 0–2 MP HIGH-SPEED CAMERA MARKET, BY FRAME RATE, 2020–2025 (USD MILLION)

#### TABLE 73 0–2 MP HIGH-SPEED CAMERA MARKET, BY FRAME RATE, 2017–2019 (UNITS)

#### TABLE 74 0–2 MP HIGH-SPEED CAMERA MARKET, BY FRAME RATE, 2020–2025 (UNITS)

### 9.3 >2–5 MP

#### 9.3.1 >2–5 MP HIGH-SPEED CAMERAS ARE MOST OPTIMUM SOLUTION FOR HIGH-SPEED IMAGING APPLICATIONS

### TABLE 75 HIGH-SPEED CAMERAS WITH >2–5 MP RESOLUTIONS, BY MARKET PLAYER

#### TABLE 76 >2–5 MP HIGH-SPEED CAMERA MARKET, BY FRAME RATE, 2017–2019 (USD MILLION)

#### TABLE 77 >2–5 MP HIGH-SPEED CAMERA MARKET, BY FRAME RATE, 2020–2025 (USD MILLION)

#### TABLE 78 >2–5 MP HIGH-SPEED CAMERA MARKET, BY FRAME RATE, 2017–2019 (UNITS)

#### TABLE 79 >2–5 MP HIGH-SPEED CAMERA MARKET, BY FRAME RATE, 2020–2025 (UNITS)

### 9.4 >5 MP

#### 9.4.1 NEED FOR DETAILED AND RELIABLE ANALYSIS IN CRITICAL RESEARCH APPLICATIONS BOOSTING DEMAND FOR CAMERAS WITH ABOVE 5 MP RESOLUTIONS

### TABLE 80 HIGH-SPEED CAMERAS WITH >5 MP RESOLUTIONS, BY MARKET PLAYER

#### TABLE 81 >5 MP HIGH-SPEED CAMERA MARKET, BY FRAME RATE, 2017–2019 (USD THOUSAND)

#### TABLE 82 >5 MP HIGH-SPEED CAMERA MARKET, BY FRAME RATE, 2020–2025 (USD THOUSAND)

#### TABLE 83 >5 MP HIGH-SPEED CAMERA MARKET, BY FRAME RATE, 2017–2019 (UNITS)

#### TABLE 84 >5 MP HIGH-SPEED CAMERA MARKET, BY FRAME RATE, 2020–2025 (UNITS)

## **10 HIGH-SPEED CAMERA MARKET, BY THROUGHPUT**

### **10.1 INTRODUCTION**

TABLE 85 HIGH-SPEED CAMERA MARKET, BY THROUGHPUT, 2017–2019 (USD MILLION)

TABLE 86 HIGH-SPEED CAMERA MARKET, BY THROUGHPUT, 2020–2025 (USD MILLION)

TABLE 87 HIGH-SPEED CAMERA MARKET, BY THROUGHPUT, 2017–2019 (UNITS)

TABLE 88 HIGH-SPEED CAMERA MARKET, BY THROUGHPUT, 2020–2025 (UNITS)

### **10.2 0–2,000 MPPS**

10.2.1 0–2,000 MPPS THROUGHPUT CAMERAS ARE MOST COST-EFFICIENT SOLUTIONS FOR RESEARCH AND INDUSTRIAL APPLICATIONS

TABLE 89 HIGH-SPEED CAMERAS WITH THROUGHPUT OF 0–2,000 MPPS

### **10.3 >2,000–5,000 MPPS**

10.3.1 HIGH-SPEED CAMERAS WITH >2,000–5,000 MPPS THROUGHPUT HELD LARGEST MARKET SHARE IN 2019

TABLE 90 HIGH-SPEED CAMERA WITH THROUGHPUT OF >2,000–5,000 MPPS

### **10.4 >5,000–10,000 MPPS**

10.4.1 >5,000–10,000 MPPS CAMERAS ARE USED IN COMPLEX APPLICATIONS SUCH AS AUTOMOTIVE AND EXPLOSIVES TESTING

TABLE 91 HIGH-SPEED CAMERA WITH THROUGHPUT OF >5,000–10,000 MPPS

### **10.5 >10,000 MPPS**

10.5.1 >10,000 MPPS CAMERAS ARE ADOPTED MOSTLY IN RESEARCH APPLICATIONS TO STUDY COMPLEX PROCESSES

TABLE 92 HIGH-SPEED CAMERAS WITH THROUGHPUT OF >10,000 MPPS

## **11 HIGH-SPEED CAMERA MARKET, BY COMPONENT**

### **11.1 INTRODUCTION**

TABLE 93 HIGH-SPEED CAMERA MARKET, BY COMPONENT, 2017–2019 (USD MILLION)

TABLE 94 HIGH-SPEED CAMERA MARKET, BY COMPONENT, 2020–2025 (USD MILLION)

