

3D Camera Market by Image Detection Technique (Time of Flight, Structured Light, Stereoscopic Vision), Type (Target Camera, Target-free Camera), End-user Industry and Region (North America, Europe, Asia Pacific, RoW) - Global Forecast to 2028

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Report description:

The global 3D camera market is expected to be valued at USD 3.6 Billion in 2023 and is projected to reach USD 9.1 Billion by 2028; it is expected to grow at a CAGR of 20.3% from 2023 to 2028. The use of 3D cameras in the construction industry has been on the rise in recent years. These cameras capture high-resolution images and create accurate 3D models of construction sites. This technology has several benefits for the construction industry, including improved safety, increased efficiency, and better communication among project stakeholders. For example, 3D cameras create a virtual construction site model, allowing project managers to identify potential safety hazards before workers are even on-site. This can include uneven ground, overhead hazards, or areas where heavy machinery may pose a risk. By identifying these hazards early, project managers can take steps to mitigate the risks and ensure a safer working environment for all workers.

"Target cameras to account for the largest type segment for 3D camera market"

In architecture and construction, target 3D cameras are used to capture detailed 3D models of existing structures, which can be used for renovation, restoration, or retrofitting. This technology is also used to create accurate models of construction sites, which helps in planning, design, and construction. Also, in industrial design and manufacturing, target 3D cameras are used to create accurate 3D models of products and parts, which can be used for quality control, testing, and prototyping. This technology is also used for reverse engineering, where a 3D model of an existing product is created to understand its design and function.

"Automotive end-user industry to grow at the highest CAGR for 3D camera market."

3D cameras are used in combination with Lidar sensors in automobiles to provide additional information about the environment and improve the accuracy and performance of these sensors. Lidar uses laser beams to measure distances to objects and create a 3D map of the surroundings. By scanning the laser beam in different directions, a complete 3D map of the environment is created

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with the help of 3D cameras. For instance, Tesla's Autopilot system utilizes a suite of sensors, including 3D cameras, radar, and lidar, to enable advanced driver assistance features such as adaptive cruise control, lane keeping, and automatic emergency braking. The company's latest Model S and Model X vehicles are equipped with a new sensor suite called "Tesla Vision," which relies on eight 3D cameras, radar, and ultrasonic sensors to provide a 360-degree view of the environment. The cameras are used for image recognition and processing, while radar and ultrasonic sensors provide additional information about the surroundings.

"China to grow at the highest CAGR for Asia Pacific 3D camera market"

China is a significant market for 3D cameras in the Asia Pacific region. The increasing adoption of 3D technology in various industries and the growing demand for 3D cameras in the consumer electronics sector are the major factors driving the market in China. The consumer electronics industry is one of the major industries driving the demand for 3D cameras in China. The increasing adoption of 3D cameras in smartphones, tablets, and other consumer electronic devices is fuelling the growth of the market in the country. Chinese smartphone manufacturers such as Huawei, Xiaomi, and Oppo have already launched 3D camera-enabled devices, which are becoming increasingly popular among consumers.

The study contains insights from various industry experts, ranging from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

- By Company Type: Tier 1 - 45%, Tier 2 - 32%, and Tier 3 - 23%
- By Designation: C-level Executives - 30%, Directors - 45%, and Others - 25%
- By Region: North America - 26%, Europe - 40%, Asia Pacific - 22%, RoW - 12%

The key players operating in the 3D camera market are FARO (US), Ricoh Co., Ltd. (Japan), Leica Geosystems AG (Switzerland), Panasonic Holdings Corporation (Japan), and Intel Corp. (US).

This research report categorizes the 3D camera market by image detection technique (Stereoscopic Vision, Time of Flight (ToF), Structured Light), type (Target camera, and Target-free camera), end-user industry (Consumer Electronics, Healthcare, Industrial, Aerospace & Defense, Construction, Automotive, Media & Entertainment), and region (North America, Europe, Asia Pacific, the Middle East & Africa, and Latin America). The scope of the report covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the 3D camera market. A detailed analysis of the key industry players has been done to provide insights into their business overview, solutions, and services; key strategies; contracts, partnerships, agreements. new product & service launches, mergers and acquisitions, and recent developments associated with the 3D camera market. Competitive analysis of upcoming startups in the 3D camera market ecosystem is covered in this report.

Research Coverage:

Key Benefits of Buying the Report

-□Analysis of key drivers (Wide applications of 3D imaging, Increasing adoption of industrial robots, Rising demand for 3D cameras in construction), restraints (High cost, Technological limitations), opportunities (Growth of AR/VR, Advancements in 3D printing, Development of 3D camera technologies), and challenges (High production cost, Competition from established camera manufacturers) influencing the growth of the 3D camera market.

-□Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the 3D camera market

-□Market Development: Comprehensive information about lucrative markets - the report analyses the 3D camera market across varied regions.

-□Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the 3D camera market

-□Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players like

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FARO (US), Ricoh Co., Ltd. (Japan), Leica Geosystems AG (Switzerland), Panasonic Holdings Corporation (Japan), and Intel Corp. (US), among others in the 3D camera market.

