

Optical Satellite Market by Size (Small, Medium, Large), Application (Earth Observation, Communication), Operational Orbit, Component, End User and Region (North America, Europe, Asia Pacific, Rest of the world) - Global Forecast to 2028

Market Report | 2023-10-25 | 224 pages | MarketsandMarkets

AVAILABLE LICENSES:

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

Report description:

The optical satellite market is valued at USD 2.0 billion in 2023 and is projected to reach USD 4.1 billion by 2028, at a CAGR of 15.1% from 2023 to 2028. Over the last few decades, the optical satellite industry has continued to evolve with expanding use cases, better cost efficiencies, and a more significant impact of new technological developments in the satellites. The optical satellite market is experiencing growth driven by increasing communication and demand for high-resolution earth observation and imaging capabilities across multiple sectors, including agriculture, forestry, urban planning, disaster management, and defense. Technological advancements, particularly in cost-effective, compact satellite platforms, are improving market accessibility. Growing involvement of commercial space enterprises and government investments in space infrastructure are stimulating competition and innovation.

Based on application, the earth observation segment is estimated to have the second largest market share in 2023.

The earth observation segment in the optical satellite market is being driven by evolving global security dynamics. The Earth observation segment in the optical satellite market is being propelled by increasing demand for high-precision geospatial data across sectors like agriculture, urban planning, and environmental monitoring. Technological advancements, particularly in cost-effective small satellite platforms, are expanding market accessibility. Growing environmental concerns, along with government and commercial investments in space infrastructure, underscore the need for optical satellites in monitoring and addressing environmental challenges. This competitive landscape is driving innovation and enhancing the market's overall growth prospects.

Based on size, the small segment is estimated to have the second largest market share in 2023.

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

The small segment within the optical satellite market is being driven by cost-efficiency and versatility. The advancements in miniaturization and cost-effective satellite technology have lowered entry barriers, fostering heightened competition. The escalating demand for precise Earth observation and imaging services in sectors such as agriculture, logistics, and environmental monitoring is bolstering the requirement for compact, agile satellites capable of delivering targeted data. This competitive landscape is propelling growth in the small satellite segment.

Based on regions, the Asia Pacific region is estimated to have the second largest market share in 2023.

The Asia Pacific region is witnessing robust growth in the optical satellite market driven by key business factors. The region's thriving economies are generating increased demand for high-resolution Earth observation and imaging services across various industries. Governments in the region are making substantial investments in space infrastructure and satellite technology, which is accelerating the development and deployment of optical satellites. Additionally, the presence of a rapidly expanding commercial space sector, particularly in countries like Japan and China, is intensifying competition and driving innovation, contributing to market expansion.

The break-up of the profile of primary participants in the optical satellite market:

- By Company Type: Tier 1 - 35%, Tier 2 - 45%, and Tier 3 - 20%
- By Designation: C Level - 40%, Director Level - 25%, and Others - 35%
- By Region: North America - 40%, Europe - 25%, Asia Pacific - 25%, Rest of the World (RoW) - 10%

Major companies profiled in the report include SpaceX (US), Lockheed Martin Corporation (US), Ball Corporation (US), Airbus Defense & Space (Germany), and L3Harris Technologies, Inc. (US), among others.

Research Coverage:

This market study covers the optical satellite market across various segments and subsegments. It aims to estimate this market's size and growth potential across different parts based on size, operational orbits, application, component, end user, and region. This study also includes an in-depth competitive analysis of the key players in the market, their company profiles, key observations related to their product and business offerings, recent developments, and key market strategies they adopted.

Reasons to buy this report:

The report will help the market leaders/new entrants with information on the closest approximations of the revenue numbers for the overall optical satellite market. This report will 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 market pulse and provides information on key market drivers, restraints, challenges, and opportunities. The optical satellite market is experiencing substantial growth, primarily driven by the exchange of real-time information. The increasing trend toward international cooperation and joint operations among nations is fostering demand for optical satellites, contributing to regional and global stability. The report provides insights on the following pointers:

-□Market Drivers: Market Drivers such as the need for Earth observation imagery and analytics, Technological advancements in optical satellite communication, and other drivers covered in the report.

-□Market Penetration: Comprehensive information on optical satellite offered by the top players in the market

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

-□Market Development: Comprehensive information about lucrative markets - the report analyses the optical satellite market across varied regions.

