

Optical Waveguide Market by Type (Planar, Channel), Material (Glass, Polymer, Semiconductor), Propagation (Single-mode, Multi-mode), Refractive Index (Step-index, Graded-index), Interconnect Level, End-user Industry and Region - Global Forecast to 2028

Market Report | 2023-01-27 | 277 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 Waveguide Market is projected to grow from USD 6.6 billion in 2023 and is projected to reach USD 9.5 billion by 2028; it is expected to grow at a CAGR of 7.3% from 2023 to 2028.

The growth of this market is driven by factors such as technological advancements in photonic integrated circuits (PICs), rising number of data centers worldwide, surging demand for high bandwidth.

"The chip- and board-level optical interconnect segment is projected to grow at high CAGR during the forecast period."

The chip- and board-level optical interconnect segment is projected to grow at high CAGR during the forecast period. The increasing requirement for co-packaged optics, processors, and optical transceivers with low power consumption and high data transmission rates drives the market growth. The increased popularity of parallel computing and the arrival of multicore processors and 3D chips are creating an increased demand for chip-and-board-level optical interconnects. They are becoming crucial to cope with various end-use industries' high computing speed requirements.

"North America will be one of the fastest growing region in optical waveguide market during the forecast period"

North America is expected to be one of the fastest-growing region in the optical waveguide market during the forecast period. The proliferation of data center facilities across the US, Canada, and Mexico is expected to boost the optical waveguide market in the region. The data centers are extensively integrated with optical waveguide components such as transceivers, connectors, optical fibers, and amplifiers. These components help to interconnect two or more data center facilities located over a long distance and transfer large volumes of data with high data transmission speeds. According to Data Center Map, the number of colocation data centers in the US accounted for 1,851 across 50 states, of which 239 were in California, 187 facilities in Texas, and 112 facilities in

Scotts International. EU Vat number: PL 6772247784

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

www.scott-international.com

Florida. The increasing deployment of newer data centers in the region will fuel the optical waveguide market growth during the forecast period.

In the process of determining and verifying the market size for several segments and subsegments gathered through secondary research, extensive primary interviews have been conducted with key industry experts in the optical waveguide space. The break-up of primary participants for the report has been shown below:

- By Company Type: Tier 1 - 10%, Tier 2 - 20%, and Tier 3 - 70%
- By Designation: C-level Executives - 30%, Directors -10%, and Others - 60%
- By Region: North America -45%, Europe - 10%, Asia Pacific- 35%, and RoW - 10%

The report profiles key players in the optical waveguide market with their respective market ranking analysis. Prominent players profiled in this report are include Corning Incorporated (US), Sumitomo Electric Industries, Ltd. (Japan), Yangtze Optical Fibre and Cable Joint Stock Limited Company (YOFC) (China), Fujikura Ltd. (Japan), Prysmian Group (Italy), Furukawa Electric Co., Ltd. (Japan), Coherent Corp. (US), CommScope (US), Sterlite Technologies Limited (India), and DigiLens Inc. (US). Apart from these, Holographix (US), HC Photonics Corp. (Taiwan), Teem Photonics (France), Mitsubishi Chemical Group Corporation (Japan), Asahi Kasei Corporation (Japan), Birla Cable Ltd. (India), Optical Cable Corporation (US), and Belden Inc. (US) are among a few emerging companies in the optical waveguide market.

Research Coverage:

This research report categorizes the optical waveguide market on the basis of type, material, propagation, refractive index, interconnect level, end-user industry and region. The report describes the major drivers, restraints, challenges, and opportunities pertaining to the optical waveguide market and forecasts the same till 2028. Apart from these, the report also consists of leadership mapping and analysis of all the companies included in the optical waveguide ecosystem.

Key Benefits of Buying the Report

The report would help leaders/new entrants in this market in the following ways:

- 1.□This report segments the optical waveguide market comprehensively and provides the closest market size projection for all subsegments across different regions.
- 2.□The report helps stakeholders understand the pulse of the market and provides them with information on key drivers, restraints, challenges, and opportunities for market growth.
- 3.□This report would help stakeholders understand their competitors better and gain more insights to improve their position in the business. The competitive landscape section includes competitor ecosystem, product developments and launches, partnerships, and mergers and acquisitions.
- 4.□The analysis of the top 27 companies, based on the market rank as well as the product footprint will help stakeholders visualize the market positioning of these key players.
- 5.□Patent analysis, trade data, and technological trends that will shape the market in the coming years has also been covered in this report.

