

## **Photoelectric Sensor Market by Sensing Mode (Through-beam, Retroreflective, Diffuse Reflective), Structural (Interrupter, Fiber-optic, Multi-beam), Mounting (Cylindrical, Rectangular, Threaded Barrel, Fork), Source (Laser, LED) - Global Forecast to 2032**

Market Report | 2025-12-02 | 256 pages | MarketsandMarkets

### **AVAILABLE LICENSES:**

- Single User \$4950.00
- Multi User \$6650.00
- Corporate License \$8150.00
- Enterprise Site License \$10000.00

### **Report description:**

At a CAGR of 8.1%, the global photoelectric sensor market is anticipated to grow from USD 2.33 billion in 2025 to USD 4.02 billion by 2032. The market is driven by the increasing emphasis on quality control, operational safety, and energy efficiency in industrial environments. The expanding use of automated inspection systems, material handling equipment, and logistics automation fuels the demand for precise object detection solutions. Moreover, the shift toward contactless sensing technologies to reduce wear and maintenance costs accelerates the adoption across diverse end-use industries.

<https://mnmmimg.marketsandmarkets.com/Images/photoelectric-sensor-market-img-overview.webp>

"Cylindrical segment is expected to capture a prominent share of photoelectric sensor market in 2025"

The cylindrical segment is expected to hold the largest market share in 2025 during the forecast period, owing to its versatile design, ease of installation, and wide compatibility with industrial equipment. These sensors are available in standard sizes (such as M12, M18, and M30), making them suitable for integration across various automation systems. Their rugged construction and high sensing accuracy enable reliable performance in harsh industrial environments like automotive, packaging, and material handling. Additionally, the growing demand for compact and easily replaceable sensor solutions further strengthens the dominance of cylindrical photoelectric sensors in the global market.

"LED segment is projected to record a significant growth rate during the forecast period"

**Scotts International. EU Vat number: PL 6772247784**

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

[www.scotts-international.com](http://www.scotts-international.com)

The LED segment is projected to grow commendably in the photoelectric sensor market during the forecast period, driven by its cost-effectiveness, long operational life, and energy efficiency. LED-based sensors offer stable light emission, quick response times, and reliable detection over short to medium ranges, making them ideal for packaging, material handling, and assembly line applications. Their low heat generation and minimal maintenance requirements further enhance their appeal for continuous industrial operations. Moreover, advances in high-intensity and multi-wavelength LED technology improve detection accuracy and expand their usability across diverse industrial environments.

"Asia Pacific is anticipated to be the fastest-growing market from 2025 to 2032"

Asia Pacific is projected to be the fastest-growing market for photoelectric sensors during the forecast period, driven by rapid industrialization, urbanization, and increasing adoption of automation technologies across manufacturing sectors. China, Japan, South Korea, and India are heavily investing in smart factories, robotics, and industrial IoT, fueling the demand for advanced sensing solutions. The expanding automotive, electronics, packaging, and semiconductor industries rely extensively on photoelectric sensors for precision detection and quality control. Additionally, government initiatives promoting digital transformation and smart manufacturing are accelerating sensor adoption. The presence of key players, including KEYENCE CORPORATION (Japan), OMRON Corporation (Japan), and Panasonic Corporation (Japan), with strong distribution networks further supports the robust market growth.

#### Breakdown of Primaries

Various executives from key organizations operating in the photoelectric sensor market, including CEOs, marketing directors, and innovation and technology directors, were interviewed in-depth. □

-□ By Company Type: Tier 1 - 25%, Tier 2 - 35%, and Tier 3 - 40%

-□ By Designation: Directors - 25%, C-level Executives - 35%, and Others - 40%

-□ By Region: North America - 25%, Europe - 42%, Asia Pacific - 21%, and RoW - 12%

Note: Three tiers of companies have been defined based on their total revenue as of 2024: Tier 1: >USD 500 million, Tier 2: USD 100 million-USD 500 million, and Tier 3: <USD 100 million. Other designations include sales managers, marketing managers, and product managers.