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

-□Market Diversification: Exhaustive information about new products, untapped geographies, recent developments, and investments in the optical satellite market

-□Competitive Assessment: In-depth assessment of market shares, growth strategies, products, and manufacturing capabilities of leading players in the optical satellite market

Table of Contents:

1	INTRODUCTION	29
1.1	STUDY OBJECTIVES	29
1.2	MARKET DEFINITION	29
1.3	STUDY SCOPE	30
1.3.1	MARKETS COVERED	30
FIGURE 1	OPTICAL SATELLITE MARKET SEGMENTATION	30
1.3.2	REGIONS COVERED	30
1.3.3	YEARS CONSIDERED	31
1.4	INCLUSIONS AND EXCLUSIONS	31
TABLE 1	INCLUSIONS AND EXCLUSIONS	31
1.5	CURRENCY CONSIDERED	32
TABLE 2	USD EXCHANGE RATES	32
1.6	STAKEHOLDERS	32
2	RESEARCH METHODOLOGY	33
2.1	RESEARCH DATA	33
FIGURE 2	RESEARCH PROCESS FLOW	33
FIGURE 3	RESEARCH DESIGN	34
2.1.1	SECONDARY DATA	34
2.1.1.1	Secondary sources	35
2.1.2	PRIMARY DATA	35
2.1.2.1	Primary sources	35
2.1.2.2	Key data from primary sources	36
FIGURE 4	BREAKDOWN OF PRIMARY INTERVIEWS	36
2.2	FACTOR ANALYSIS	37
2.2.1	INTRODUCTION	37
2.2.2	DEMAND-SIDE INDICATORS	37
2.2.3	SUPPLY-SIDE INDICATORS	37
2.2.4	RECESSION IMPACT	38
2.3	MARKET SIZE ESTIMATION	38
2.3.1	BOTTOM-UP APPROACH	38
2.3.1.1	Market size estimation and methodology	38
FIGURE 5	BOTTOM-UP APPROACH	39
2.3.2	TOP-DOWN APPROACH	39
FIGURE 6	TOP-DOWN APPROACH	39
2.4	DATA TRIANGULATION	40
FIGURE 7	DATA TRIANGULATION	40
2.5	RESEARCH ASSUMPTIONS	41
2.6	RESEARCH LIMITATIONS	41
2.7	RISK ASSESSMENT	42
3	EXECUTIVE SUMMARY	43

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

FIGURE 8 COMMUNICATION SEGMENT TO HOLD LARGEST MARKET SHARE IN 2023 43

FIGURE 9 LARGE SATELLITES TO SECURE LEADING MARKET POSITION IN 2028 44

FIGURE 10 COMMERCIAL TO SURPASS OTHER SEGMENTS DURING FORECAST PERIOD 44

FIGURE 11 MEO/GEO SEGMENT TO ACCOUNT FOR LARGER MARKET SHARE IN 2023 45

FIGURE 12 EUROPE TO RECORD HIGHEST CAGR DURING FORECAST PERIOD 45

4 PREMIUM INSIGHTS 47

4.1 ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN OPTICAL SATELLITE MARKET 47

FIGURE 13 INCREASE IN DEMAND FOR EARTH MONITORING AND REAL-TIME INFORMATION 47

4.2 OPTICAL SATELLITE MARKET, BY END USER 47

FIGURE 14 COMMERCIAL SEGMENT TO ACQUIRE MAXIMUM MARKET SHARE IN 2023 47

4.3 OPTICAL SATELLITE MARKET, BY APPLICATION 48

FIGURE 15 COMMUNICATION TO BE LARGEST SEGMENT DURING FORECAST PERIOD 48

4.4 OPTICAL SATELLITE MARKET, BY COUNTRY 48

FIGURE 16 RUSSIA TO BE FASTEST-GROWING COUNTRY DURING FORECAST PERIOD 48

5 MARKET OVERVIEW 49

5.1 INTRODUCTION 49

5.2 MARKET DYNAMICS 50

FIGURE 17 OPTICAL SATELLITE MARKET DYNAMICS 50

5.2.1 DRIVERS 50

5.2.1.1 Technological advancements in optical satellite communication 50

5.2.1.2 Growing demand for multimedia services 51

5.2.1.3 Booming cloud computing market 51

5.2.1.4 Rapid development of new satellite constellations 51

5.2.1.5 Need for Earth observation imagery and analytics 52

5.2.2 RESTRAINTS 52

5.2.2.1 High development cost of optical satellite systems 52

5.2.2.2 Lack of standardized communication protocols 52

5.2.3 OPPORTUNITIES 53

5.2.3.1 Rise in adoption of cloud-based services 53

5.2.3.2 Increased government investments in space-based infrastructure and services 54

5.2.4 CHALLENGES 54

5.2.4.1 Implications of cloud cover 54

5.2.4.2 Operational limitations associated with harsh and remote environments 55

5.3 RECESSION IMPACT ANALYSIS 55

FIGURE 18 RECESSION IMPACT ANALYSIS 55

5.4 PORTER'S FIVE FORCES ANALYSIS 56

FIGURE 19 PORTER'S FIVE FORCES ANALYSIS 56

TABLE 3 IMPACT OF PORTER'S FIVE FORCES 56

5.4.1 THREAT OF NEW ENTRANTS 57

5.4.2 THREAT OF SUBSTITUTES 57

5.4.3 BARGAINING POWER OF SUPPLIERS 57

5.4.4 BARGAINING POWER OF BUYERS 57

5.4.5 INTENSITY OF COMPETITIVE RIVALRY 57

5.5 VALUE CHAIN ANALYSIS 58

FIGURE 20 VALUE CHAIN ANALYSIS 58

5.6 ECOSYSTEM MAPPING 59

FIGURE 21 ECOSYSTEM MAPPING 60

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 4 □ROLE OF COMPANIES IN ECOSYSTEM □60