Table of Contents:

1□INTRODUCTION□	33
1.1□STUDY OBJECTIVES□	33
1.2□MARKET DEFINITION□	33
1.3□STUDY SCOPE□	34
1.3.1□MARKETS COVERED□	34
FIGURE 1□OPTICAL WAVEGUIDE MARKET: SEGMENTATION□	34
1.3.2□REGIONAL SCOPE□	35
1.4□INCLUSIONS AND EXCLUSIONS□	35
1.5□YEARS CONSIDERED□	36
1.6□CURRENCY CONSIDERED□	36
1.7□LIMITATIONS□	36

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

1.8	STAKEHOLDERS	37
1.9	RECESSION ANALYSIS	37
2	RESEARCH METHODOLOGY	38
2.1	RESEARCH DATA	38
FIGURE 2	OPTICAL WAVEGUIDE MARKET: RESEARCH DESIGN	38
2.1.1	SECONDARY DATA	39
2.1.1.1	Secondary sources	39
2.1.1.2	Key data from secondary research	40
2.1.2	PRIMARY DATA	40
2.1.2.1	Primary interviews with experts	40
2.1.2.2	Breakdown of primaries	41
2.1.2.3	Key data from primary sources	42
2.1.3	SECONDARY AND PRIMARY RESEARCH	43
2.1.3.1	Key industry insights	43
2.2	MARKET SIZE ESTIMATION	44
FIGURE 3	MARKET SIZE ESTIMATION METHODOLOGY (SUPPLY SIDE): REVENUE OF MARKET PLAYERS	44
2.2.1	BOTTOM-UP APPROACH	45
FIGURE 4	MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH	45
2.2.1.1	Approach to derive market size using bottom-up analysis (demand side)	45
2.2.2	TOP-DOWN APPROACH	46
FIGURE 5	MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH	46
2.2.2.1	Approach to derive market share using top-down analysis (supply side)	46
2.3	MARKET BREAKDOWN AND DATA TRIANGULATION	47
FIGURE 6	DATA TRIANGULATION	47
2.4	RESEARCH ASSUMPTIONS	48
2.5	IMPACT OF RECESSION	48
2.6	RISK ASSESSMENT	49
TABLE 1	RISK ASSESSMENT	49
2.7	RESEARCH LIMITATIONS	49
3	EXECUTIVE SUMMARY	50
3.1	RECESSION ANALYSIS	50
FIGURE 7	GDP GROWTH PROJECTIONS TILL 2023 FOR MAJOR ECONOMIES	50
FIGURE 8	REVENUE PROJECTIONS FOR OPTICAL WAVEGUIDE MARKET, 2019-2028	51
3.2	GROWTH RATE ASSUMPTIONS/FORECAST	52
FIGURE 9	CHANNEL WAVEGUIDE SEGMENT TO DOMINATE OPTICAL WAVEGUIDE MARKET DURING FORECAST PERIOD	54
FIGURE 10	GLASS SEGMENT TO HOLD LARGEST MARKET SHARE DURING FORECAST PERIOD	55
FIGURE 11	SINGLE-MODE SEGMENT TO REGISTER HIGHER CAGR BETWEEN 2023 AND 2028	55
FIGURE 12	CHIP- AND BOARD-LEVEL OPTICAL INTERCONNECT SEGMENT TO REGISTER HIGHEST CAGR BETWEEN 2023 AND 2028	56
FIGURE 13	DATA CENTER & HIGH-PERFORMANCE COMPUTING (HPC) SEGMENT TO EXHIBIT HIGHEST CAGR FROM 2023 TO 2028	57
FIGURE 14	ASIA PACIFIC TO ACCOUNT FOR LARGEST SHARE OF OPTICAL WAVEGUIDE MARKET DURING FORECAST PERIOD	58
4	PREMIUM INSIGHTS	59
4.1	ATTRACTIVE OPPORTUNITIES FOR PLAYERS OPERATING IN OPTICAL WAVEGUIDE MARKET	59
FIGURE 15	GROWING DEPLOYMENT OF 5G TELECOMMUNICATION NETWORKS	59
4.2	OPTICAL WAVEGUIDE MARKET, BY TYPE	59
FIGURE 16	CHANNEL WAVEGUIDE SEGMENT TO HOLD LARGER SHARE OF OPTICAL WAVEGUIDE MARKET DURING FORECAST PERIOD	59
4.3	OPTICAL WAVEGUIDE MARKET, BY MATERIAL	60