Major players profiled in the photoelectric sensor market report are Schneider Electric (France), OMRON Corporation (Japan), SICK AG (Germany), KEYENCE CORPORATION (Japan), Rockwell Automation (US), ifm electronic gmbh (Germany), Pepperl+Fuchs SE (Germany), Balluff GmbH (Germany), Panasonic Corporation (Japan), SensoPart Industriesensorik GmbH (Germany), HTMSensors (US), Fargo Controls Inc. (US), Eaton (Ireland), Leuze electronic GmbH + Co. KG (Germany), wenglor sensoric GmbH (Germany), Autonics Corporation (South Korea), BERNSTEIN AG (Germany), CNTD Electric Technology Co., Ltd. (China), Hans Turck GmbH & Co. KG (Germany), Carlo Gavazzi (Switzerland), Molex (US), Baumer (Switzerland), Contrinex S.A. (Switzerland), OPTEX FA CO., LTD. (Japan), TMSS France (France), and Pilz GmbH & Co. KG (Germany). These leading companies possess a broad portfolio of products and establish a prominent presence in established and emerging markets.

The study provides a detailed competitive analysis of these key market players, presenting their company profiles, most recent developments, and key market strategies.

#### Research Coverage

This report segments the photoelectric sensor market based on sensing mode, structural type, sensing range, mounting type, beam source, end user, and region. The sensing mode segment includes through-beam, retro-reflective, and diffuse-reflective. The structural type segment includes slot/fork/interrupter sensors, fiber-optic photoelectric sensors, and multi-beam/array sensors. The sensing range segment includes short range (<100 MM), mid range (100 MM-1 M), long range (1 M-30 M), ultra long range (>30 M). The mounting type segment includes cylindrical, rectangular, and slot/fork modules. The beam source segment comprises LED and laser. The end user segment includes automotive manufacturing, packaging printing & e-commerce logistics, food & beverages, pharmaceutical & medical, semiconductor & electronics, consumer goods, energy & utilities, and others. The

market has been segmented into four regions: North America, Asia Pacific, Europe, and RoW.

### Reasons to Buy the Report

The report will help the leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall market and the subsegments. It will also help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the photoelectric sensor market's pulse and provides information on key market drivers, restraints, challenges, and opportunities.

### Key Benefits of Buying the Report

- Analysis of key drivers (Extensive use of photoelectric sensors in different industries, Increased adoption of retroreflective photoelectric sensors in various applications, Surging adoption of industrial robots across several regions), restraints (US-China trade war, Easy availability of competent alternative sensors), opportunities (Increasing demand for photoelectric sensors for packaging applications from food & beverages industry, Ongoing digitization and emerging connected industries, Prevailing trend of miniaturized sensors, and challenges (Unavailability of raw materials, High maintenance costs of photoelectric sensors) influencing the growth of the photoelectric sensor market
- Product Development/Innovation: Detailed insights on upcoming technologies, research and development activities, and product launches in the photoelectric sensor market
- Market Development: Comprehensive information about lucrative markets, including the analysis of the photoelectric sensor market across varied regions
- Market Diversification: Exhaustive information about new products/services, untapped geographies, recent developments, and investments in the photoelectric sensor market
- Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players, including OMRON Corporation (Japan), Schneider Electric (France), KEYENCE CORPORATION (Japan), Rockwell Automation (US), and SICK AG (Germany).

### Table of Contents:

1 □ INTRODUCTION □ 25
1.1 □ STUDY OBJECTIVES □ 25
1.2 □ MARKET DEFINITION □ 25
1.3 □ STUDY SCOPE □ 26
1.3.1 □ MARKET SEGMENTATION & REGIONAL SCOPE □ 26
1.3.2 □ INCLUSIONS & EXCLUSIONS □ 27
1.4 □ YEARS CONSIDERED □ 28
1.5 □ CURRENCY CONSIDERED □ 28
1.6 □ STAKEHOLDERS □ 28
1.7 □ SUMMARY OF CHANGES □ 29
2 □ EXECUTIVE SUMMARY □ 30
2.1 □ KEY INSIGHTS AND MARKET HIGHLIGHTS □ 30
2.2 □ KEY MARKET PARTICIPANTS: MAPPING OF STRATEGIC DEVELOPMENTS □ 31
2.3 □ DISRUPTIONS SHAPING PHOTOELECTRIC SENSOR MARKET □ 32
2.4 □ HIGH-GROWTH SEGMENTS □ 33