5.7 □TRENDS AND DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES □61

FIGURE 22 □TRENDS AND DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES □61

5.8 □USE CASE ANALYSIS □62

5.8.1 □OPTICAL INTER-SATELLITE DATA RELAY SERVICE □62

5.8.2 □OPTICAL INTER-SATELLITE COMMUNICATION □62

5.9 □TRADE DATA ANALYSIS □63

TABLE 5 □COUNTRY-WISE IMPORT DATA, 2019-2022 □63

TABLE 6 □COUNTRY-WISE EXPORT DATA, 2019-2022 □63

5.10 □REGULATORY LANDSCAPE □64

TABLE 7 □NORTH AMERICA: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS □64

TABLE 8 □EUROPE: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS □64

TABLE 9 □ASIA PACIFIC: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS □65

TABLE 10 □REST OF THE WORLD: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS □66

5.11 □OPERATIONAL DATA □66

TABLE 11 □OPTICAL SATELLITE LAUNCHES, BY APPLICATION, 2021-2023 (UNITS) □66

5.12 □PRICING ANALYSIS □67

TABLE 12 □AVERAGE SELLING PRICE OF OPTICAL SATELLITES, BY COMMUNICATION APPLICATION (USD MILLION) □67

TABLE 13 □AVERAGE SELLING PRICE OF OPTICAL SATELLITES, BY EARTH OBSERVATION APPLICATION (USD MILLION) □67

5.13 □KEY STAKEHOLDERS AND BUYING CRITERIA □67

5.13.1 □KEY STAKEHOLDERS IN BUYING PROCESS □67

FIGURE 23 □INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS OF OPTICAL SATELLITES, BY APPLICATION □67

TABLE 14 □INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS OF OPTICAL SATELLITES, BY APPLICATION (%) □68

5.13.2 □BUYING CRITERIA □68

FIGURE 24 □KEY BUYING CRITERIA FOR OPTICAL SATELLITES, BY END USER □68

TABLE 15 □KEY BUYING CRITERIA FOR OPTICAL SATELLITES, BY END USER □68

5.14 □KEY CONFERENCES AND EVENTS, 2023-2024 □69

TABLE 16 □KEY CONFERENCES AND EVENTS, 2023?2024 □69

6 □INDUSTRY TRENDS □70

6.1 □INTRODUCTION □70

6.2 □TECHNOLOGY TRENDS □70

6.2.1 □INTEGRATION OF ADVANCED TECHNOLOGIES □70

6.2.2 □LASER COMMUNICATION RELAY SYSTEMS □70

6.2.3 □CLOUD COMPUTING □71

6.2.4 □5G □71

6.2.5 □ATP TECHNOLOGY □71

6.3 □IMPACT OF MEGATRENDS □72

6.3.1 □SATELLITE INTERNET OF THINGS □72

6.3.2 □SATCOM-ON-THE-MOVE □72

6.3.3 □INTELLIGENT OPTICAL SATELLITE COMMUNICATION □72

6.3.4 □HYBRID SATELLITE-TERRESTRIAL RELAY NETWORK □73

6.4 □SUPPLY CHAIN ANALYSIS □73

FIGURE 25 □SUPPLY CHAIN ANALYSIS □74

6.5 □INNOVATIONS AND PATENT REGISTRATIONS □75

FIGURE 26 □TOP PATENT OWNERS □75

TABLE 17 □KEY PATENTS □76

6.6 □TECHNOLOGICAL ROADMAP TO OPTICAL SATELLITE MARKET □77

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

FIGURE 27 □ EVOLUTION OF OPTICAL SATELLITES □ 77

7 □ OPTICAL SATELLITE MARKET, BY SIZE □ 78

7.1 □ INTRODUCTION □ 79

FIGURE 28 □ OPTICAL SATELLITE MARKET, BY SIZE, 2023-2028 □ 79

TABLE 18 □ OPTICAL SATELLITE MARKET, BY SIZE, 2020-2022 (USD MILLION) □ 79

TABLE 19 □ OPTICAL SATELLITE MARKET, BY SIZE, 2023-2028 (USD MILLION) □ 79

7.2 □ SMALL □ 80

7.2.1 □ COST-EFFECTIVENESS AND ACCESSIBILITY TO DRIVE GROWTH □ 80

7.3 □ MEDIUM □ 80

7.3.1 □ RAPID ADVANCEMENTS IN TECHNOLOGY TO DRIVE GROWTH □ 80

7.4 □ LARGE □ 81

7.4.1 □ RISING DEMAND FOR ADVANCED IMAGING CAPABILITIES TO DRIVE GROWTH □ 81

8 □ OPTICAL SATELLITE MARKET, BY APPLICATION □ 82

8.1 □ INTRODUCTION □ 83

FIGURE 29 □ OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 □ 83

TABLE 20 □ OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) □ 83

TABLE 21 □ OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) □ 83

8.2 □ COMMUNICATION □ 84

8.2.1 □ INCREASING POPULARITY OF STREAMING MEDIA TO DRIVE GROWTH □ 84

8.2.2 □ SATELLITE-TO-SATELLITE □ 84

8.2.3 □ SATELLITE-TO-GROUND □ 84

8.3 □ EARTH OBSERVATION □ 85

8.3.1 □ BOOST IN ENVIRONMENTAL MONITORING AND URBAN PLANNING TO DRIVE GROWTH □ 85