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

FIGURE 17 □ GLASS SEGMENT TO HOLD LARGEST SHARE OF OPTICAL WAVEGUIDE MARKET DURING FORECAST PERIOD □ 60

4.4 □ OPTICAL WAVEGUIDE MARKET, BY PROPAGATION AND INTERCONNECT LEVEL □ 60

FIGURE 18 □ SINGLE-MODE AND METRO AND LONG-HAUL OPTICAL INTERCONNECT SEGMENTS TO HOLD LARGEST SHARES OF OPTICAL WAVEGUIDE MARKET IN 2023 □ 60

4.5 □ OPTICAL WAVEGUIDE MARKET, BY END-USER INDUSTRY □ 61

FIGURE 19 □ TELECOMMUNICATIONS SEGMENT TO LEAD OPTICAL WAVEGUIDE MARKET DURING FORECAST PERIOD □ 61

4.6 □ OPTICAL WAVEGUIDE MARKET, BY REGION □ 61

FIGURE 20 □ ASIA PACIFIC TO HOLD LARGEST SHARE OF OPTICAL WAVEGUIDE MARKET IN 2023 □ 61

4.7 □ OPTICAL WAVEGUIDE MARKET, BY COUNTRY □ 62

FIGURE 21 □ OPTICAL WAVEGUIDE MARKET IN CHINA TO REGISTER HIGHEST CAGR FROM 2023 TO 2028 □ 62

5 □ MARKET OVERVIEW □ 63

5.1 □ INTRODUCTION □ 63

5.2 □ MARKET DYNAMICS □ 63

FIGURE 22 □ OPTICAL WAVEGUIDE MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES □ 63

5.2.1 □ DRIVERS □ 64

5.2.1.1 □ Rising number of data centers worldwide □ 64

5.2.1.2 □ Technological advancements in photonic integrated circuits (PICs) □ 64

5.2.1.3 □ Surging demand for high bandwidth □ 65

FIGURE 23 □ OPTICAL WAVEGUIDE MARKET: DRIVERS AND THEIR IMPACT □ 65

5.2.2 □ RESTRAINTS □ 66

5.2.2.1 □ Issues associated with designing and fabricating optical waveguides □ 66

FIGURE 24 □ OPTICAL WAVEGUIDE MARKET: RESTRAINTS AND THEIR IMPACT □ 66

5.2.3 □ OPPORTUNITIES □ 66

5.2.3.1 □ Growing deployment of 5G telecommunication networks □ 66

5.2.3.2 □ Rising investments in augmented/mixed reality (AR/MR) market □ 67

FIGURE 25 □ OPTICAL WAVEGUIDE MARKET: OPPORTUNITIES AND THEIR IMPACT □ 67

5.2.4 □ CHALLENGES □ 68

5.2.4.1 □ Challenges associated while embedding optical waveguide components into small circuits □ 68