Table of Contents:

1	INTRODUCTION	24
1.1	STUDY OBJECTIVES	24
1.2	MARKET DEFINITION	24
1.2.1	INCLUSIONS AND EXCLUSIONS	25
1.3	STUDY SCOPE	25
1.3.1	MARKETS COVERED	25
FIGURE 1 3D CAMERA MARKET SEGMENTATION		25
1.3.2	GEOGRAPHIC SCOPE	26
1.3.3	YEARS CONSIDERED	26
1.4	CURRENCY CONSIDERED	27
1.5	STAKEHOLDERS	27
1.6	RECESSION ANALYSIS	27
FIGURE 2 GDP GROWTH PROJECTION UNTIL 2023 FOR MAJOR ECONOMIES		28
2	RESEARCH METHODOLOGY	29
2.1	RESEARCH DATA	29
FIGURE 3 3D CAMERA MARKET: RESEARCH DESIGN		30
2.1.1	SECONDARY DATA	30
2.1.1.1	Major secondary sources	31
2.1.1.2	Key data from secondary sources	31
2.1.2	PRIMARY DATA	31
2.1.2.1	Primary interviews with experts	32
2.1.2.2	Key data from primary sources	32
2.1.2.3	Key industry insights	33
2.1.2.4	Breakdown of primaries	33
2.1.3	SECONDARY AND PRIMARY RESEARCH	34
2.2	MARKET SIZE ESTIMATION	34
FIGURE 4 RESEARCH FLOW OF MARKET SIZE ESTIMATION		35
2.2.1	MARKET SIZE ESTIMATION METHODOLOGY: SUPPLY-SIDE ANALYSIS	35
FIGURE 5 MARKET SIZE ESTIMATION METHODOLOGY (SUPPLY SIDE): REVENUE FROM SALES OF 3D CAMERA PRODUCTS AND SOLUTIONS		35
2.2.2	BOTTOM-UP APPROACH	36
2.2.2.1	Approach to arrive at market size using bottom-up analysis	36
FIGURE 6 MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH		36
2.2.3	TOP-DOWN APPROACH	37
2.2.3.1	Approach to capture market share using top-down analysis	37
FIGURE 7 TOP-DOWN APPROACH		37
2.3	DATA TRIANGULATION	38
FIGURE 8 DATA TRIANGULATION		38
2.4	RESEARCH ASSUMPTIONS	39
2.5	RISK ASSESSMENT	40
TABLE 1 RISK FACTOR ANALYSIS		40
2.6	RECESSION ASSUMPTIONS	40
TABLE 2 ASSUMPTIONS FOR RECESSION ANALYSIS		40

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2.7	STUDY LIMITATIONS	41
3	EXECUTIVE SUMMARY	42
3.1	GROWTH RATE ASSUMPTIONS/FORECAST	42
FIGURE 9	TARGET-FREE CAMERA SEGMENT TO CAPTURE HIGHER CAGR IN 3D CAMERA MARKET DURING FORECAST PERIOD	43
FIGURE 10	TIME OF FLIGHT SEGMENT TO REGISTER HIGHEST CAGR DURING FORECAST PERIOD	44
FIGURE 11	AUTOMOTIVE SEGMENT TO AMASS LARGEST SHARE OF 3D CAMERA MARKET IN 2028	44
FIGURE 12	3D CAMERA MARKET IN ASIA PACIFIC TO GROW AT HIGHEST CAGR FROM 2023 TO 2028	45
4	PREMIUM INSIGHTS	46
4.1	ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN 3D CAMERA MARKET	46
FIGURE 13	INCREASING USE OF 3D CAMERAS IN CONSTRUCTION AND ARCHITECTURE INDUSTRIES TO DRIVE MARKET	46
4.2	NORTH AMERICA: 3D CAMERA MARKET, BY COUNTRY AND IMAGE DETECTION TECHNIQUE	47
FIGURE 14	US AND TIME OF FLIGHT TECHNOLOGY EXPECTED TO HOLD LARGEST SHARE OF NORTH AMERICAN 3D CAMERA MARKET IN 2023	47
4.3	ASIA PACIFIC: 3D CAMERA MARKET, BY COUNTRY	47
FIGURE 15	CHINA TO ACCOUNT FOR LARGEST SHARE OF 3D CAMERA MARKET IN ASIA PACIFIC DURING FORECAST PERIOD	47
4.4	3D CAMERA MARKET, BY COUNTRY	48
FIGURE 16	3D CAMERA MARKET IN CHINA TO GROW AT HIGHEST CAGR FROM 2023 TO 2028	48
5	MARKET OVERVIEW	49
5.1	INTRODUCTION	49
5.2	MARKET DYNAMICS	49
FIGURE 17	3D CAMERA MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES	49
5.2.1	DRIVERS	49
5.2.1.1	Wide applications of 3D imaging	49
5.2.1.2	Increasing adoption of industrial robots	50
5.2.1.3	Rising demand for 3D cameras in construction	50
FIGURE 18	3D CAMERA MARKET: IMPACT ANALYSIS OF DRIVERS	51
5.2.2	RESTRAINTS	51
5.2.2.1	High product price due to limited demand	51
5.2.2.2	Technological limitations associated with 3D cameras	51
FIGURE 19	3D CAMERA MARKET: IMPACT ANALYSIS OF RESTRAINTS	52
5.2.3	OPPORTUNITIES	52
5.2.3.1	Growth of AR/VR	52
5.2.3.2	Advancements in 3D printing	52
5.2.3.3	Evolution of 3D camera technology	52
FIGURE 20	3D CAMERA MARKET: IMPACT ANALYSIS OF OPPORTUNITIES	53
5.2.4	CHALLENGES	53
5.2.4.1	Increase in 3D camera production cost due to use of specialized hardware and software	53
5.2.4.2	Significant barriers to enter 3D camera market	53
FIGURE 21	3D CAMERA MARKET: IMPACT ANALYSIS OF CHALLENGES	54
5.3	VALUE CHAIN ANALYSIS	54
FIGURE 22	VALUE CHAIN ANALYSIS: 3D CAMERA	54
5.4	ECOSYSTEM ANALYSIS	55
FIGURE 23	KEY PLAYERS IN 3D CAMERA MARKET	55
TABLE 3	ROLE OF COMPANIES IN ECOSYSTEM/VALUE CHAIN	56
5.5	PORTER'S FIVE FORCES ANALYSIS	57
TABLE 4	IMPACT OF PORTER'S FIVE FORCES ON 3D CAMERA MARKET	57
FIGURE 24	PORTER'S FIVE FORCES ANALYSIS: 3D CAMERA MARKET	57