**Scotts International. EU Vat number: PL 6772247784**

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

[www.scotts-international.com](http://www.scotts-international.com)

2.5 GLOBAL SNAPSHOT: MARKET SIZE, GROWTH RATE, AND FORECAST	34
3 PREMIUM INSIGHTS	35
3.1 ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN PHOTOELECTRIC SENSOR MARKET	35
3.2 PHOTOELECTRIC SENSOR MARKET, BY SENSING MODE	35
3.3 PHOTOELECTRIC SENSOR MARKET, BY END USER	36
3.4 NORTH AMERICA: PHOTOELECTRIC SENSOR MARKET, BY END USER AND COUNTRY	36
3.5 PHOTOELECTRIC SENSOR MARKET, BY REGION	37
4 MARKET OVERVIEW	38
4.1 INTRODUCTION	38
4.2 MARKET DYNAMICS	38
4.2.1 DRIVERS	39
4.2.1.1 Widespread adoption of photoelectric sensors across multiple industries	39
4.2.1.2 Expanded application of retro-reflective photoelectric sensors in various industries	39
4.2.1.3 Rapid adoption of industrial robots across multiple regions	39
4.2.2 RESTRAINTS	41
4.2.2.1 Rising trade tensions between US and China	41
4.2.2.2 Easy availability of competent alternative sensors	41
4.2.3 OPPORTUNITIES	42
4.2.3.1 Rising use of photoelectric sensors in food & beverage packaging applications	42
4.2.3.2 Advanced digital transformation and expansion of connected industrial ecosystems	42
4.2.3.3 Growing use of compact, miniaturized sensor solutions	43
4.2.4 CHALLENGES	43
4.2.4.1 High maintenance costs	43
4.3 UNMET NEEDS AND WHITE SPACES	44
4.4 UNMET NEEDS IN PHOTOELECTRIC SENSOR MARKET	44
4.5 WHITE SPACE OPPORTUNITIES	44
4.6 INTERCONNECTED MARKETS AND CROSS-SECTOR OPPORTUNITIES	45
4.7 STRATEGIC MOVES BY TIER 1/2/3 PLAYERS	45
5 STRATEGIC DISRUPTION, PATENT, DIGITAL, AND AI ADOPTION	47
5.1 KEY EMERGING TECHNOLOGIES	47
5.1.1 CMOS TECHNOLOGY	47
5.1.2 DURABEAM TECHNOLOGY	47
5.1.3 MULTI-PIXEL TECHNOLOGY (MPT)	47
5.2 COMPLEMENTARY TECHNOLOGIES	47
5.2.1 INDUSTRIAL IOT (IIOT) & EDGE CONNECTIVITY	47
5.2.2 MACHINE VISION & AI-BASED VISION SYSTEMS	47
5.3 TECHNOLOGY/PRODUCT ROADMAP	48
5.4 PATENT ANALYSIS	49
5.5 IMPACT OF AI/GEN AI ON PHOTOELECTRIC SENSOR MARKET	50
5.5.1 CASE STUDY: IMPLEMENTATION OF AI IN PHOTOELECTRIC SENSOR MARKET	52
5.5.2 INTERCONNECTED ADJACENT ECOSYSTEM AND IMPACT	52
5.5.3 CLIENT READINESS TO ADOPT GEN AI IN PHOTOELECTRIC SENSOR MARKET	52
6 REGULATORY LANDSCAPE	53
6.1 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS	53
6.2 REGULATIONS, BY REGION	55
6.2.1 NORTH AMERICA	55
6.2.1.1 ANSI B11 - Machine Safety	55