### **11.2 IMAGE SENSORS**

11.2.1 IMAGE SENSORS TO CONTINUE TO ACCOUNT FOR LARGEST SHARE OF HIGH-SPEED CAMERA MARKET DURING FORECAST PERIOD

#### **11.2.1.1 CCD sensors**

11.2.1.1.1 Increased adoption of CCD sensors in variety of imaging applications to surge their demand

#### 11.2.1.2 CMOS sensors

11.2.1.2.1 Better imaging quality, ease of control, and low cost to drive adoption of CMOS sensors

### 11.3 LENSES

11.3.1 LENSES ARE KEY COMPONENTS OF CAMERAS AS THEY DEFINE IMAGE QUALITY

### 11.4 BATTERIES

11.4.1 QUICK RECHARGEABLE LITHIUM-ION BATTERIES ARE MOST USED BATTERIES IN HIGH-SPEED CAMERAS

### 11.5 IMAGE PROCESSORS

11.5.1 MARKET FOR IMAGE PROCESSORS TO GROW AT FASTEST RATE DURING FORECAST PERIOD

### 11.6 FANS AND COOLING SYSTEMS

11.6.1 INCREASING DEMAND FOR HIGH-SPEED CAMERAS IN EXTREME APPLICATIONS SUCH AS AEROSPACE & DEFENSE AND INDUSTRIAL MANUFACTURING PLANTS TO DRIVE ADOPTION OF FANS AND COOLING SYSTEMS

### 11.7 MEMORY SYSTEMS

11.7.1 INCREASING DEMAND FOR MEMORY SYSTEMS IN HIGH-SPEED CAMERAS DUE TO SHORTAGE OF STORAGE SPACE

TABLE 95 HIGH-SPEED CAMERA MARKET FOR MEMORY SYSTEMS, BY CAPACITY, 2017–2019 (USD MILLION)

TABLE 96 HIGH-SPEED CAMERA MARKET FOR MEMORY SYSTEMS, BY CAPACITY, 2020–2025 (USD MILLION)

11.7.2 0–50 GB

11.7.3 >50–100 GB

11.7.4 >100 GB

### 11.8 OTHERS

## 12 HIGH-SPEED CAMERA MARKET, BY SPECTRUM

### 12.1 INTRODUCTION

TABLE 97 HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2017–2019 (USD MILLION)

TABLE 98 HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2020–2025 (USD MILLION)

TABLE 99 HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2017–2019 (UNITS)

TABLE 100 HIGH-SPEED CAMERA MARKET, BY SPECTRUM, 2020–2025 (UNITS)

### 12.2 VISIBLE RGB

12.2.1 HIGH ADOPTION IN ENTERTAINMENT & MEDIA AND SPORTS APPLICATIONS TO DRIVE DEMAND FOR HIGH-SPEED VISIBLE RGB CAMERAS  
TABLE 101 EXAMPLES OF HIGH-SPEED VISIBLE RGB CAMERAS, BY MARKET PLAYER

TABLE 102 HIGH-SPEED VISIBLE RGB CAMERAS MARKET, BY FRAME RATE, 2017–2019 (USD MILLION)

TABLE 103 HIGH-SPEED VISIBLE RGB CAMERAS MARKET, BY FRAME RATE, 2020–2025 (USD MILLION)

TABLE 104 HIGH-SPEED VISIBLE RGB CAMERAS MARKET, BY FRAME RATE, 2017–2019 (UNITS)

TABLE 105 HIGH-SPEED VISIBLE RGB CAMERAS MARKET, BY FRAME RATE, 2020–2025 (UNITS)

TABLE 106 HIGH-SPEED VISIBLE RGB CAMERAS MARKET, BY APPLICATION, 2017–2019 (USD MILLION)

TABLE 107 HIGH-SPEED VISIBLE RGB CAMERAS MARKET, BY APPLICATION, 2020–2025 (USD MILLION)

## 12.3 INFRARED

12.3.1 INCREASED USE OF HIGH-SPEED INFRARED CAMERAS IN HEALTHCARE INDUSTRY TO DETECT BODY TEMPERATURE

TABLE 108 EXAMPLES OF HIGH-SPEED INFRARED CAMERAS, BY MARKET PLAYER

TABLE 109 HIGH-SPEED INFRARED CAMERAS MARKET, BY FRAME RATE, 2017–2019 (USD THOUSAND)

TABLE 110 HIGH-SPEED INFRARED CAMERAS MARKET, BY FRAME RATE, 2020–2025 (USD THOUSAND)

TABLE 111 HIGH-SPEED INFRARED CAMERAS MARKET, BY FRAME RATE, 2017–2019 (UNITS)

TABLE 112 HIGH-SPEED INFRARED CAMERAS MARKET, BY FRAME RATE, 2020–2025 (UNITS)

TABLE 113 HIGH-SPEED INFRARED CAMERAS MARKET, BY APPLICATION, 2017–2019 (USD THOUSAND)

TABLE 114 HIGH-SPEED INFRARED CAMERAS MARKET, BY APPLICATION, 2020–2025 (USD THOUSAND)

## 12.4 X-RAY

12.4.1 EXTENSIVE ADOPTION OF HIGH-SPEED X-RAY CAMERAS IN BALLISTICS AND EXPLOSIVES TESTING TO SPUR MARKET GROWTH

TABLE 115 EXAMPLES OF HIGH-SPEED X-RAY CAMERAS, BY MARKET PLAYER

TABLE 116 HIGH-SPEED X-RAY CAMERAS MARKET, BY FRAME RATE, 2017–2019 (USD THOUSAND)

TABLE 117 HIGH-SPEED X-RAY CAMERAS MARKET, BY FRAME RATE, 2020–2025 (USD THOUSAND)

TABLE 118 HIGH-SPEED X-RAY CAMERAS MARKET, BY FRAME RATE, 2017–2019 (UNITS)

TABLE 119 HIGH-SPEED X-RAY CAMERAS MARKET, BY FRAME RATE, 2020–2025 (UNITS)