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5.5.1	THREAT OF NEW ENTRANTS	58
5.5.2	THREAT OF SUBSTITUTES	58
5.5.3	BARGAINING POWER OF SUPPLIERS	58
5.5.4	BARGAINING POWER OF BUYERS	58
5.5.5	INTENSITY OF COMPETITION RIVALRY	58
5.6	KEY STAKEHOLDERS AND BUYING CRITERIA	59
5.6.1	KEY STAKEHOLDERS IN BUYING PROCESS	59
FIGURE 25	INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE END-USER INDUSTRIES	59
TABLE 5	INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE END-USER INDUSTRIES (%)	59
5.6.2	BUYING CRITERIA	60
FIGURE 26	KEY BUYING CRITERIA FOR TOP THREE END-USER INDUSTRIES	60
TABLE 6	KEY BUYING CRITERIA FOR TOP THREE END-USER INDUSTRIES	60
5.7	TRENDS/DISRUPTIONS IMPACTING CUSTOMER BUSINESS	60
FIGURE 27	REVENUE SHIFTS FOR PLAYERS IN 3D CAMERA MARKET	61
5.8	AVERAGE SELLING PRICE ANALYSIS	61
FIGURE 28	AVERAGE SELLING PRICES OF 3D CAMERAS, BY END-USER INDUSTRY AND COMPANY	61
TABLE 7	AVERAGE SELLING PRICE OF 3D CAMERAS, BY END-USER INDUSTRY AND COMPANY (USD)	62
5.8.1	AVERAGE SELLING PRICE TRENDS	62
FIGURE 29	AVERAGE SELLING PRICE ANALYSIS, BY END-USER INDUSTRY	62
5.9	CASE STUDIES	63
TABLE 8	USE CASE: AMAZON USED 3D CAMERA FROM INTEL	63
TABLE 9	USE CASE: DJI USED HASSELBLAD 3D CAMERA IN ITS MAVIC 2 PRO DRONE	63
TABLE 10	USE CASE: HTC USED INTEL 3D CAMERA IN ITS VIVE PRO VR HEADSET	64
TABLE 11	USE CASE: APPLE IPHONE X USES 3D CAMERA MODULE MADE BY LUMENTUM	64
TABLE 12	USE CASE: HP INTEGRATED 3D CAMERA SYSTEM FROM INTEL IN SPROUT PRO WORKSTATION	65
5.10	TECHNOLOGY ANALYSIS	65
5.10.1	LIGHT DETECTION AND RANGING (LIDAR)	65
5.10.2	MULTI-CAMERA ARRAYS	65
5.10.3	QUANTUM IMAGING	66
5.10.4	COMPUTATIONAL PHOTOGRAPHY	66
5.10.5	METASURFACE LENSES	66
5.11	PATENT ANALYSIS	67
FIGURE 30	NUMBER OF PATENTS GRANTED IN 3D CAMERA MARKET, 2012-2022	67
TABLE 13	LIST OF FEW PATENTS IN 3D CAMERA MARKET, 2020-2022	68
5.12	TRADE ANALYSIS	71
TABLE 14	IMPORT DATA, BY COUNTRY, 2018-2022 (USD MILLION)	71
FIGURE 31	IMPORT DATA, BY COUNTRY, 2018-2022 (USD MILLION)	71
TABLE 15	EXPORT DATA, BY COUNTRY, 2018-2022 (USD MILLION)	72
FIGURE 32	EXPORT DATA, BY COUNTRY, 2018-2022 (USD MILLION)	72
5.13	TARIFF ANALYSIS	73
TABLE 16	MFN TARIFFS FOR HS CODE: 852580 EXPORTED BY CHINA	73
TABLE 17	MFN TARIFFS FOR HS CODE: 852580 EXPORTED BY US	73
TABLE 18	MFN TARIFF FOR HS CODE: 852580 EXPORTED BY GERMANY	73
5.14	STANDARDS AND REGULATORY LANDSCAPE	74
5.14.1	REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS	74
TABLE 19	NORTH AMERICA: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS	74
TABLE 20	EUROPE: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS	74