FIGURE 26 □ OPTICAL WAVEGUIDE MARKET: CHALLENGES AND THEIR IMPACT □ 68

5.3 □ TECHNOLOGY ANALYSIS □ 68

5.3.1 □ OPTICAL WAVEGUIDE FABRICATION PROCESSES □ 68

5.3.1.1 □ Lithography □ 68

5.3.1.2 □ Microreplication □ 69

5.3.1.3 □ Photo-addressed method □ 69

5.4 □ VALUE CHAIN ANALYSIS □ 69

FIGURE 27 □ OPTICAL WAVEGUIDE MARKET: VALUE CHAIN ANALYSIS □ 69

5.5 □ ECOSYSTEM ANALYSIS □ 71

FIGURE 28 □ OPTICAL WAVEGUIDE MARKET: ECOSYSTEM ANALYSIS □ 71

TABLE 2 □ OPTICAL WAVEGUIDE ECOSYSTEM: COMPANIES AND THEIR ROLE □ 72

5.6 □ TRENDS AND DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES □ 73

FIGURE 29 □ TRENDS AND DISRUPTIONS IN OPTICAL WAVEGUIDE MARKET □ 73

5.7 □ PORTER'S FIVE FORCES ANALYSIS □ 74

TABLE 3 □ OPTICAL WAVEGUIDE MARKET: PORTER'S FIVE FORCES ANALYSIS □ 74

5.7.1 □ INTENSITY OF COMPETITIVE RIVALRY □ 74

5.7.2 □ BARGAINING POWER OF SUPPLIERS □ 74

5.7.3 □ BARGAINING POWER OF BUYERS □ 75

5.7.4 □ THREAT OF SUBSTITUTES □ 75

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

5.7.5 THREAT OF NEW ENTRANTS 75

5.8 AVERAGE SELLING PRICE (ASP) ANALYSIS 76

TABLE 4 AVERAGE SELLING PRICE OF OPTICAL WAVEGUIDE COMPONENTS 76

FIGURE 30 AVERAGE SELLING PRICE OF OPTICAL FIBERS OFFERED BY MAJOR MARKET PLAYERS TO TOP THREE END-USER INDUSTRIES 77

TABLE 5 AVERAGE SELLING PRICE OF OPTICAL FIBERS OFFERED BY MAJOR MARKET PLAYERS TO TOP THREE END-USER INDUSTRIES 77

TABLE 6 AVERAGE SELLING PRICE OF OPTICAL TRANSCEIVERS BASED ON DATA RATES 78

5.9 CASE STUDY ANALYSIS 79

5.9.1 AIM PHOTONICS AND SPARK PHOTONICS TEAMED UP TO DEVELOP HANDS-ON EDUCATIONAL PHOTONIC INTEGRATED CIRCUIT (PIC) CHIP 79

5.9.2 ALMA TELECOM UPGRADED ITS NETWORK USING FTTP SOLUTION OFFERED BY CORNING INCORPORATED 79

5.9.3 COMMSCOPE HELPED E-FIBER COMMERCIALIZE FTTX NETWORKS IN NETHERLANDS 80

5.10 TRADE ANALYSIS 81

FIGURE 31 IMPORT DATA FOR HS CODE 900110, BY COUNTRY, 2017-2021 81

FIGURE 32 EXPORT DATA FOR HS CODE 900110, BY COUNTRY, 2017-2021 82

5.11 PATENT ANALYSIS 82

FIGURE 33 NUMBER OF PATENTS GRANTED PER YEAR, 2013-2022 82

FIGURE 34 TOP 10 COMPANIES WITH HIGHEST NUMBER OF PATENT APPLICATIONS IN LAST 10 YEARS 83

TABLE 7 LIST OF TOP PATENT OWNERS IN LAST 10 YEARS 83

5.11.1 PATENT ANALYSIS 84

TABLE 8 LIST OF MAJOR PATENTS PERTAINING TO OPTICAL WAVEGUIDE MARKET 84

5.12 KEY CONFERENCES AND EVENTS, 2023-2024 87

TABLE 9 OPTICAL WAVEGUIDE MARKET: DETAILED LIST OF CONFERENCES AND EVENTS 87

5.13 TARIFF ANALYSIS 88

TABLE 10 MFN TARIFF FOR HS CODE 900110 EXPORTED BY US 88

TABLE 11 MFN TARIFF FOR HS CODE 900110 EXPORTED BY CHINA 89

5.14 STANDARDS AND REGULATORY LANDSCAPE 89

5.14.1 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 89

TABLE 12 NORTH AMERICA: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 89

TABLE 13 EUROPE: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 90

TABLE 14 ASIA PACIFIC: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 91

TABLE 15 ROW: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 92

5.14.2 REGULATORY STANDARDS 92

5.14.2.1 International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC) 92

5.14.2.2 International Telecommunication Union (ITU) Standards 93

5.14.3 GOVERNMENT REGULATIONS 94

5.14.3.1 US 94

5.14.3.2 Europe 94

5.14.3.3 China 94

5.14.3.4 India 95

5.15 KEY STAKEHOLDERS AND BUYING CRITERIA 95

5.15.1 KEY STAKEHOLDERS IN BUYING PROCESS 95

FIGURE 35 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE END-USER INDUSTRIES 95

TABLE 16 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE END-USER INDUSTRIES (%) 95