8.3.2 □ SURVEILLANCE AND MONITORING □ 85

8.3.3 □ SCIENTIFIC RESEARCH □ 85

8.3.4 □ WEATHER MONITORING □ 86

8.3.5 □ DISASTER MANAGEMENT □ 86

8.3.6 □ EARLY WARNING SYSTEMS □ 86

8.3.7 □ OTHER IMAGING AND VIDEO OPERATIONS □ 86

9 □ OPTICAL SATELLITE MARKET, BY OPERATIONAL ORBIT □ 87

9.1 □ INTRODUCTION □ 88

FIGURE 30 □ OPTICAL SATELLITE MARKET, BY OPERATIONAL ORBIT, 2023-2028 □ 88

TABLE 22 □ OPTICAL SATELLITE MARKET, BY OPERATIONAL ORBIT, 2020-2022 (USD MILLION) □ 88

TABLE 23 □ OPTICAL SATELLITE MARKET, BY OPERATIONAL ORBIT, 2023-2028 (USD MILLION) □ 88

9.2 □ LEO □ 89

9.2.1 □ NEED FOR INSTANT CONNECTIVITY AND LOW-LATENCY COVERAGE TO DRIVE GROWTH □ 89

9.3 □ MEO/GEO □ 89

9.3.1 □ RISING PREFERENCE FOR HIGH-SPEED DATA TRANSMISSION TO DRIVE GROWTH □ 89

10 □ OPTICAL SATELLITE MARKET, BY END USER □ 90

10.1 □ INTRODUCTION □ 91

FIGURE 31 □ OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 □ 91

TABLE 24 □ OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) □ 91

TABLE 25 □ OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) □ 91

10.2 □ GOVERNMENT □ 92

10.2.1 □ SURGE IN NATIONAL SECURITY CONCERNS TO DRIVE GROWTH □ 92

10.3 □ COMMERCIAL □ 92

10.3.1 □ COMMERCIALIZATION OF OPTICAL SATELLITES TO DRIVE GROWTH □ 92

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

10.4	DEFENSE	93
10.4.1	ESCALATING DEMAND FOR REAL-TIME DATA AND IMAGING TO DRIVE GROWTH	93
11	OPTICAL SATELLITE MARKET, BY COMPONENT	94
11.1	INTRODUCTION	94
11.2	IMAGING AND SENSING SYSTEMS	94
11.2.1	VISIBLE SPECTRUM AND PANCHROMATIC	94
11.2.2	ULTRAVIOLET AND INFRARED	94
11.2.3	LASER-BASED	94
11.3	OPTICAL COMMUNICATION SYSTEMS	95
11.3.1	SATELLITE-TO-SATELLITE COMMUNICATION	95
11.3.2	SATELLITE-TO-GROUND COMMUNICATION	95
12	OPTICAL SATELLITE MARKET, BY REGION	96
12.1	INTRODUCTION	97
FIGURE 32	OPTICAL SATELLITE MARKET, BY REGION, 2023-2028	97
12.2	REGIONAL RECESSION IMPACT ANALYSIS	97
TABLE 26	REGIONAL RECESSION IMPACT ANALYSIS	98
TABLE 27	OPTICAL SATELLITE MARKET, BY REGION, 2020?2022 (USD MILLION)	98
TABLE 28	OPTICAL SATELLITE MARKET, BY REGION, 2023?2030 (USD MILLION)	99
12.3	NORTH AMERICA	99
12.3.1	PESTLE ANALYSIS	99
12.3.2	RECESSION IMPACT ANALYSIS	100
FIGURE 33	NORTH AMERICA: OPTICAL SATELLITE MARKET SNAPSHOT	101
TABLE 29	NORTH AMERICA: OPTICAL SATELLITE MARKET, BY COUNTRY, 2020-2022 (USD MILLION)	101
TABLE 30	NORTH AMERICA: OPTICAL SATELLITE MARKET, BY COUNTRY, 2023-2028 (USD MILLION)	102
TABLE 31	NORTH AMERICA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION)	102
TABLE 32	NORTH AMERICA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION)	102
TABLE 33	NORTH AMERICA: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION)	102
TABLE 34	NORTH AMERICA: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION)	103
12.3.3	US	103
12.3.3.1	Increasing influx of small satellite launches to drive growth	103
TABLE 35	US: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION)	103
TABLE 36	US: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION)	103
TABLE 37	US: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION)	104
TABLE 38	US: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION)	104
12.3.4	CANADA	104
12.3.4.1	Rising deployment of optical satellites to drive growth	104
TABLE 39	CANADA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION)	104
TABLE 40	CANADA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION)	105
TABLE 41	CANADA: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION)	105
TABLE 42	CANADA: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION)	105
12.4	EUROPE	106
12.4.1	PESTLE ANALYSIS	106