6.2.2 EUROPE	55
6.2.2.1 Machinery Directive (2006/42/EC)	55
6.2.3 ASIA PACIFIC	55
6.2.3.1 RoHS and REACH Regulations	55
6.2.4 MIDDLE EAST	56
6.2.4.1 UAE National Strategy for Artificial Intelligence	56
6.3 STANDARDS & CERTIFICATIONS	56
?	
7 CUSTOMER LANDSCAPE & BUYER BEHAVIOR	57
7.1 DECISION-MAKING PROCESS	57
7.2 BUYER STAKEHOLDERS AND BUYING EVALUATION CRITERIA	58
7.2.1 KEY STAKEHOLDERS IN BUYING PROCESS	58
7.2.2 BUYING CRITERIA	59
7.3 ADOPTION BARRIERS & INTERNAL CHALLENGES	60
7.4 UNMET NEEDS FROM VARIOUS END USERS	60
8 TECHNOLOGY AND INNOVATION TRENDS	62
8.1 INTRODUCTION	62
8.2 SHIFT TO HYBRID CONNECTORS	62
8.3 INTEGRATION WITH AI AND EDGE COMPUTING HARDWARE	62
8.4 DEVELOPMENT OF EMI-SHIELDED AND HIGH-SPEED CONNECTOR SOLUTIONS	62
8.5 MINIATURIZATION AND DEMAND FOR FINE-PITCH CONNECTORS	62
8.6 ADVANCEMENTS IN AUTOMATED TESTING AND INSPECTION DURING MANUFACTURING	63
9 INDUSTRY TRENDS	64
9.1 PORTER'S FIVE FORCES ANALYSIS	64
9.1.1 THREAT FROM NEW ENTRANTS	65
9.1.2 THREAT FROM SUBSTITUTES	65
9.1.3 BARGAINING POWER OF SUPPLIERS	65
9.1.4 BARGAINING POWER OF BUYERS	66
9.1.5 INTENSITY OF COMPETITIVE RIVALRY	66
9.2 MACROECONOMIC INDICATORS	66
9.2.1 INTRODUCTION	66
9.2.2 GDP TRENDS AND FORECAST	66
9.2.3 TRENDS IN GLOBAL AUTOMOTIVE MANUFACTURING INDUSTRY	68
9.2.4 TRENDS IN PACKAGING AND PRINTING & E-COMMERCE LOGISTICS INDUSTRY	69
9.3 VALUE CHAIN ANALYSIS	69
9.4 ECOSYSTEM ANALYSIS	70
9.5 PRICING ANALYSIS	72
9.5.1 AVERAGE SELLING PRICE OF PHOTOELECTRIC SENSING MODES, BY KEY PLAYER	72
9.5.2 AVERAGE SELLING PRICE, BY REGION	72
9.6 TRADE ANALYSIS	73
9.6.1 IMPORT SCENARIO	73
9.6.2 EXPORT SCENARIO	75
9.7 KEY CONFERENCES & EVENTS, 2025-2026	76
9.8 TRENDS/DISRUPTIONS IMPACTING CUSTOMERS' CUSTOMER	76
9.9 INVESTMENT & FUNDING SCENARIO	77
9.10 CASE STUDY ANALYSIS	78