TABLE 120 HIGH-SPEED X-RAY CAMERAS MARKET, BY APPLICATION, 2017–2019 (USD THOUSAND)

TABLE 121 HIGH-SPEED X-RAY CAMERAS MARKET, BY APPLICATION, 2020–2025 (USD THOUSAND)

12.5 COVID-19 IMPACT ON HIGH-SPEED CAMERA MARKET, BY SPECTRUM

12.5.1 MOST IMPACTED SPECTRUM TYPE

12.5.2 LEAST IMPACTED SPECTRUM TYPE

### **13 HIGH-SPEED CAMERA MARKET, BY APPLICATION**

#### **13.1 INTRODUCTION**

TABLE 122 HIGH-SPEED CAMERA MARKET, BY APPLICATION, 2017–2019 (USD MILLION)

TABLE 123 HIGH-SPEED CAMERA MARKET, BY APPLICATION, 2020–2025 (USD MILLION)

TABLE 124 HIGH-SPEED CAMERA MARKET, BY APPLICATION, 2017–2019 (UNITS)

TABLE 125 HIGH-SPEED CAMERA MARKET, BY APPLICATION, 2020–2025 (UNITS)

#### **13.2 AUTOMOTIVE & TRANSPORTATION INDUSTRY**

TABLE 126 HIGH-SPEED CAMERA MARKET FOR AUTOMOTIVE & TRANSPORTATION INDUSTRY, BY APPLICATION TYPE, 2017–2019 (USD MILLION)

TABLE 127 HIGH-SPEED CAMERA MARKET FOR AUTOMOTIVE & TRANSPORTATION INDUSTRY, BY APPLICATION TYPE, 2020–2025 (USD MILLION)

TABLE 128 HIGH-SPEED CAMERA MARKET FOR AUTOMOTIVE & TRANSPORTATION INDUSTRY, BY SPECTRUM, 2017–2019 (USD MILLION)

TABLE 129 HIGH-SPEED CAMERA MARKET FOR AUTOMOTIVE & TRANSPORTATION INDUSTRY, BY SPECTRUM, 2020–2025 (USD MILLION)

TABLE 130 HIGH-SPEED CAMERA MARKET FOR AUTOMOTIVE & TRANSPORTATION INDUSTRY, BY USAGE, 2017–2019 (USD MILLION)

TABLE 131 HIGH-SPEED CAMERA MARKET FOR AUTOMOTIVE & TRANSPORTATION INDUSTRY, BY USAGE, 2020–2025 (USD MILLION)

TABLE 132 HIGH-SPEED CAMERA MARKET FOR AUTOMOTIVE &



TRANSPORTATION INDUSTRY, BY USAGE, 2017–2019 (UNITS)

TABLE 133 HIGH-SPEED CAMERA MARKET FOR AUTOMOTIVE &

TRANSPORTATION INDUSTRY, BY USAGE, 2020–2025 (UNITS)

#### 13.2.1 CRASH TESTING

13.2.1.1 Adoption of high-speed cameras by automobile engineers for improving vehicle safety

#### 13.2.2 OTHERS

### 13.3 INDUSTRIAL MANUFACTURING PLANTS

TABLE 134 HIGH-SPEED CAMERA MARKET FOR INDUSTRIAL MANUFACTURING PLANTS, BY APPLICATION TYPE, 2017–2019 (USD MILLION)

TABLE 135 HIGH-SPEED CAMERA MARKET FOR INDUSTRIAL MANUFACTURING PLANTS, BY APPLICATION TYPE, 2020–2025 (USD MILLION)

TABLE 136 HIGH-SPEED CAMERA MARKET FOR INDUSTRIAL MANUFACTURING PLANTS, BY SPECTRUM, 2017–2019 (USD MILLION)

TABLE 137 HIGH-SPEED CAMERA MARKET FOR INDUSTRIAL MANUFACTURING PLANTS, BY SPECTRUM, 2020–2025 (USD MILLION)

TABLE 138 HIGH-SPEED CAMERA MARKET FOR INDUSTRIAL MANUFACTURING PLANTS, BY USAGE, 2017–2019 (USD MILLION)

TABLE 139 HIGH-SPEED CAMERA MARKET FOR INDUSTRIAL MANUFACTURING PLANTS, BY USAGE, 2020–2025 (USD MILLION)

TABLE 140 HIGH-SPEED CAMERA MARKET FOR INDUSTRIAL MANUFACTURING PLANTS, BY USAGE, 2017–2019 (UNITS)

TABLE 141 HIGH-SPEED CAMERA MARKET FOR INDUSTRIAL MANUFACTURING PLANTS, BY USAGE, 2020–2025 (UNITS)

#### 13.3.1 PACKAGING

13.3.1.1 Increased use of high-speed cameras for inspections in packaging industry

#### 13.3.2 MACHINE DESIGNING

13.3.2.1 Surged adoption of high-speed cameras for analyzing machine designs

#### 13.3.3 PRODUCTION LINE MONITORING

13.3.3.1 Escalated demand for high-speed cameras from industrial manufacturing plants to detect production errors

#### 13.3.4 OTHERS

### 13.4 FOOD & BEVERAGES INDUSTRY

TABLE 142 HIGH-SPEED CAMERA MARKET FOR FOOD & BEVERAGES INDUSTRY, BY APPLICATION TYPE, 2017–2019 (USD MILLION)

TABLE 143 HIGH-SPEED CAMERA MARKET FOR FOOD & BEVERAGES INDUSTRY, BY APPLICATION TYPE, 2020–2025 (USD MILLION)