12.4.2	RECESSION IMPACT ANALYSIS	107
FIGURE 34	EUROPE: OPTICAL SATELLITE MARKET SNAPSHOT	108
TABLE 43	EUROPE: OPTICAL SATELLITE MARKET, BY COUNTRY, 2020-2022 (USD MILLION)	109
TABLE 44	EUROPE: OPTICAL SATELLITE MARKET, BY COUNTRY, 2023-2028 (USD MILLION)	109
TABLE 45	EUROPE: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION)	109

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 46 EUROPE: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 109

TABLE 47 EUROPE: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 110

TABLE 48 EUROPE: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 110

12.4.3 UK 110

12.4.3.1 Increasing demand for high-speed data transmission to drive growth 110

TABLE 49 UK: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 110

TABLE 50 UK: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 111

TABLE 51 UK: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 111

TABLE 52 UK: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 111

12.4.4 FRANCE 111

12.4.4.1 New satellite launches by domestic space companies to drive growth 111

TABLE 53 FRANCE: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 112

TABLE 54 FRANCE: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 112

TABLE 55 FRANCE: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 112

TABLE 56 FRANCE: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 112

12.4.5 GERMANY 113

12.4.5.1 Boost in government investments to drive growth 113

TABLE 57 GERMANY: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 113

TABLE 58 GERMANY: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 113

TABLE 59 GERMANY: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 113

TABLE 60 GERMANY: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 114

12.4.6 ITALY 114

12.4.6.1 Innovations in satellite technologies to drive growth 114

TABLE 61 ITALY: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 114

TABLE 62 ITALY: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 114

TABLE 63 ITALY: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 115

TABLE 64 ITALY: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 115

12.4.7 RUSSIA 115

12.4.7.1 Rising development of domestic space systems to drive growth 115

TABLE 65 RUSSIA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 115

TABLE 66 RUSSIA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 116

TABLE 67 RUSSIA: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 116

TABLE 68 RUSSIA: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 116

12.4.8 REST OF EUROPE 116

TABLE 69 REST OF EUROPE: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 116

TABLE 70 REST OF EUROPE: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 117

TABLE 71 REST OF EUROPE: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 117

TABLE 72 REST OF EUROPE: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 117

12.5 ASIA PACIFIC 118

12.5.1 PESTLE ANALYSIS 118

12.5.2 RECESSION IMPACT ANALYSIS 119

FIGURE 35 ASIA PACIFIC: OPTICAL SATELLITE MARKET SNAPSHOT 120

TABLE 73 ASIA PACIFIC: OPTICAL SATELLITE MARKET, BY COUNTRY, 2020-2022 (USD MILLION) 120

TABLE 74 ASIA PACIFIC: OPTICAL SATELLITE MARKET, BY COUNTRY, 2023-2028 (USD MILLION) 121

TABLE 75 ASIA PACIFIC: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 121

TABLE 76 ASIA PACIFIC: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 121

TABLE 77 ASIA PACIFIC: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 121

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 78 ASIA PACIFIC: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 122