9.10.1	INTEGRATION OF SICK AG'S PHOTOELECTRIC SENSORS WITH HEYE INTERNATIONAL GMBH'S MACHINERY FOR ACCURATE GLASS BOTTLE COUNTING	78
9.10.2	AUDIO HUNGARIA MOTOR DEPLOYED OG DIFFUSE REFLECTION TYPE PHOTOELECTRIC SENSORS FROM IFM ELECTRONIC GMBH	78
9.10.3	ENHANCING MANUFACTURING EFFICIENCY AND QUALITY THROUGH ADVANCED PHOTOELECTRIC SENSOR DEPLOYMENT AT KEYENCE	79
9.11	IMPACT OF 2025 US TARIFFS	79
9.11.1	INTRODUCTION	79
9.11.2	KEY TARIFF RATES	80
9.11.3	PRICE IMPACT ANALYSIS	80
9.11.4	IMPACT ON COUNTRY/REGION	81
9.11.4.1	US	81
9.11.4.2	Europe	82
9.11.4.3	Asia Pacific	82
9.11.5	IMPACT ON END-USE INDUSTRIES	83
10	PHOTOELECTRIC SENSOR MARKET, BY SENSING MODE	85
10.1	INTRODUCTION	86
10.2	THROUGH BEAM	88
10.2.1	THROUGH-BEAM PHOTOELECTRIC SENSORS PROVIDE LONG-DISTANCE DETECTION	88
10.3	RETRO REFLECTIVE	95
10.3.1	RISING NEED FOR RETRO REFLECTIVE PHOTOELECTRIC SENSORS FOR TRANSPARENT PRODUCTS	95
10.4	DIFFUSE REFLECTIVE	102
10.4.1	NEED FOR COST-EFFICIENT SENSORS TO DRIVE DEMAND	102
11	PHOTOELECTRIC SENSOR MARKET, BY STRUCTURAL TYPE	110
11.1	INTRODUCTION	111
11.2	SLOT/FORK/INTERRUPTER SENSORS	112
11.2.1	NEED FOR SENSORS FOR HIGH-SPEED PRECISION TASKS TO DRIVE MARKET	112
11.3	FIBER-OPTIC PHOTOELECTRIC SENSORS	113
11.3.1	INCREASE USE OF SENSORS IN EXTREME AND CONFINED ENVIRONMENTS TO DRIVE DEMAND	113
11.4	MULTI-BEAM/ARRAY SENSORS	114
11.4.1	FOCUS ON WIDE-AREA PROFILING AND DIMENSIONING SOLUTIONS TO BOOST GROWTH	114
12	PHOTOELECTRIC SENSOR MARKET, BY SENSING RANGE	116
12.1	INTRODUCTION	117
12.2	SHORT RANGE (< 100 MM)	118
12.2.1	NEED FOR SENSORS WITH HIGH RESOLUTION AND QUICK RESPONSE TIMES TO DRIVE MARKET	118
12.3	MID RANGE (100 MM-1 M)	120
12.3.1	DEMAND FOR SENSORS THAT BALANCE COST, RELIABILITY, AND PERFORMANCE TO DRIVE MARKET	120
12.4	LONG RANGE (1 M-30 M)	121
12.4.1	GROWING DEMAND FOR LONG-RANGE SENSORS IN INTRALOGISTICS AND AGVS TO DRIVE MARKET	121
12.5	ULTRA LONG RANGE (> 30 M)	123
12.5.1	ULTRA-LONG-RANGE SENSORS ARE CRITICAL FOR OUTDOOR AND LARGE-SCALE AUTOMATION	123
13	PHOTOELECTRIC SENSOR MARKET, BY MOUNTING TYPE	125
13.1	INTRODUCTION	126
13.2	CYLINDRICAL	127
13.2.1	NEED FOR SENSORS WITH STANDARDIZED THREAD SIZE AND QUICK-CHANGE CAPABILITY TO DRIVE MARKET	127
13.2.2	M5	128

13.2.3	M8	128
13.2.4	M12	128
13.2.5	M18	128
13.2.6	M30	128
13.3	RECTANGULAR	128
13.3.1	DEMAND FOR SPACE-EFFICIENT SENSORS WITH FEATURE-RICH DESIGN TO DRIVE MARKET	128
13.4	SLOT/FORK MODULES	129
13.4.1	NEED FOR HIGH PRECISION AND IMMUNITY IN DEDICATED APPLICATIONS TO DRIVE GROWTH	129
14	PHOTOELECTRIC SENSOR MARKET, BY BEAM SOURCE	130
14.1	INTRODUCTION	131
14.2	LED	132
14.2.1	NEED FOR SENSORS OFFERING EXCELLENT PRICE-PERFORMANCE RATIO TO DRIVE MARKET	132
14.3	LASER	132
14.3.1	FOCUS ON RELIABLE DETECTION OF STRUCTURED SURFACES TO DRIVE MARKET FOR LASER-BASED SENSORS	132
15	PHOTOELECTRIC SENSOR MARKET, BY END USER	133
15.1	INTRODUCTION	134
15.2	AUTOMOTIVE MANUFACTURING	136
15.2.1	RAPID INTEGRATION OF PHOTOELECTRIC SENSORS ACROSS ROBOTIC ASSEMBLY AND QUALITY INSPECTION LINES TO DRIVE MARKET	136
15.3	PACKAGING AND PRINTING & E-COMMERCE LOGISTICS	137
15.3.1	ACCELERATED ADOPTION OF PHOTOELECTRIC SENSORS IN SORTATION AND PARCEL TRACKING SYSTEMS TO DRIVE MARKET	137
?		
15.4	FOOD & BEVERAGE	139
15.4.1	RISING NEED FOR HYGIENIC PROCESSING AND PACKAGING INSPECTION TO DRIVE MARKET	139
15.5	PHARMACEUTICAL & MEDICAL	140
15.5.1	PRECISION DRUG PACKAGING, DEVICE ASSEMBLY, AND CLEANROOM AUTOMATION TO DRIVE GROWTH	140
15.6	SEMICONDUCTOR & ELECTRONICS	142
15.6.1	STRONG DEMAND FOR ULTRA-PRECISE PHOTOELECTRIC SENSORS IN CHIP ASSEMBLY AND PCB INSPECTION TO BOOST GROWTH	142
15.7	CONSUMER GOODS	144
15.7.1	FOCUS ON HIGH-VOLUME ASSEMBLY AND QUALITY ASSURANCE OPERATIONS TO FUEL ADOPTION OF PHOTOELECTRIC SENSORS	144
15.8	ENERGY & UTILITIES	145
15.8.1	INCREASING APPLICATION OF PHOTOELECTRIC SENSORS IN POWER PLANTS AND RENEWABLE ENERGY SYSTEMS TO BOOST GROWTH	145
15.9	OTHERS	147
16	PHOTOELECTRIC SENSOR MARKET, BY REGION	149
16.1	INTRODUCTION	150
16.2	NORTH AMERICA	152
16.2.1	US	154
16.2.1.1	Ongoing industrial automation to drive market	154
16.2.2	CANADA	154
16.2.2.1	Rising investments in advanced technologies to drive growth	154
16.2.3	MEXICO	155
16.2.3.1	Rising manufacturing investments under FTAs to fuel market growth	155
16.3	EUROPE	155