5.15.2 BUYING CRITERIA 96

FIGURE 36 KEY BUYING CRITERIA FOR TOP THREE END-USER INDUSTRIES 96

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 17 KEY BUYING CRITERIA FOR TOP THREE END-USER INDUSTRIES 96

6 OPTICAL WAVEGUIDE MARKET, BY TYPE 97

6.1 INTRODUCTION 98

FIGURE 37 CHANNEL WAVEGUIDE SEGMENT TO DOMINATE OPTICAL WAVEGUIDE MARKET DURING FORECAST PERIOD 98

TABLE 18 OPTICAL WAVEGUIDE MARKET, BY TYPE, 2019-2022 (USD MILLION) 99

TABLE 19 OPTICAL WAVEGUIDE MARKET, BY TYPE, 2023-2028 (USD MILLION) 99

6.2 PLANAR WAVEGUIDE 99

6.2.1 RISING DEMAND FOR OPTICAL TRANSCEIVERS IN DATA CENTERS 99

FIGURE 38 ASIA PACIFIC TO REGISTER HIGHEST CAGR IN OPTICAL WAVEGUIDE MARKET FOR PLANAR WAVEGUIDE SEGMENT DURING FORECAST PERIOD 100

TABLE 20 PLANAR WAVEGUIDE: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) 100

TABLE 21 PLANAR WAVEGUIDE: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) 100

6.3 CHANNEL WAVEGUIDE 101

6.3.1 GROWING USE OF CHANNEL WAVEGUIDES TO MEET LONG-DISTANCE AND HIGH-BANDWIDTH REQUIREMENTS 101

FIGURE 39 ASIA PACIFIC TO HOLD LARGEST SHARE OF OPTICAL WAVEGUIDE MARKET FOR CHANNEL WAVEGUIDE SEGMENT DURING FORECAST PERIOD 101

TABLE 22 CHANNEL WAVEGUIDE: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) 102

TABLE 23 CHANNEL WAVEGUIDE: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) 102

6.4 UNIT SHIPMENTS OF OPTICAL WAVEGUIDE-BASED COMPONENTS 102

TABLE 24 OPTICAL WAVEGUIDE COMPONENT MARKET, BY TYPE, 2019-2022 (USD MILLION) 103

TABLE 25 OPTICAL WAVEGUIDE COMPONENT MARKET, BY TYPE, 2023-2028 (USD MILLION) 103

TABLE 26 OPTICAL FIBER MARKET, BY TYPE, 2019-2022 (USD MILLION) 103

TABLE 27 OPTICAL FIBER MARKET, BY TYPE, 2023-2028 (USD MILLION) 104

TABLE 28 OPTICAL FIBER MARKET, BY TYPE, 2019-2022 (MILLION FIBER KILOMETER) 104

TABLE 29 OPTICAL FIBER MARKET, BY TYPE, 2023-2028 (MILLION FIBER KILOMETER) 104

TABLE 30 OPTICAL WAVEGUIDE COMPONENT MARKET, BY TYPE, 2019-2022 (MILLION UNITS) 104

TABLE 31 OPTICAL WAVEGUIDE COMPONENT MARKET, BY TYPE, 2023-2028 (MILLION UNITS) 105

7 OPTICAL WAVEGUIDE MARKET, BY MATERIAL 106

7.1 INTRODUCTION 107

FIGURE 40 GLASS SEGMENT TO DOMINATE OPTICAL WAVEGUIDE MARKET DURING FORECAST PERIOD 107

TABLE 32 OPTICAL WAVEGUIDE MARKET, BY MATERIAL, 2019-2022 (USD MILLION) 108

TABLE 33 OPTICAL WAVEGUIDE MARKET, BY MATERIAL, 2023-2028 (USD MILLION) 108

7.2 GLASS 108

7.2.1 GLASS-BASED OPTICAL WAVEGUIDES DELIVER HIGH PERFORMANCE IN EXTREME CONDITIONS 108

FIGURE 41 ASIA PACIFIC TO REGISTER HIGHEST CAGR IN OPTICAL WAVEGUIDE MARKET FOR GLASS SEGMENT DURING FORECAST PERIOD 109

TABLE 34 GLASS: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) 109

TABLE 35 GLASS: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) 109

7.3 POLYMER 110

7.3.1 POLYMER-BASED OPTICAL WAVEGUIDES OFFER HIGH FLEXIBILITY 110

FIGURE 42 ASIA PACIFIC TO HOLD LARGEST SHARE OF OPTICAL WAVEGUIDE MARKET FOR POLYMER SEGMENT DURING FORECAST PERIOD 110

TABLE 36 POLYMER: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) 111

TABLE 37 POLYMER: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) 111

7.4 SEMICONDUCTOR 111

7.4.1 SEMICONDUCTOR-BASED OPTICAL WAVEGUIDES USED IN PHOTONIC INTEGRATED CIRCUITS (PICs) 111

FIGURE 43 ASIA PACIFIC TO HOLD LARGEST SHARE OF OPTICAL WAVEGUIDE MARKET FOR SEMICONDUCTOR SEGMENT DURING

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

FORECAST PERIOD 112

TABLE 38 SEMICONDUCTOR: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) 112