12.5.3 CHINA 122

12.5.3.1 Rapid development of new satellites to drive growth 122

TABLE 79 CHINA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 122

TABLE 80 CHINA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 122

TABLE 81 CHINA: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 123

TABLE 82 CHINA: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 123

12.5.4 JAPAN 123

12.5.4.1 Rise in launch of optical satellites to drive growth 123

TABLE 83 JAPAN: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 123

TABLE 84 JAPAN: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 124

TABLE 85 JAPAN: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 124

TABLE 86 JAPAN: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 124

12.5.5 INDIA 124

12.5.5.1 Domestic emphasis on space-based Earth observation to drive growth 124

TABLE 87 INDIA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 125

TABLE 88 INDIA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 125

TABLE 89 INDIA: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 125

TABLE 90 INDIA: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 125

12.5.6 SOUTH KOREA 126

12.5.6.1 Presence of key space technology companies to drive growth 126

TABLE 91 SOUTH KOREA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 126

TABLE 92 SOUTH KOREA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 126

TABLE 93 SOUTH KOREA: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 126

TABLE 94 SOUTH KOREA: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 127

12.5.7 REST OF ASIA PACIFIC 127

TABLE 95 REST OF ASIA PACIFIC: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 127

TABLE 96 REST OF ASIA PACIFIC: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 127

TABLE 97 REST OF ASIA PACIFIC: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 128

TABLE 98 REST OF ASIA PACIFIC: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 128

12.6 REST OF THE WORLD 129

FIGURE 36 REST OF THE WORLD: OPTICAL SATELLITE MARKET SNAPSHOT 129

12.6.1 PESTLE ANALYSIS 130

12.6.2 RECESSION IMPACT ANALYSIS 131

TABLE 99 REST OF THE WORLD: OPTICAL SATELLITE MARKET, BY REGION 2020-2022 (USD MILLION) 131

TABLE 100 REST OF THE WORLD: OPTICAL SATELLITE MARKET, BY REGION, 2023-2028 (USD MILLION) 131

TABLE 101 REST OF THE WORLD: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 132

TABLE 102 REST OF THE WORLD: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 132

TABLE 103 REST OF THE WORLD: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 132

TABLE 104 REST OF THE WORLD: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 132

12.6.3 MIDDLE EAST & AFRICA 133

12.6.3.1 Rising demand for high-definition video streaming and cloud computing applications to drive growth 133

TABLE 105 MIDDLE EAST & AFRICA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 133

TABLE 106 MIDDLE EAST & AFRICA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 133

TABLE 107 MIDDLE EAST & AFRICA: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 133

TABLE 108 MIDDLE EAST & AFRICA: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 134

12.6.4 LATIN AMERICA 134

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

12.6.4.1 Increasing focus on space development to drive growth 134

TABLE 109 LATIN AMERICA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2020-2022 (USD MILLION) 134

TABLE 110 LATIN AMERICA: OPTICAL SATELLITE MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 134

TABLE 111 LATIN AMERICA: OPTICAL SATELLITE MARKET, BY END USER, 2020-2022 (USD MILLION) 135

TABLE 112 LATIN AMERICA: OPTICAL SATELLITE MARKET, BY END USER, 2023-2028 (USD MILLION) 135

13 COMPETITIVE LANDSCAPE 136

13.1 INTRODUCTION 136

TABLE 113 STRATEGIES ADOPTED BY KEY PLAYERS IN OPTICAL SATELLITE MARKET 136

13.2 MARKET RANKING ANALYSIS, 2022 139

FIGURE 37 MARKET RANKING OF TOP FIVE PLAYERS, 2022 139

13.3 COMPANY EVALUATION MATRIX, 2022 140

13.3.1 STARS 140

13.3.2 EMERGING LEADERS 140

13.3.3 PERVASIVE PLAYERS 140

13.3.4 PARTICIPANTS 140

FIGURE 38 COMPANY EVALUATION MATRIX, 2022 141

13.3.5 COMPANY FOOTPRINT 142

TABLE 114 COMPANY FOOTPRINT 142

TABLE 115 APPLICATION FOOTPRINT 142

TABLE 116 REGION FOOTPRINT 143

13.4 START-UP/SME EVALUATION MATRIX, 2022 144

13.4.1 PROGRESSIVE COMPANIES 144

13.4.2 RESPONSIVE COMPANIES 144

13.4.3 DYNAMIC COMPANIES 144

13.4.4 STARTING BLOCKS 144

FIGURE 39 START-UP/SME EVALUATION MATRIX, 2022 145

TABLE 117 OPTICAL SATELLITE MARKET: KEY START-UPS/SMES 146

13.4.5 COMPETITIVE BENCHMARKING 146

TABLE 118 COMPETITIVE BENCHMARKING OF KEY START-UPS/SMES 146

13.5 COMPETITIVE SCENARIO 147

13.5.1 PRODUCT LAUNCHES 147

TABLE 119 PRODUCT LAUNCHES, 2020-2023 147

13.5.2 DEALS 148

TABLE 120 DEALS, 2020-2023 148

14 COMPANY PROFILES 161

14.1 KEY PLAYERS 161

(Business Overview, Products/Services/Solutions Offered, MnM View, Key Strengths and Right to Win, Strategic Choices Made, Weaknesses and Competitive Threats, Recent Developments)*