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TABLE 21 ASIA PACIFIC: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 75

TABLE 22 REST OF THE WORLD: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 76

5.14.2 STANDARDS & REGULATIONS RELATED TO 3D CAMERA MARKET 76

5.15 KEY CONFERENCES AND EVENTS, 2023-2024 77

TABLE 23 3D CAMERA MARKET: DETAILED LIST OF CONFERENCES AND EVENTS, 2023-2024 77

6 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE 79

6.1 INTRODUCTION 80

FIGURE 33 TIME OF FLIGHT SEGMENT TO GROW AT HIGHEST CAGR DURING FORECAST PERIOD 80

TABLE 24 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2019-2022 (USD MILLION) 80

TABLE 25 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2023-2028 (USD MILLION) 80

6.2 STEREOSCOPIIC VISION 81

6.2.1 STEREOSCOPIIC VISION-BASED 3D CAMERAS IDEAL FOR ROBOT NAVIGATION AND MAPPING IN DIVERSE, UNSTRUCTURED ENVIRONMENTS 81

6.2.1.1 Use case: Zillow uses Matterport's 3D cameras to create high-quality and immersive virtual tours of properties listed on its website 82

TABLE 26 STEREOSCOPIIC VISION: 3D CAMERA MARKET, BY END-USER INDUSTRY, 2019-2022 (USD MILLION) 82

TABLE 27 STEREOSCOPIIC VISION: 3D CAMERA MARKET, BY END-USER INDUSTRY, 2023-2028 (USD MILLION) 82

TABLE 28 STEREOSCOPIIC VISION: 3D CAMERA MARKET, BY REGION, 2019-2022 (USD MILLION) 83

TABLE 29 STEREOSCOPIIC VISION: 3D CAMERA MARKET, BY REGION, 2023-2028 (USD MILLION) 83

6.3 STRUCTURED LIGHT 83

6.3.1 STRUCTURED LIGHT 3D CAMERAS USED IN VARIOUS MANUFACTURING APPLICATIONS FOR DIMENSIONAL MEASUREMENT, QUALITY CONTROL, AND INSPECTION 83