16.3.1 GERMANY 157

16.3.1.1 Expanding automotive industry to drive demand for photoelectric sensors 157

16.3.2 UK 158

16.3.2.1 Expanding construction sector to drive demand for photoelectric sensors 158

16.3.3 FRANCE 158

16.3.3.1 Rising deployment of robotics and automated machinery to boost market growth 158

16.3.4 ITALY 158

16.3.4.1 Adoption of photoelectric sensors among small and medium-sized enterprises to boost market 158

16.3.5 SPAIN 158

16.3.5.1 Rapid industrial automation across manufacturing, logistics, and food & beverage sectors to drive market 158

16.3.6 NORDICS 159

16.3.6.1 Expanding warehouse automation and e-commerce logistics to contribute to growth 159

16.3.7 REST OF EUROPE 159

16.4 ASIA PACIFIC 159

16.4.1 CHINA 162

16.4.1.1 Rapid industrial automation across manufacturing sector to boost market 162

16.4.2 JAPAN 163

16.4.2.1 Need for robust industrial automation and smart manufacturing to drive market 163

16.4.3 SOUTH KOREA 163

16.4.3.1 Rising demand for photoelectric sensors in industrial robotic applications to drive market 163

16.4.4 INDIA 163

16.4.4.1 Rapid expansion of manufacturing sector to boost demand 163

16.4.5 AUSTRALIA 163

16.4.5.1 Presence of advanced manufacturing and mining sectors to drive market 163

16.4.6 INDONESIA 164

16.4.6.1 Push toward industrialization and growth of manufacturing sector to drive market 164

16.4.7 MALAYSIA 164

16.4.7.1 Presence of robust electronics and semiconductor industries to drive growth 164

16.4.8 THAILAND 164

16.4.8.1 Rapid growth of automotive and food processing industries to drive market 164

16.4.9 VIETNAM 164

16.4.9.1 Evolving safety standards in pharmaceutical and consumer goods sectors to boost market 164

16.4.10 REST OF ASIA PACIFIC 165

16.5 ROW 165

16.5.1 SOUTH AMERICA 167

16.5.1.1 Focus on industrial modernization and mining automation to drive market 167

16.5.2 MIDDLE EAST 168

16.5.2.1 Saudi Arabia 169

16.5.2.1.1 ?Vision 2030' to fuel adoption of photoelectric sensors 169

16.5.2.2 UAE 169

16.5.2.2.1 Industry 4.0 and smart cities to drive demand for photoelectric sensors 169

16.5.2.3 Oman 169

16.5.2.3.1 Emerging industrial zones to ignite adoption of photoelectric sensors 169

16.5.2.4 Qatar 169

16.5.2.4.1 LNG expansion and petrochemical diversification to drive market growth 169

?