TABLE 144 HIGH-SPEED CAMERA MARKET FOR FOOD & BEVERAGES INDUSTRY, BY SPECTRUM, 2017–2019 (USD MILLION)

TABLE 145 HIGH-SPEED CAMERA MARKET FOR FOOD & BEVERAGES

INDUSTRY, BY SPECTRUM, 2020–2025 (USD MILLION)

TABLE 146 HIGH-SPEED CAMERA MARKET FOR FOOD & BEVERAGES

INDUSTRY, BY USAGE, 2017–2019 (USD MILLION)

TABLE 147 HIGH-SPEED CAMERA MARKET FOR FOOD & BEVERAGES

INDUSTRY, BY USAGE, 2020–2025 (USD MILLION)

TABLE 148 HIGH-SPEED CAMERA MARKET FOR FOOD & BEVERAGES

INDUSTRY, BY USAGE, 2017–2019 (UNITS)

TABLE 149 HIGH-SPEED CAMERA MARKET FOR FOOD & BEVERAGES

INDUSTRY, BY USAGE, 2020–2025 (UNITS)

#### 13.4.1 PACKAGING

13.4.1.1 Growing utilization of high-speed cameras for monitoring packaging processes in food & beverages industry

#### 13.4.2 FOOD & BEVERAGE PRODUCTION

13.4.2.1 Rising adoption of high-speed cameras for inspection and error detection in food & beverage production facilities

### 13.5 CONSUMER ELECTRONICS INDUSTRY

TABLE 150 HIGH-SPEED CAMERA MARKET FOR CONSUMER ELECTRONICS INDUSTRY, BY APPLICATION TYPE, 2017–2019 (USD MILLION)

TABLE 151 HIGH-SPEED CAMERA MARKET FOR CONSUMER ELECTRONICS INDUSTRY, BY APPLICATION TYPE, 2020–2025 (USD MILLION)

TABLE 152 HIGH-SPEED CAMERA MARKET FOR CONSUMER ELECTRONICS INDUSTRY, BY SPECTRUM, 2017–2019 (USD THOUSAND)

TABLE 153 HIGH-SPEED CAMERA MARKET FOR CONSUMER ELECTRONICS INDUSTRY, BY SPECTRUM, 2020–2025 (USD THOUSAND)

TABLE 154 HIGH-SPEED CAMERA MARKET FOR CONSUMER ELECTRONICS INDUSTRY, BY USAGE, 2017–2019 (USD THOUSAND)

TABLE 155 HIGH-SPEED CAMERA MARKET FOR CONSUMER ELECTRONICS INDUSTRY, BY USAGE, 2020–2025 (USD THOUSAND)

TABLE 156 HIGH-SPEED CAMERA MARKET FOR CONSUMER ELECTRONICS INDUSTRY, BY USAGE, 2017–2019 (UNITS)

TABLE 157 HIGH-SPEED CAMERA MARKET FOR CONSUMER ELECTRONICS INDUSTRY, BY USAGE, 2020–2025 (UNITS)

#### 13.5.1 DROP TESTING

13.5.1.1 Ability to capture images at high frame rates for detailed analysis lead to increased demand for high-speed cameras

#### 13.5.2 OTHERS

### 13.6 ENTERTAINMENT & MEDIA INDUSTRY

TABLE 158 HIGH-SPEED CAMERA MARKET FOR ENTERTAINMENT & MEDIA INDUSTRY, BY APPLICATION TYPE, 2017–2019 (USD MILLION)

TABLE 159 HIGH-SPEED CAMERA MARKET FOR ENTERTAINMENT & MEDIA INDUSTRY, BY APPLICATION TYPE, 2020–2025 (USD MILLION)

TABLE 160 HIGH-SPEED CAMERA MARKET FOR ENTERTAINMENT & MEDIA INDUSTRY, BY SPECTRUM, 2017–2019 (USD MILLION)

TABLE 161 HIGH-SPEED CAMERA MARKET FOR ENTERTAINMENT & MEDIA INDUSTRY, BY SPECTRUM, 2020–2025 (USD MILLION)

TABLE 162 HIGH-SPEED CAMERA MARKET FOR ENTERTAINMENT & MEDIA INDUSTRY, BY USAGE, 2017–2019 (USD MILLION)

TABLE 163 HIGH-SPEED CAMERA MARKET FOR ENTERTAINMENT & MEDIA INDUSTRY, BY USAGE, 2020–2025 (USD MILLION)

TABLE 164 HIGH-SPEED CAMERA MARKET FOR ENTERTAINMENT & MEDIA INDUSTRY, BY USAGE, 2017–2019 (UNITS)

TABLE 165 HIGH-SPEED CAMERA MARKET FOR ENTERTAINMENT & MEDIA INDUSTRY, BY USAGE, 2020–2025 (UNITS)

#### 13.6.1 DOCUMENTARIES

13.6.1.1 Surged adoption of high-speed cameras for recording certain movements not visible to naked eyes

#### 13.6.2 ADVERTISING AND MOTION PICTURES

13.6.2.1 Increased use of high-speed cameras to generate slow-motion sequences for advertising and motion pictures

### 13.7 SPORTS INDUSTRY

TABLE 166 HIGH-SPEED CAMERA MARKET FOR SPORTS INDUSTRY, BY APPLICATION TYPE, 2017–2019 (USD MILLION)