6.3.1.1 Use case: 3D inspection of large heavy machinery components to save material cost 84

TABLE 30 STRUCTURED LIGHT: 3D CAMERA MARKET, BY END-USER INDUSTRY, 2019-2022 (USD MILLION) 84

TABLE 31 STRUCTURED LIGHT: 3D CAMERA MARKET, BY END-USER INDUSTRY, 2023-2028 (USD MILLION) 85

TABLE 32 STRUCTURED LIGHT: 3D CAMERA MARKET, BY REGION, 2019-2022 (USD MILLION) 85

TABLE 33 STRUCTURED LIGHT: 3D CAMERA MARKET, BY REGION, 2023-2028 (USD MILLION) 85

6.4 TIME OF FLIGHT 86

6.4.1 TOF 3D CAMERAS USED IN ROBOTICS DUE TO THEIR ABILITY TO PROVIDE FAST, ACCURATE, AND REAL-TIME 3D INFORMATION 86

6.4.1.1 Use case: 3D time of flight cameras to aid robotic palletizers 86

TABLE 34 TIME OF FLIGHT: 3D CAMERA MARKET, BY END-USER INDUSTRY, 2019-2022 (USD MILLION) 87

TABLE 35 TIME OF FLIGHT: 3D CAMERA MARKET, BY END-USER INDUSTRY, 2023-2028 (USD MILLION) 87

TABLE 36 TIME OF FLIGHT: 3D CAMERA MARKET, BY REGION, 2019-2022 (USD MILLION) 87

TABLE 37 TIME OF FLIGHT: 3D CAMERA MARKET, BY REGION, 2023-2028 (USD MILLION) 88

7 3D CAMERA MARKET, BY TYPE 89

7.1 INTRODUCTION 90

FIGURE 34 TARGET-FREE CAMERA SEGMENT TO GROW AT HIGHER CAGR IN 3D CAMERA MARKET DURING FORECAST PERIOD 90

TABLE 38 3D CAMERA MARKET, BY TYPE, 2019-2022 (USD MILLION) 90

TABLE 39 3D CAMERA MARKET, BY TYPE, 2023-2028 (USD MILLION) 90

7.2 TARGET CAMERA 91

7.2.1 USES TIME OF FLIGHT TECHNOLOGY 91

7.2.1.1 Use case: Cheese factory in Netherlands uses time of flight 3D cameras in self-driving forklifts 92

7.3 TARGET-FREE CAMERA 92

7.3.1 USES COMBINATION OF TIME OF FLIGHT (TOF), STEREOSCOPIIC VISION, AND STRUCTURED LIGHT TECHNOLOGIES 92

7.3.1.1 Use case: Amazon Robotics uses 3D camera technology to capture images and track objects at its warehouses 93

8 3D CAMERA MARKET, BY END-USER INDUSTRY 94

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8.1 INTRODUCTION 95

FIGURE 35 INDUSTRIAL SEGMENT TO REGISTER HIGHEST CAGR IN 3D CAMERA MARKET DURING FORECAST PERIOD 95

TABLE 40 3D CAMERA MARKET, BY END-USER INDUSTRY, 2019-2022 (USD MILLION) 95

TABLE 41 3D CAMERA MARKET, BY END-USER INDUSTRY, 2023-2028 (USD MILLION) 96

TABLE 42 3D CAMERA MARKET, BY END-USER INDUSTRY, 2019-2022 (THOUSAND UNITS) 96

TABLE 43 3D CAMERA MARKET, BY END-USER INDUSTRY, 2023-2028 (THOUSAND UNITS) 96

8.2 CONSUMER ELECTRONICS 97

8.2.1 GROWING ADOPTION OF 3D CAMERAS IN CONSUMER ELECTRONICS PRODUCTS TO DRIVE MARKET 97

TABLE 44 CONSUMER ELECTRONICS: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2019-2022 (USD MILLION) 98

TABLE 45 CONSUMER ELECTRONICS: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2023-2028 (USD MILLION) 98

8.3 HEALTHCARE 98

8.3.1 EXTENSIVE APPLICATIONS OF 3D CAMERAS IN MEDICAL IMAGING TO DRIVE MARKET GROWTH 98

8.3.1.1 Use case: Researchers at University of Michigan used 3D cameras to create a customized prosthetic socket 99

TABLE 46 HEALTHCARE: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2019-2022 (USD MILLION) 99

TABLE 47 HEALTHCARE: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2023-2028 (USD MILLION) 100

8.4 INDUSTRIAL 100

8.4.1 INCREASING ADOPTION OF 3D CAMERAS ACROSS INDUSTRIAL MANUFACTURING TO SUPPORT MARKET GROWTH 100

8.4.1.1 Use case: Manufacturer of autonomous mobile robots selected 3D cameras offered by e-con Systems for warehouse automation 101

TABLE 48 INDUSTRIAL: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2019-2022 (USD MILLION) 101

TABLE 49 INDUSTRIAL: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2023-2028 (USD MILLION) 101

8.5 AEROSPACE & DEFENSE 101

8.5.1 DEVELOPMENT OF INSPECTION AND MAINTENANCE TECHNOLOGIES FOR AEROSPACE & DEFENSE TO CREATE DEMAND FOR 3D CAMERAS 101

8.5.1.1 Use case: 3D vision inspection of aerospace components 102

TABLE 50 AEROSPACE & DEFENSE: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2019-2022 (USD MILLION) 103

TABLE 51 AEROSPACE & DEFENSE: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2023-2028 (USD MILLION) 103

8.6 CONSTRUCTION 103

8.6.1 USE OF 3D CAMERAS IN CONSTRUCTION MAPPING AND SITE ANALYSIS TO BOOST MARKET 103

8.6.1.1 Use case: GreenValley International uses ONE Series 360 cameras to transform LiDAR mapping 104

TABLE 52 CONSTRUCTION: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2019-2022 (USD MILLION) 104

TABLE 53 CONSTRUCTION: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2023-2028 (USD MILLION) 104

8.7 AUTOMOTIVE 105

8.7.1 INCREASING ADOPTION OF AUTONOMOUS VEHICLES TO CREATE NEED FOR 3D CAMERAS 105

8.7.1.1 Use case: Automated car inspection with 3D cameras in Singapore 105

TABLE 54 AUTOMOTIVE: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2019-2022 (USD MILLION) 106

TABLE 55 AUTOMOTIVE: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2023-2028 (USD MILLION) 106

8.8 MEDIA & ENTERTAINMENT 106

8.8.1 WIDE RANGE OF APPLICATIONS OF 3D CAMERAS IN MEDIA & ENTERTAINMENT TO FOSTER MARKET GROWTH 106

8.8.1.1 Use case: Use of 3D cameras to broadcast sporting events 107

TABLE 56 MEDIA & ENTERTAINMENT: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2019-2022 (USD MILLION) 107

TABLE 57 MEDIA & ENTERTAINMENT: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2023-2028 (USD MILLION) 108