14.1.1 BALL CORPORATION 161

TABLE 121 BALL CORPORATION: COMPANY OVERVIEW 161

FIGURE 40 BALL CORPORATION: COMPANY SNAPSHOT 162

TABLE 122 BALL CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED 162

TABLE 123 BALL CORPORATION: DEALS 163

14.1.2 LOCKHEED MARTIN CORPORATION 165

TABLE 124 LOCKHEED MARTIN CORPORATION: COMPANY OVERVIEW 165

FIGURE 41 LOCKHEED MARTIN CORPORATION: COMPANY SNAPSHOT 166

TABLE 125 LOCKHEED MARTIN CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED 166

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 126	LOCKHEED MARTIN CORPORATION: DEALS	167
14.1.3	SPACEX	169
TABLE 127	SPACEX: COMPANY OVERVIEW	169
TABLE 128	SPACEX: PRODUCTS/SOLUTIONS/SERVICES OFFERED	169
TABLE 129	SPACEX: DEALS	170
14.1.4	L3HARRIS TECHNOLOGIES, INC.	172
TABLE 130	L3HARRIS TECHNOLOGIES, INC.: COMPANY OVERVIEW	172
FIGURE 42	L3HARRIS TECHNOLOGIES, INC.: COMPANY SNAPSHOT	173
TABLE 131	L3HARRIS TECHNOLOGIES, INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED	173
TABLE 132	L3HARRIS TECHNOLOGIES, INC.: DEALS	174
TABLE 133	L3HARRIS TECHNOLOGIES, INC.: OTHERS	175
14.1.5	AIRBUS DEFENCE AND SPACE	176
TABLE 134	AIRBUS DEFENCE AND SPACE: COMPANY OVERVIEW	176
FIGURE 43	AIRBUS DEFENCE AND SPACE: COMPANY SNAPSHOT	177
TABLE 135	AIRBUS DEFENCE AND SPACE: PRODUCTS/SOLUTIONS/SERVICES OFFERED	177
TABLE 136	AIRBUS DEFENCE AND SPACE: DEALS	178
14.1.6	mitsubishi electric corporation	180
TABLE 137	mitsubishi electric corporation: COMPANY OVERVIEW	180
FIGURE 44	mitsubishi electric corporation: COMPANY SNAPSHOT	181
TABLE 138	mitsubishi electric corporation: PRODUCTS/SOLUTIONS/SERVICES OFFERED	181
TABLE 139	mitsubishi electric corporation: PRODUCT LAUNCHES	182
14.1.7	AAC CLYDE SPACE	183
TABLE 140	AAC CLYDE SPACE: COMPANY OVERVIEW	183
FIGURE 45	AAC CLYDE SPACE: COMPANY SNAPSHOT	183
TABLE 141	AAC CLYDE SPACE: PRODUCTS/SOLUTIONS/SERVICES OFFERED	184
TABLE 142	AAC CLYDE SPACE: PRODUCT LAUNCHES	184
TABLE 143	AAC CLYDE SPACE: DEALS	185
14.1.8	honeywell international inc.	186
TABLE 144	honeywell international inc.: COMPANY OVERVIEW	186
FIGURE 46	honeywell international inc.: COMPANY SNAPSHOT	187
TABLE 145	honeywell international inc.: PRODUCTS/SOLUTIONS/SERVICES OFFERED	187
TABLE 146	honeywell international inc: DEALS	188
14.1.9	THALES GROUP	190
TABLE 147	THALES GROUP: COMPANY OVERVIEW	190
FIGURE 47	THALES GROUP: COMPANY SNAPSHOT	191
TABLE 148	THALES GROUP: PRODUCTS/SOLUTIONS/SERVICES OFFERED	191
TABLE 149	THALES GROUP: DEALS	192
14.1.10	PLANET LABS PBC	193
TABLE 150	PLANET LABS PBC: COMPANY OVERVIEW	193
FIGURE 48	PLANET LABS PBC: COMPANY SNAPSHOT	193
TABLE 151	PLANET LABS PBC: PRODUCTS/SOLUTIONS/SERVICES OFFERED	194
TABLE 152	PLANET LABS PBC: PRODUCT LAUNCHES	194
TABLE 153	PLANET LABS PBC: DEALS	195
14.1.11	RAYTHEON TECHNOLOGIES CORPORATION	197
TABLE 154	RAYTHEON TECHNOLOGIES CORPORATION: COMPANY OVERVIEW	197
FIGURE 49	RAYTHEON TECHNOLOGIES CORPORATION: COMPANY SNAPSHOT	198
TABLE 155	RAYTHEON TECHNOLOGIES CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED	198