TABLE 167 HIGH-SPEED CAMERA MARKET FOR SPORTS INDUSTRY, BY APPLICATION TYPE, 2020–2025 (USD MILLION)

TABLE 168 HIGH-SPEED CAMERA MARKET FOR SPORTS INDUSTRY, BY SPECTRUM, 2017–2019 (USD MILLION)

TABLE 169 HIGH-SPEED CAMERA MARKET FOR SPORTS INDUSTRY, BY SPECTRUM, 2020–2025 (USD MILLION)

TABLE 170 HIGH-SPEED CAMERA MARKET FOR SPORTS INDUSTRY, BY USAGE, 2017–2019 (USD MILLION)

TABLE 171 HIGH-SPEED CAMERA MARKET FOR SPORTS INDUSTRY, BY USAGE, 2020–2025 (USD MILLION)

TABLE 172 HIGH-SPEED CAMERA MARKET FOR SPORTS INDUSTRY, BY USAGE, 2017–2025 (UNITS)

TABLE 173 HIGH-SPEED CAMERA MARKET FOR SPORTS INDUSTRY, BY USAGE, 2020–2025 (UNITS)

#### 13.7.1 BROADCASTING

13.7.1.1 Increased demand for high-speed cameras to broadcast sports events

### 13.7.2 MOTION ANALYSIS

13.7.2.1 Accelerated use of high-speed cameras during sports events to analyze movements of sportspersons

### 13.8 PAPER & PRINTING INDUSTRY

TABLE 174 HIGH-SPEED CAMERA MARKET FOR PAPER & PRINTING INDUSTRY, BY APPLICATION TYPE, 2017–2019 (USD THOUSAND)

TABLE 175 HIGH-SPEED CAMERA MARKET FOR PAPER & PRINTING INDUSTRY, BY APPLICATION TYPE, 2020–2025 (USD THOUSAND)

TABLE 176 HIGH-SPEED CAMERA MARKET FOR PAPER & PRINTING INDUSTRY, BY SPECTRUM, 2017–2019 (USD THOUSAND)

TABLE 177 HIGH-SPEED CAMERA MARKET FOR PAPER & PRINTING INDUSTRY, BY SPECTRUM, 2020–2025 (USD THOUSAND)

TABLE 178 HIGH-SPEED CAMERA MARKET FOR PAPER & PRINTING INDUSTRY, BY USAGE, 2017–2019 (USD THOUSAND)

TABLE 179 HIGH-SPEED CAMERA MARKET FOR PAPER & PRINTING INDUSTRY, BY USAGE, 2020–2025 (USD THOUSAND)

TABLE 180 HIGH-SPEED CAMERA MARKET FOR PAPER & PRINTING INDUSTRY, BY USAGE, 2017–2019 (UNITS)

TABLE 181 HIGH-SPEED CAMERA MARKET FOR PAPER & PRINTING, BY USAGE, 2020–2025 (UNITS)

#### 13.8.1 CONVERTED PAPER MANUFACTURING

13.8.1.1 Increased adoption of high-speed cameras to monitor tissue manufacturing and converting processes

TABLE 182 ROLE OF HIGH-SPEED CAMERAS IN VARIOUS STAGES OF TISSUE MANUFACTURING AND CONVERTING

#### 13.8.2 OTHERS

### 13.9 AEROSPACE & DEFENSE INDUSTRY

TABLE 183 HIGH-SPEED CAMERA MARKET FOR AEROSPACE & DEFENSE INDUSTRY, BY APPLICATION TYPE, 2017–2019 (USD MILLION)

TABLE 184 HIGH-SPEED CAMERA MARKET FOR AEROSPACE & DEFENSE INDUSTRY, BY APPLICATION TYPE, 2020–2025 (USD MILLION)

TABLE 185 HIGH-SPEED CAMERA MARKET FOR AEROSPACE & DEFENSE INDUSTRY, BY SPECTRUM, 2017–2019 (USD MILLION)

TABLE 186 HIGH-SPEED CAMERA MARKET FOR AEROSPACE & DEFENSE INDUSTRY, BY SPECTRUM, 2020–2025 (USD MILLION)

TABLE 187 HIGH-SPEED CAMERA MARKET FOR AEROSPACE & DEFENSE INDUSTRY, BY USAGE, 2017–2019 (USD MILLION)

TABLE 188 HIGH-SPEED CAMERA MARKET FOR AEROSPACE & DEFENSE INDUSTRY, BY USAGE, 2020–2025 (USD MILLION)

TABLE 189 HIGH-SPEED CAMERA MARKET FOR AEROSPACE & DEFENSE INDUSTRY, BY USAGE, 2017–2019 (UNITS)

TABLE 190 HIGH-SPEED CAMERA MARKET FOR AEROSPACE & DEFENSE INDUSTRY, BY USAGE, 2020–2025 (UNITS)

#### 13.9.1 EXPLOSIVES AND PYROTECHNICS

13.9.1.1 Surged deployment of high-speed cameras to study impact physics of explosives and pyrotechnics

#### 13.9.2 PROJECTILE AND COMPONENT TRACKING

13.9.2.1 Accelerated demand for high-speed cameras from government agencies for projectile tracking

#### 13.9.3 FLOW VISUALIZATION

13.9.3.1 High-speed cameras enable visualization of flow patterns of several gases

#### 13.9.4 OTHERS

### 13.10 RESEARCH, DESIGN, & TESTING LABORATORIES

TABLE 191 HIGH-SPEED CAMERA MARKET FOR RESEARCH, DESIGN, & TESTING LABORATORIES, BY APPLICATION TYPE, 2017–2019 (USD MILLION)