9 3D CAMERA MARKET, BY REGION 109

9.1 INTRODUCTION 110

FIGURE 36 3D CAMERA MARKET IN ASIA PACIFIC TO GROW AT HIGHEST CAGR FROM 2023 TO 2028 110

TABLE 58 3D CAMERA MARKET, BY REGION, 2019-2022 (USD MILLION) 110

TABLE 59 3D CAMERA MARKET, BY REGION, 2023-2028 (USD MILLION) 111

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9.2 NORTH AMERICA 111

FIGURE 37 NORTH AMERICA: 3D CAMERA MARKET SNAPSHOT 112

TABLE 60 NORTH AMERICA: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2019-2022 (USD MILLION) 112

TABLE 61 NORTH AMERICA: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2023-2028 (USD MILLION) 113

TABLE 62 NORTH AMERICA: 3D CAMERA MARKET, BY COUNTRY, 2019-2022 (USD MILLION) 113

TABLE 63 NORTH AMERICA: 3D CAMERA MARKET, BY COUNTRY, 2023-2028 (USD MILLION) 113

9.2.1 NORTH AMERICA: IMPACT OF RECESSION 113

9.2.2 US 114

9.2.2.1 Increasing adoption of 3D cameras across industries to enhance market growth 114

9.2.2.2 Case study: Audi uses 3D camera systems from Hella Aglaia to provide a comprehensive view of vehicle's surroundings 114

9.2.3 CANADA 114

9.2.3.1 Increasing initiatives and investments in healthcare to boost growth 114

9.2.3.2 Case study: Johns Hopkins Hospital used 3D camera for spinal surgery 115

9.2.4 MEXICO 115

9.2.4.1 Demand from manufacturing sector to drive market 115

9.2.4.2 Case study: Ford redesigned assembly line using 3D cameras 115

9.3 EUROPE 116

FIGURE 38 EUROPE: 3D CAMERA MARKET SNAPSHOT 117

TABLE 64 EUROPE: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2019-2022 (USD MILLION) 117

TABLE 65 EUROPE: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2023-2028 (USD MILLION) 118

TABLE 66 EUROPE: 3D CAMERA MARKET, BY COUNTRY, 2019-2022 (USD MILLION) 118

TABLE 67 EUROPE: 3D CAMERA MARKET, BY COUNTRY, 2023-2028 (USD MILLION) 118

9.3.1 EUROPE: IMPACT OF RECESSION 118

9.3.2 UK 119

9.3.2.1 Increasing adoption of AR/VR-based solutions to propel market 119

9.3.2.2 Case study: British museum used 3D cameras and VR technology to create virtual tours of its exhibits 119

9.3.3 GERMANY 120

9.3.3.1 Adoption of 3D cameras in autonomous driving to fuel market growth 120

9.3.3.2 Case study: General Motors used 3D cameras in Cruise AV autonomous vehicles 120

9.3.4 FRANCE 120

9.3.4.1 Strong focus on R&D in 3D technology to drive market 120

9.3.4.2 Case study: Boeing used 3D cameras to inspect aircraft components 121

9.3.5 SPAIN 121

9.3.5.1 Increasing adoption of 3D cameras in architecture and construction to augment market growth 121

9.3.5.2 Case study: Architecture restoration team used 3D cameras to plan and execute repairs 121

9.3.6 REST OF EUROPE 121

9.4 ASIA PACIFIC 122

FIGURE 39 ASIA PACIFIC: 3D CAMERA MARKET SNAPSHOT 123

TABLE 68 ASIA PACIFIC: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2019-2022 (USD MILLION) 123

TABLE 69 ASIA PACIFIC: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2023-2028 (USD MILLION) 124