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 156	RAYTHEON TECHNOLOGIES CORPORATION: DEALS	199
14.1.12	MAXAR TECHNOLOGIES	200
TABLE 157	MAXAR TECHNOLOGIES: COMPANY OVERVIEW	200
FIGURE 50	MAXAR TECHNOLOGIES: COMPANY SNAPSHOT	201
TABLE 158	MAXAR TECHNOLOGIES: PRODUCTS/SOLUTIONS/SERVICES OFFERED	201
14.1.13	BAE SYSTEMS	202
TABLE 159	BAE SYSTEMS: COMPANY OVERVIEW	202
FIGURE 51	BAE SYSTEMS: COMPANY SNAPSHOT	203
TABLE 160	BAE SYSTEMS: PRODUCTS/SOLUTIONS/SERVICES OFFERED	203
TABLE 161	BAE SYSTEMS: DEALS	204
14.1.14	HENSOLDT	205
TABLE 162	HENSOLDT: COMPANY OVERVIEW	205
FIGURE 52	HENSOLDT: COMPANY SNAPSHOT	206
TABLE 163	HENSOLDT: PRODUCTS/SOLUTIONS/SERVICES OFFERED	206
TABLE 164	HENSOLDT: DEALS	207
14.1.15	IMAGESAT INTERNATIONAL	208
TABLE 165	IMAGESAT INTERNATIONAL: COMPANY OVERVIEW	208
FIGURE 53	IMAGESAT INTERNATIONAL: COMPANY SNAPSHOT	208
TABLE 166	IMAGESAT INTERNATIONAL: PRODUCTS/SOLUTIONS/SERVICES OFFERED	209
TABLE 167	IMAGESAT INTERNATIONAL: DEALS	209
14.1.16	OHB SE	210
TABLE 168	OHB SE: COMPANY OVERVIEW	210
FIGURE 54	OHB SE: COMPANY SNAPSHOT	210
TABLE 169	OHB SE: PRODUCTS/SOLUTIONS/SERVICES OFFERED	211
14.1.17	TERRAN ORBITAL CORPORATION	212
TABLE 170	TERRAN ORBITAL CORPORATION: COMPANY OVERVIEW	212
FIGURE 55	TERRAN ORBITAL CORPORATION: COMPANY SNAPSHOT	212
TABLE 171	TERRAN ORBITAL CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED	213
TABLE 172	TERRAN ORBITAL CORPORATION: PRODUCT LAUNCHES	213
14.1.18	SATELLOGIC	214
TABLE 173	SATELLOGIC: COMPANY OVERVIEW	214
FIGURE 56	SATELLOGIC: COMPANY SNAPSHOT	214
TABLE 174	SATELLOGIC: PRODUCTS/SOLUTIONS/SERVICES OFFERED	215
TABLE 175	SATELLOGIC: DEALS	215
*Business Overview, Products/Services/Solutions Offered, MnM View, Key Strengths and Right to Win, Strategic Choices Made, Weaknesses and Competitive Threats, Recent Developments might not be captured in case of unlisted companies.		
14.2	OTHER PLAYERS	217
14.2.1	PIXXEL	217
TABLE 176	PIXXEL: COMPANY OVERVIEW	217
14.2.2	LASER TECHNOLOGY, INC.	218
TABLE 177	LASER TECHNOLOGY, INC.: COMPANY OVERVIEW	218
14.2.3	SITAEL S.P.A.	219
TABLE 178	SITAEL S.P.A.: COMPANY OVERVIEW	219
14.2.4	TRANSCHESTIAL	220
TABLE 179	TRANSCHESTIAL: COMPANY OVERVIEW	220
14.2.5	ALEN SPACE	221
TABLE 180	ALEN SPACE: COMPANY OVERVIEW	221

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

14.2.6	NANOAVIONICS	222
TABLE 181	NANOAVIONICS: COMPANY OVERVIEW	222
14.2.7	WARPSPACE INC.	222
TABLE 182	WARPSPACE INC.: COMPANY OVERVIEW	222
14.2.8	GALAXEYE SPACE SOLUTIONS PVT LTD.	223
TABLE 183	GALAXEYE SPACE SOLUTIONS PVT LTD.: COMPANY OVERVIEW	223
15	APPENDIX	224
15.1	DISCUSSION GUIDE	224
15.2	KNOWLEDGESTORE: MARKETSandMARKETS' SUBSCRIPTION PORTAL	227
15.3	CUSTOMIZATION OPTIONS	229
15.4	RELATED REPORTS	229
15.5	AUTHOR DETAILS	230

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

Optical Satellite Market by Size (Small, Medium, Large), Application (Earth Observation, Communication), Operational Orbit, Component, End User and Region (North America, Europe, Asia Pacific, Rest of the world) - Global Forecast to 2028

Market Report | 2023-10-25 | 224 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"/>
Zip Code*	<input type="text"/>	Country*	<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

Date

2025-05-20

Signature

A large, empty rectangular box with a thin black border, intended for a signature.

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com