TABLE 192 HIGH-SPEED CAMERA MARKET FOR RESEARCH, DESIGN, & TESTING LABORATORIES, BY APPLICATION TYPE, 2020–2025 (USD MILLION)

TABLE 193 HIGH-SPEED CAMERA MARKET FOR RESEARCH, DESIGN, & TESTING LABORATORIES, BY SPECTRUM, 2017–2019 (USD MILLION)

TABLE 194 HIGH-SPEED CAMERA MARKET FOR RESEARCH, DESIGN, & TESTING LABORATORIES, BY SPECTRUM, 2020–2025 (USD MILLION)

TABLE 195 HIGH-SPEED CAMERA MARKET FOR RESEARCH, DESIGN, & TESTING LABORATORIES, BY USAGE, 2017–2019 (USD MILLION)

TABLE 196 HIGH-SPEED CAMERA MARKET FOR RESEARCH, DESIGN, & TESTING LABORATORIES, BY USAGE, 2020–2025 (USD MILLION)

TABLE 197 HIGH-SPEED CAMERA MARKET FOR RESEARCH, DESIGN, & TESTING LABORATORIES, BY USAGE, 2017–2019 (UNITS)

TABLE 198 HIGH-SPEED CAMERA MARKET FOR RESEARCH, DESIGN, & TESTING LABORATORIES, BY USAGE, 2020–2025 (UNITS)

#### 13.10.1 COMBUSTION RESEARCH

13.10.1.1 Ability of high-speed cameras to capture split second events resulting in their increased use in combustion research activities

#### 13.10.2 FLUID DYNAMICS (PIV) AND SOLID MECHANICS (DIC)

13.10.2.1 Use of high-speed cameras to analyze motions of seeding particles

#### 13.10.3 PRODUCT AND MATERIAL TESTING

13.10.3.1 Deployment of high-speed cameras to check adherence of products and materials with client expectations

#### 13.10.4 SPRAY ANALYSIS



13.10.4.1 Adoption of high-speed cameras for evaluation and analysis of transient spray characteristics

13.10.5 OTHERS

13.11 HEALTHCARE INDUSTRY

TABLE 199 HIGH-SPEED CAMERA MARKET FOR HEALTHCARE INDUSTRY, BY APPLICATION TYPE, 2017–2019 (USD MILLION)

TABLE 200 HIGH-SPEED CAMERA MARKET FOR HEALTHCARE INDUSTRY, BY APPLICATION TYPE, 2020–2025 (USD MILLION)

TABLE 201 HIGH-SPEED CAMERA MARKET FOR HEALTHCARE INDUSTRY, BY SPECTRUM, 2017–2019 (USD MILLION)

TABLE 202 HIGH-SPEED CAMERA MARKET FOR HEALTHCARE INDUSTRY, BY SPECTRUM, 2020–2025 (USD MILLION)

TABLE 203 HIGH-SPEED CAMERA MARKET FOR HEALTHCARE INDUSTRY, BY USAGE, 2017–2019 (USD MILLION)

TABLE 204 HIGH-SPEED CAMERA MARKET FOR HEALTHCARE INDUSTRY, BY USAGE, 2020–2025 (USD MILLION)

TABLE 205 HIGH-SPEED CAMERA MARKET FOR HEALTHCARE INDUSTRY, BY USAGE, 2017–2019 (UNITS)

TABLE 206 HIGH-SPEED CAMERA MARKET FOR HEALTHCARE INDUSTRY, BY USAGE, 2020–2025 (UNITS)

13.11.1 DIAGNOSTICS

13.11.1.1 Surged adoption of high-speed cameras to detect diseases

13.11.2 MICROSCOPY

13.11.2.1 Increased employment of high-speed cameras to study micro-level objects

13.11.3 OTHERS

13.12 OTHERS

TABLE 207 HIGH-SPEED CAMERA MARKET FOR OTHER APPLICATIONS, BY APPLICATION TYPE, 2017–2019 (USD THOUSAND)

TABLE 208 HIGH-SPEED CAMERA MARKET FOR OTHER APPLICATIONS, BY APPLICATION TYPE, 2020–2025 (USD THOUSAND)

TABLE 209 HIGH-SPEED CAMERA MARKET FOR OTHER APPLICATIONS, BY SPECTRUM, 2017–2019 (USD THOUSAND)

TABLE 210 HIGH-SPEED CAMERA MARKET FOR OTHER APPLICATIONS, BY SPECTRUM, 2020–2025 (USD THOUSAND)

TABLE 211 HIGH-SPEED CAMERA MARKET FOR OTHER APPLICATIONS, BY USAGE, 2017–2019 (USD THOUSAND)

TABLE 212 HIGH-SPEED CAMERA MARKET FOR OTHER APPLICATIONS, BY USAGE, 2020–2025 (USD THOUSAND)

TABLE 213 HIGH-SPEED CAMERA MARKET FOR OTHER APPLICATIONS, BY

USAGE, 2017–2019 (UNITS)

TABLE 214 HIGH-SPEED CAMERA MARKET FOR OTHER APPLICATIONS, BY  
USAGE, 2020–2025 (UNITS)