TABLE 70 ASIA PACIFIC: 3D CAMERA MARKET, BY COUNTRY, 2019-2022 (USD MILLION) 124

TABLE 71 ASIA PACIFIC: 3D CAMERA MARKET, BY COUNTRY, 2023-2028 (USD MILLION) 124

9.4.1 ASIA PACIFIC: IMPACT OF RECESSION 125

9.4.2 CHINA 125

9.4.2.1 Growing investments in AR/VR to drive 3D camera market 125

9.4.2.2 Case study: VUZIX used Plessey 3D cameras in its M400 Smart Glasses 126

9.4.3 JAPAN 126

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- 9.4.3.1 Growth of application industries to ensure continued demand for 3D cameras 126
- 9.4.3.2 Case study: Amazon Robotics used 3D cameras offered by SICK at its warehouses 126
- 9.4.4 INDIA 127
 - 9.4.4.1 Increasing adoption of 3D cameras in medical imaging to support growth 127
 - 9.4.4.2 Case study: Siemens Healthineers used Intel RealSense depth cameras for medical imaging 127
- 9.4.5 SOUTH KOREA 127
 - 9.4.5.1 Increasing investments in industrial automation to boost market 127
 - 9.4.5.2 Case study: Bosch used 3D cameras for industrial automation 128
- 9.4.6 REST OF ASIA PACIFIC 128
- 9.5 REST OF THE WORLD 128
 - TABLE 72 REST OF THE WORLD: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2019-2022 (USD MILLION) 129
 - TABLE 73 REST OF THE WORLD: 3D CAMERA MARKET, BY IMAGE DETECTION TECHNIQUE, 2023-2028 (USD MILLION) 129
 - TABLE 74 REST OF THE WORLD: 3D CAMERA MARKET, BY COUNTRY, 2019-2022 (USD MILLION) 129
 - TABLE 75 REST OF THE WORLD: 3D CAMERA MARKET, BY COUNTRY, 2023-2028 (USD MILLION) 129
 - 9.5.1 REST OF THE WORLD: IMPACT OF RECESSION 130
 - 9.5.2 SOUTH AMERICA 130
 - 9.5.2.1 Government support for 3D printing to drive market 130
 - 9.5.3 MIDDLE EAST AND AFRICA 130
 - 9.5.3.1 Increasing adoption of 3D printing to boost market 130
- 10 COMPETITIVE LANDSCAPE 132
 - 10.1 INTRODUCTION 132
 - 10.2 STRATEGIES ADOPTED BY KEY PLAYERS 132
 - TABLE 76 OVERVIEW OF STRATEGIES ADOPTED BY COMPANIES IN 3D CAMERA MARKET 132
 - 10.3 COMPANY REVENUE ANALYSIS, 2020-2022 134
 - FIGURE 40 THREE-YEAR REVENUE ANALYSIS OF TOP FIVE PLAYERS IN 3D CAMERA MARKET 134
 - 10.4 MARKET SHARE ANALYSIS, 2022 134
 - FIGURE 41 MARKET SHARES OF LEADING PLAYERS IN 3D CAMERA MARKET, 2022 134
 - TABLE 77 3D CAMERA MARKET: DEGREE OF COMPETITION 135
 - 10.5 COMPANY EVALUATION QUADRANT, 2022 136
 - 10.5.1 STARS 136
 - 10.5.2 EMERGING LEADERS 136
 - 10.5.3 PERVASIVE PLAYERS 136
 - 10.5.4 PARTICIPANTS 136
 - FIGURE 42 3D CAMERA MARKET (GLOBAL): COMPANY EVALUATION QUADRANT, 2022 137
 - 10.6 STARTUPS/SMES EVALUATION QUADRANT, 2022 138
 - 10.6.1 PROGRESSIVE COMPANIES 138
 - 10.6.2 RESPONSIVE COMPANIES 138
 - 10.6.3 DYNAMIC COMPANIES 138
 - 10.6.4 STARTING BLOCKS 138
 - FIGURE 43 3D CAMERA MARKET: STARTUPS/SMES EVALUATION QUADRANT, 2022 139
 - 10.7 COMPANY PRODUCT FOOTPRINT ANALYSIS 140
 - TABLE 78 OVERALL COMPANY FOOTPRINT 140
 - TABLE 79 COMPANY IMAGE DETECTION TECHNIQUE FOOTPRINT 141
 - TABLE 80 COMPANY TYPE FOOTPRINT 142
 - TABLE 81 COMPANY END-USER INDUSTRY FOOTPRINT 143
 - TABLE 82 COMPANY REGION FOOTPRINT 144
 - 10.8 STARTUPS/SMES EVALUATION MATRIX 145

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10.8.1 LIST OF STARTUPS/SMES: 3D CAMERA MARKET 145
 TABLE 83 DETAILED LIST OF KEY STARTUPS/SMES: 3D CAMERA MARKET 145
 10.8.2 COMPETITIVE BENCHMARKING OF KEY STARTUPS/SMES: 3D CAMERA MARKET 146
 TABLE 84 OVERALL STARTUPS FOOTPRINT 146
 TABLE 85 STARTUPS IMAGE DETECTION TECHNIQUE FOOTPRINT 146
 TABLE 86 STARTUPS TYPE FOOTPRINT 147
 TABLE 87 STARTUPS END-USER INDUSTRY FOOTPRINT 147
 TABLE 88 STARTUPS REGION FOOTPRINT 148
 10.9 COMPETITIVE SCENARIOS AND TRENDS 148
 TABLE 89 3D CAMERA MARKET: TOP PRODUCT LAUNCHES AND DEVELOPMENTS, JANUARY 2022 TO JANUARY 2023 148
 TABLE 90 3D CAMERA MARKET: TOP DEALS AND OTHER DEVELOPMENTS, FEBRUARY 2022 TO JANUARY 2023 150

11 COMPANY PROFILES 152

(Business Overview, Products Offered, Recent Developments, MnM View Right to win, Strategic choices made, Weaknesses and competitive threats) *

11.1 KEY PLAYERS 152

11.1.1 ORBBEC 152

TABLE 91 ORBBEC: BUSINESS OVERVIEW 152
 TABLE 92 ORBBEC: PRODUCTS/SOLUTIONS/SERVICES OFFERED 153
 TABLE 93 ORBBEC: PRODUCT LAUNCHES 154
 TABLE 94 ORBBEC: DEALS 155