16.5.2.5 Kuwait 170

**Scotts International. EU Vat number: PL 6772247784**

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

www.scotts-international.com

16.5.2.5.1	Need for modernization of refineries and safety of petrochemicals to boost demand	170
16.5.2.6	Bahrain	170
16.5.2.6.1	Growth of logistics industry to spur demand for photoelectric sensors	170
16.5.2.7	Rest of Middle East	170
16.5.3	AFRICA	170
16.5.3.1	South Africa	171
16.5.3.1.1	Focus on automation of mining and manufacturing revival to drive growth	171
16.5.3.2	Other African countries	171
17	COMPETITIVE LANDSCAPE	172
17.1	INTRODUCTION	172
17.2	KEY PLAYER STRATEGIES/RIGHT TO WIN, 2021-2025	172
17.3	REVENUE ANALYSIS, 2020-2024	173
17.4	MARKET SHARE ANALYSIS, 2024	174
17.5	BRAND/PRODUCT COMPARISON	176
17.6	COMPANY VALUATION AND FINANCIAL METRICS	176
17.7	COMPANY EVALUATION MATRIX: KEY PLAYERS, 2024	177
17.7.1	STARS	177
17.7.2	EMERGING LEADERS	177
17.7.3	PERVASIVE PLAYERS	177
17.7.4	PARTICIPANTS	177
17.7.5	COMPANY FOOTPRINT: KEY PLAYERS, 2024	179
17.7.5.1	Company footprint	179
17.7.5.2	Region footprint	180
17.7.5.3	Sensing mode footprint	181
17.7.5.4	Beam source footprint	182
17.7.5.5	End user footprint	183
17.8	COMPANY EVALUATION MATRIX: STARTUPS/SMES, 2024	184
17.8.1	PROGRESSIVE COMPANIES	184
17.8.2	RESPONSIVE COMPANIES	184
17.8.3	DYNAMIC COMPANIES	184
17.8.4	STARTING BLOCKS	184
17.8.5	COMPETITIVE BENCHMARKING: STARTUPS/SMES, 2024	186
17.8.5.1	Detailed list of key startups/SMEs	186
17.8.5.2	Competitive benchmarking of key startups/SMEs	186
17.9	COMPETITIVE SCENARIO	187
17.9.1	PRODUCT LAUNCHES/ENHANCEMENTS	187
17.9.2	DEALS	189
18	COMPANY PROFILES	190
18.1	KEY PLAYERS	190
18.1.1	OMRON CORPORATION	190
18.1.1.1	Business overview	190
18.1.1.2	Products offered	191
18.1.1.3	MnM view	193
18.1.1.3.1	Key strengths	193
18.1.1.3.2	Strategic choices	193
18.1.1.3.3	Weaknesses and competitive threats	193
18.1.2	SCHNEIDER ELECTRIC	194

18.1.2.1	Business overview	194
18.1.2.2	Products offered	195
18.1.2.3	Recent developments	196
18.1.2.3.1	Product launches/enhancements	196
18.1.2.4	MnM view	196
18.1.2.4.1	Key strengths	196
18.1.2.4.2	Strategic choices	197
18.1.2.4.3	Weaknesses and competitive threats	197
18.1.3	KEYENCE CORPORATION	198
18.1.3.1	Business overview	198
18.1.3.2	Products offered	199
18.1.3.3	Recent developments	200
18.1.3.3.1	Product launches/enhancements	200
18.1.3.4	MnM view	200
18.1.3.4.1	Key strengths	200
18.1.3.4.2	Strategic choices	200
18.1.3.4.3	Weaknesses and competitive threats	200
18.1.4	ROCKWELL AUTOMATION	201
18.1.4.1	Business overview	201
18.1.4.2	Products offered	202
18.1.4.3	Recent developments	203
18.1.4.3.1	Product launches/enhancements	203
18.1.4.4	MnM view	203
18.1.4.4.1	Key strengths	203
18.1.4.4.2	Strategic choices	203
18.1.4.4.3	Weaknesses and competitive threats	204
18.1.5	SICK AG	205
18.1.5.1	Business overview	205
18.1.5.2	Products offered	206
18.1.5.3	Recent developments	207
18.1.5.3.1	Product launches/enhancements	207
?		
18.1.5.4	MnM view	208
18.1.5.4.1	Key strengths	208
18.1.5.4.2	Strategic choices	208
18.1.5.4.3	Weaknesses and competitive threats	208
18.1.6	PANASONIC CORPORATION	209
18.1.6.1	Business overview	209
18.1.6.2	Products offered	210
18.1.7	IFM ELECTRONIC GMBH	212
18.1.7.1	Business overview	212
18.1.7.2	Products offered	212
18.1.7.3	Recent developments	213
18.1.7.3.1	Deals	213
18.1.8	PEPPERL+FUCHS	214
18.1.8.1	Business overview	214
18.1.8.2	Products offered	214