13.13 IMPACT OF COVID-19 ON HIGH-SPEED CAMERA MARKET, BY  
APPLICATION

13.13.1 MOST IMPACTED APPLICATION SEGMENT

13.13.2 LEAST IMPACTED APPLICATION SEGMENT

## **14 GEOGRAPHIC ANALYSIS**

14.1 INTRODUCTION

TABLE 215 HIGH-SPEED CAMERA MARKET, BY REGION, 2017–2019 (USD  
MILLION)

TABLE 216 HIGH-SPEED CAMERA MARKET, BY REGION, 2020–2025 (USD  
MILLION)

TABLE 217 HIGH-SPEED CAMERA MARKET, BY REGION, 2017–2025 (UNITS)

TABLE 218 HIGH-SPEED CAMERA MARKET, BY REGION, 2020–2025 (UNITS)

14.2 NORTH AMERICA

TABLE 219 HIGH-SPEED CAMERA MARKET IN NORTH AMERICA, BY COUNTRY,  
2017–2019 (USD MILLION)

TABLE 220 HIGH-SPEED CAMERA MARKET IN NORTH AMERICA, BY COUNTRY,  
2020–2025 (USD MILLION)

TABLE 221 HIGH-SPEED CAMERA MARKET IN NORTH AMERICA, BY SPECTRUM,  
2017–2019 (USD MILLION)

TABLE 222 HIGH-SPEED CAMERA MARKET IN NORTH AMERICA, BY SPECTRUM,  
2020–2025 (USD MILLION)

14.2.1 US

14.2.1.1 US is largest market for high-speed cameras in North America

14.2.2 CANADA

14.2.2.1 Growing food & beverages industry in Canada to boost demand for high-  
speed cameras

14.2.3 MEXICO

14.2.3.1 Mexican high-speed camera market to witness highest growth rate in North  
American market

14.3 EUROPE

TABLE 223 HIGH-SPEED CAMERA MARKET IN EUROPE, BY COUNTRY,  
2017–2019 (USD MILLION)

TABLE 224 HIGH-SPEED CAMERA MARKET IN EUROPE, BY COUNTRY,  
2020–2025 (USD MILLION)



TABLE 225 HIGH-SPEED CAMERA MARKET IN EUROPE, BY SPECTRUM,  
2017–2019 (USD MILLION)

TABLE 226 HIGH-SPEED CAMERA MARKET IN EUROPE, BY SPECTRUM,  
2020–2025 (USD MILLION)

#### 14.3.1 GERMANY

14.3.1.1 Increasing adoption of high-speed cameras in automotive industry to drive market growth in Germany

#### 14.3.2 FRANCE

14.3.2.1 Growing manufacturing activities in country drive demand for high-speed cameras

#### 14.3.3 UK

14.3.3.1 Rising adoption of cameras in aerospace and automotive industries to accelerate market growth

#### 14.3.4 ITALY

14.3.4.1 Increasing industrialization fosters growth of high-speed cameras

#### 14.3.5 SPAIN

14.3.5.1 Food & beverages industry accounts for major share of high-speed camera market in Spain

#### 14.3.6 REST OF EUROPE

### 14.4 APAC

TABLE 227 HIGH-SPEED CAMERA MARKET IN APAC, BY COUNTRY, 2017–2019  
(USD MILLION)

TABLE 228 HIGH-SPEED CAMERA MARKET IN APAC, BY COUNTRY, 2020–2025  
(USD MILLION)

TABLE 229 HIGH-SPEED CAMERA MARKET IN APAC, BY SPECTRUM, 2017–2019  
(USD MILLION)

TABLE 230 HIGH-SPEED CAMERA MARKET IN APAC, BY SPECTRUM, 2020–2025  
(USD MILLION)

#### 14.4.1 CHINA

14.4.1.1 R&D investments aimed at driving innovations for industrial operations to propel market growth in China

#### 14.4.2 JAPAN

14.4.2.1 Japan accounts for largest market size in APAC due to high adoption of cameras in industrial manufacturing applications

#### 14.4.3 SOUTH KOREA

14.4.3.1 Booming manufacturing sector in South Korea fueling demand for high-speed cameras

#### 14.4.4 INDIA

14.4.4.1 Rapid industrialization drives demand for high-speed cameras in India

#### 14.4.5 REST OF APAC

#### 14.5 ROW

TABLE 231 HIGH-SPEED CAMERA MARKET IN ROW, BY REGION, 2017–2019 (USD MILLION)

TABLE 232 HIGH-SPEED CAMERA MARKET IN ROW, BY REGION, 2020–2025 (USD MILLION)

TABLE 233 HIGH-SPEED CAMERA MARKET IN ROW, BY SPECTRUM, 2017–2019 (USD MILLION)

TABLE 234 HIGH-SPEED CAMERA MARKET IN ROW, BY SPECTRUM, 2020–2025 (USD MILLION)

#### 14.5.1 SOUTH AMERICA

14.5.1.1 High adoption of cameras in industrial manufacturing and automotive applications to propel South American market growth