11.1.2 FARO TECHNOLOGIES 157

TABLE 95 FARO TECHNOLOGIES: BUSINESS OVERVIEW 157
 FIGURE 44 FARO TECHNOLOGIES: COMPANY SNAPSHOT 158
 TABLE 96 FARO TECHNOLOGIES: PRODUCTS/SOLUTIONS/SERVICES OFFERED 158
 TABLE 97 FARO TECHNOLOGIES: PRODUCT LAUNCHES 159
 TABLE 98 FARO TECHNOLOGIES: DEALS 159

11.1.3 MATTERPORT INCORPORATED 162

TABLE 99 MATTERPORT INCORPORATED: BUSINESS OVERVIEW 162
 FIGURE 45 MATTERPORT INCORPORATED: COMPANY SNAPSHOT 163
 TABLE 100 MATTERPORT INCORPORATED: PRODUCTS/SOLUTIONS/SERVICES OFFERED 163
 TABLE 101 MATTERPORT INCORPORATION: PRODUCT LAUNCHES 164
 TABLE 102 MATTERPORT INCORPORATED: DEALS 164

11.1.4 RICOH CO., LTD. 166

TABLE 103 RICOH: BUSINESS OVERVIEW 166
 FIGURE 46 RICOH: COMPANY SNAPSHOT 167
 TABLE 104 RICOH: PRODUCTS/SOLUTIONS/SERVICES OFFERED 167
 TABLE 105 RICOH: PRODUCT LAUNCHES 168

11.1.5 LEICA GEOSYSTEMS AG 170

TABLE 106 LEICA GEOSYSTEMS AG: BUSINESS OVERVIEW 170
 TABLE 107 LEICA GEOSYSTEMS AG: PRODUCTS/SOLUTIONS/SERVICES OFFERED 170
 TABLE 108 LEICA GEOSYSTEMS AG: PRODUCT LAUNCHES 171

11.1.6 PANASONIC HOLDINGS CORPORATION 174

TABLE 109 PANASONIC HOLDINGS CORPORATION: BUSINESS OVERVIEW 174
 FIGURE 47 PANASONIC HOLDINGS CORPORATION: COMPANY SNAPSHOT 175
 TABLE 110 PANASONIC HOLDINGS CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED 175
 TABLE 111 PANASONIC HOLDINGS CORPORATION: DEALS 176

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11.1.7	GIRAFFE360	177
TABLE 112	GIRAFFE360: BUSINESS OVERVIEW	177
TABLE 113	GIRAFFE360: PRODUCTS/SOLUTIONS/SERVICES OFFERED	177
TABLE 114	GIRAFFE360: PRODUCT LAUNCHES	178
11.1.8	INSTA360	179
TABLE 115	INSTA360: BUSINESS OVERVIEW	179
TABLE 116	INSTA360: PRODUCTS/SOLUTIONS/SERVICES OFFERED	179
TABLE 117	INSTA360: DEALS	180
11.1.9	NAVVIS	181
TABLE 118	NAVVIS: BUSINESS OVERVIEW	181
TABLE 119	NAVVIS: PRODUCTS/SOLUTIONS/SERVICES OFFERED	181
TABLE 120	NAVVIS: PRODUCT LAUNCHES	182
TABLE 121	NAVVIS: DEALS	182
11.1.10	GEOSLAM	183
TABLE 122	GEOSLAM: BUSINESS OVERVIEW	183
TABLE 123	GEOSLAM: PRODUCTS/SOLUTIONS/SERVICES OFFERED	183
TABLE 124	GEOSLAM: DEALS	184
11.1.11	INTEL CORPORATION	185
TABLE 125	INTEL CORPORATION: BUSINESS OVERVIEW	185
FIGURE 48	INTEL CORPORATION: COMPANY SNAPSHOT	186
TABLE 126	INTEL CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED	186
TABLE 127	INTEL CORPORATION: PRODUCT LAUNCHES	187
TABLE 128	INTEL CORPORATION: DEALS	188
11.2	OTHER PLAYERS	189
11.2.1	KANDAO	189
11.2.2	FUJIFILM CORPORATION	190
11.2.3	MECH-MIND ROBOTICS	191
11.2.4	GOPRO INCORPORATED	192
11.2.5	EASTMAN KODAK COMPANY	192
11.2.6	COGNEX CORPORATION	193
11.2.7	AXIS COMMUNICATIONS AB	194
11.2.8	PICKIT 3D	195
11.2.9	SONY CORPORATION	196
11.2.10	4DAGE CO., LTD.	197
11.2.11	REALSEE	198
11.2.12	PLANITAR INC.	199
11.2.13	TRIMBLE INC.	200
11.2.14	HIKROBOT CO., LTD.	201
11.2.15	IFM ELECTRONIC GMBH	202
*Details on Business Overview, Products Offered, Recent Developments, MnM View, Right to win, Strategic choices made, Weaknesses and competitive threats might not be captured in case of unlisted companies.		
12	APPENDIX	203
12.1	DISCUSSION GUIDE	203
12.2	KNOWLEDGESTORE: MARKETSandMARKETS' SUBSCRIPTION PORTAL	206
12.3	CUSTOMIZATION OPTIONS	208
12.4	RELATED REPORTS	208
12.5	AUTHOR DETAILS	209

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