18.1.8.3 Recent developments	217
18.1.8.3.1 Product launches/enhancements	217
18.1.9 BALLUFF AUTOMATION INDIA PVT. LTD.	218
18.1.9.1 Business overview	218
18.1.9.2 Products offered	218
18.1.10 EATON	219
18.1.10.1 Business overview	219
18.1.10.2 Products offered	220
18.2 OTHER PLAYERS	222
18.2.1 SENSO PART INDUSTRIESENSORIK GMBH	222
18.2.2 HTMSENSORS	223
18.2.3 FARGO CONTROLS INC.	224
18.2.4 LEUZE ELECTRONIC, INC.	225
18.2.5 WENGLOR SENSORIC GMBH	226
18.2.6 AUTONICS CORPORATION	227
18.2.7 SINGOO	228
18.2.8 HANS TURCK GMBH & CO. KG	229
18.2.9 CARLO GAVAZZI HOLDING AG	230
18.2.10 BAUMER	231
18.2.11 CONTRINEX INC.	232
18.2.12 OPTEX FA CO., LTD.	233
18.2.13 TMSS FRANCE	234
18.2.14 PILZ GMBH & CO. KG	234
18.2.15 BANNER ENGINEERING CORP.	235
?	
19 RESEARCH METHODOLOGY	236
19.1 RESEARCH DATA	236
19.1.1 SECONDARY AND PRIMARY RESEARCH	237
19.1.2 SECONDARY DATA	238
19.1.2.1 List of key secondary sources	238
19.1.2.2 Key data from secondary sources	239
19.1.3 PRIMARY DATA	239
19.1.3.1 List of primary interview participants	239
19.1.3.2 Major primary interviewees	240
19.1.3.3 Key data from primary sources	240
19.1.3.4 Key industry insights	241
19.1.3.5 Breakdown of primaries	241
19.2 MARKET SIZE ESTIMATION METHODOLOGY	242
19.2.1 BOTTOM-UP APPROACH	242
19.2.1.1 Market size estimation using bottom-up analysis (demand side)	242
19.2.2 TOP-DOWN APPROACH	243
19.2.2.1 Market size estimation using top-down analysis (supply side)	243
19.3 DATA TRIANGULATION	245
19.4 RESEARCH ASSUMPTIONS	246
19.5 RESEARCH LIMITATIONS	246
19.6 RISK ASSESSMENT	246
20 APPENDIX	247

20.1 INSIGHTS FROM INDUSTRY EXPERTS 247

20.2 DISCUSSION GUIDE 247

20.3 KNOWLEDGESTORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL 252

20.4 CUSTOMIZATION OPTIONS 254

20.5 RELATED REPORTS 254

20.6 AUTHOR DETAILS 255

**Scotts International. EU Vat number: PL 6772247784**

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

[www.scotts-international.com](http://www.scotts-international.com)

**Photoelectric Sensor Market by Sensing Mode (Through-beam, Retroreflective, Diffuse Reflective), Structural (Interrupter, Fiber-optic, Multi-beam), Mounting (Cylindrical, Rectangular, Threaded Barrel, Fork), Source (Laser, LED) - Global Forecast to 2032**

Market Report | 2025-12-02 | 256 pages | MarketsandMarkets

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	\$4950.00
	Multi User	\$6650.00
	Corporate License	\$8150.00
	Enterprise Site License	\$10000.00
		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*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>

**Scotts International. EU Vat number: PL 6772247784**

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

[www.scotts-international.com](http://www.scotts-international.com)

Zip Code\*

Country\*

Date

Signature

**Scotts International. EU Vat number: PL 6772247784**

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

[www.scotts-international.com](http://www.scotts-international.com)