#### 14.5.2 MIDDLE EAST & AFRICA

14.5.2.1 Rapid industrialization in Middle Eastern & African countries to spur demand for high-speed cameras

### 14.6 IMPACT OF COVID-19 ON REGIONAL HIGH-SPEED CAMERA MARKETS

#### 14.6.1 MOST IMPACTED REGION

#### 14.6.2 LEAST IMPACTED REGION

## 15 HIGH-SPEED CAMERA ACCESSORIES (QUALITATIVE)

### 15.1 INTRODUCTION

### 15.2 MEMORY CARTRIDGES

TABLE 235 COST COMPARISON OF MEMORY CARTRIDGES

### 15.3 LENS ADAPTERS AND EXTENDERS

#### 15.3.1 LENS ADAPTERS

TABLE 236 COST OF LENS ADAPTERS, BY MARKET PLAYERS

#### 15.3.2 LENS EXTENDERS

TABLE 237 COST OF LENS EXTENDERS, BY MARKET PLAYERS

### 15.4 CAMERA LENSES

### 15.5 HIGH-SPEED LIGHTING ACCESSORIES

#### 15.5.1 HALOGENS

#### 15.5.2 FIBER AND LIQUID LIGHT GUIDES

### 15.6 TRIGGERS

TABLE 238 COST OF TRIGGERS, BY MARKET PLAYERS

### 15.7 TRIPODS AND LIQUID HEADS

## 16 COMPETITIVE LANDSCAPE OF HIGH-SPEED CAMERA MARKET

## 16.1 OVERVIEW

## 16.2 MARKET EVALUATION FRAMEWORK

### TABLE 239 OVERVIEW OF STRATEGIES DEPLOYED BY KEY HIGH-SPEED CAMERA MANUFACTURERS

#### 16.2.1 PRODUCT PORTFOLIO

#### 16.2.2 REGIONAL FOCUS

#### 16.2.3 MANUFACTURING FOOTPRINT

#### 16.2.4 ORGANIC/INORGANIC PLAY

## 16.3 HIGH-SPEED CAMERA MARKET SHARE ANALYSIS, 2019

## 16.4 REVENUE ANALYSIS OF TOP 5 PLAYERS IN HIGH-SPEED CAMERA MARKET

## 16.5 COMPANY EVALUATION QUADRANT

#### 16.5.1 STAR

#### 16.5.2 EMERGING LEADER

#### 16.5.3 PERVASIVE

#### 16.5.4 PARTICIPANT

#### 16.5.5 COMPANY PRODUCT FOOTPRINT

### TABLE 240 COMPANY PRODUCT FOOTPRINT

### TABLE 241 COMPANY SPECTRUM FOOTPRINT

### TABLE 242 COMPANY REGION FOOTPRINT

## 16.6 START-UP/SME EVALUATION MATRIX

### TABLE 243 LIST OF START-UP COMPANIES IN HIGH-SPEED CAMERA MARKET

#### 16.6.1 PROGRESSIVE COMPANIES

#### 16.6.2 RESPONSIVE COMPANIES

#### 16.6.3 DYNAMIC COMPANIES

#### 16.6.4 STARTING BLOCKS

## 16.7 COMPETITIVE SITUATIONS AND TRENDS

#### 16.7.1 PRODUCT LAUNCHES

### TABLE 244 PRODUCT LAUNCHES, APRIL 2020–AUGUST 2020

#### 16.7.2 PARTNERSHIPS AND COLLABORATIONS & JOINT VENTURES

### TABLE 245 PARTNERSHIPS AND COLLABORATIONS & JOINT VENTURES, SEPTEMBER 2018–AUGUST 2020

#### 16.7.3 EXPANSIONS

### TABLE 246 EXPANSIONS, JANUARY 2018 TO MAY 2020

## 17 COMPANY PROFILES

### 17.1 KEY COMPANIES

(Business Overview, Products/Software Offered, Recent Developments, MNM View, Key Strengths/Right to Win, Strategic Choices,

and Weaknesses and Competitive Threats)\*

17.1.1 PHOTRON

17.1.2 NAC IMAGE TECHNOLOGY

17.1.3 VISION RESEARCH

17.1.4 PCO AG

17.1.5 MIKROTRON GMBH

17.1.6 OPTRONIS

17.1.7 INTEGRATED DESIGN TOOLS

17.1.8 MONITORING TECHNOLOGY

17.1.9 AOS TECHNOLOGIES

17.1.10 FASTEC IMAGING

17.2 OTHER KEY COMPANIES

17.2.1 WEISSCAM GMBH I.L

17.2.2 MOTION ENGINEERING COMPANY

17.2.3 DEL IMAGING

17.2.4 IX CAMERA

17.2.5 XCITEX

17.2.6 MOTION CAPTURE TECHNOLOGIES

17.2.7 PCE INSTRUMENTS

17.2.8 BAUMER

17.2.9 DITECT

17.2.10 HIGH SPEED IMAGING

\*Details on Business Overview, Products/Software Offered, Recent Developments, MNM View, Key Strengths/Right to Win, Strategic Choices, and Weaknesses and Competitive Threats might not be captured in case of unlisted companies.

## **18 APPENDIX**

18.1 DISCUSSION GUIDE

18.2 KNOWLEDGE STORE: MARKETSandMARKETS' SUBSCRIPTION PORTAL

18.3 AVAILABLE CUSTOMIZATIONS

18.4 RELATED REPORT

18.5 AUTHOR DETAILS

## I would like to order

Product name: High-speed Camera Market with COVID-19 Impact Analysis, by Usage, Frame Rate (20,000–100,000 fps, >100,000 fps), Resolution (0–2 MP, 2–5 MP), Throughput, Component, Spectrum (Visible RGB, Infrared, and X-ray), Application, Region - Global Forecast to 2025

Product link: <https://marketpublishers.com/r/H57BC8A7750EN.html>

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/H57BC8A7750EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:

Last name:

Email:

Company:

Address:

City:

Zip code:

Country:

Tel:

Fax:

Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below  
and fax the completed form to +44 20 7900 3970