TABLE 39 SEMICONDUCTOR: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) 113

8 OPTICAL WAVEGUIDE MARKET, BY PROPAGATION 114

8.1 INTRODUCTION 115

FIGURE 44 SINGLE-MODE SEGMENT TO DOMINATE OPTICAL WAVEGUIDE MARKET DURING FORECAST PERIOD 115

TABLE 40 OPTICAL WAVEGUIDE MARKET, BY PROPAGATION, 2019-2022 (USD MILLION) 115

TABLE 41 OPTICAL WAVEGUIDE MARKET, BY PROPAGATION, 2023-2028 (USD MILLION) 116

8.2 SINGLE-MODE 116

8.2.1 GROWING PREFERENCE FOR OPTICAL WAVEGUIDES WITH SINGLE-MODE PROPAGATION AMONG TELECOMMUNICATION COMPANIES 116

FIGURE 45 ASIA PACIFIC TO REGISTER HIGHEST CAGR IN OPTICAL WAVEGUIDE MARKET FOR SINGLE-MODE SEGMENT DURING FORECAST PERIOD 117

TABLE 42 SINGLE-MODE: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) 117

TABLE 43 SINGLE-MODE: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) 117

8.3 MULTI-MODE 118

8.3.1 GROWING DEMAND FOR UNLIMITED BANDWIDTH CAPACITY 118

FIGURE 46 ASIA PACIFIC TO HOLD LARGEST SHARE OF OPTICAL WAVEGUIDE MARKET FOR MULTI-MODE SEGMENT DURING FORECAST PERIOD 118

TABLE 44 MULTI-MODE: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) 119

TABLE 45 MULTI-MODE: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) 119

9 OPTICAL WAVEGUIDE MARKET, BY REFRACTIVE INDEX 120

9.1 INTRODUCTION 120

FIGURE 47 OPTICAL WAVEGUIDE MARKET, BY REFRACTIVE INDEX 120

9.2 STEP-INDEX 120

9.2.1 RISING USE OF STEP-INDEX IN SHORT-DISTANCE APPLICATIONS 120

9.3 GRADED-INDEX 121

9.3.1 RISING USE OF GRADED-INDEX FOR LOW ATTENUATION AND HIGHER BANDWIDTH SIGNAL TRANSMISSION 121

10 OPTICAL WAVEGUIDE MARKET, BY INTERCONNECT LEVEL 122

10.1 INTRODUCTION 123

FIGURE 48 CHIP- AND BOARD-LEVEL OPTICAL INTERCONNECT SEGMENT TO REGISTER HIGHEST CAGR DURING FORECAST PERIOD 123

TABLE 46 OPTICAL WAVEGUIDE MARKET, BY INTERCONNECT LEVEL, 2019-2022 (USD MILLION) 124

TABLE 47 OPTICAL WAVEGUIDE MARKET, BY INTERCONNECT LEVEL, 2023-2028 (USD MILLION) 124

10.2 METRO AND LONG-HAUL OPTICAL INTERCONNECT 124

10.2.1 RISING ADOPTION OF METRO AND LONG-HAUL OPTICAL INTERCONNECTS IN TELECOMMUNICATION NETWORKS 124

FIGURE 49 ASIA PACIFIC TO REGISTER HIGHEST CAGR IN OPTICAL WAVEGUIDE MARKET FOR METRO AND LONG-HAUL OPTICAL INTERCONNECT SEGMENT DURING FORECAST PERIOD 125

TABLE 48 METRO AND LONG-HAUL OPTICAL INTERCONNECT: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) 125

TABLE 49 METRO AND LONG-HAUL OPTICAL INTERCONNECT: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) 125

10.3 BOARD-TO-BOARD AND RACK-LEVEL OPTICAL INTERCONNECT 126

10.3.1 INCREASING DEMAND FOR BOARD-TO-BOARD AND RACK-LEVEL OPTICAL INTERCONNECTIONS FOR FAST AND ENERGY-EFFICIENT SYSTEMS 126

FIGURE 50 ASIA PACIFIC TO BE LARGEST OPTICAL WAVEGUIDE MARKET FOR BOARD-TO-BOARD AND RACK-LEVEL OPTICAL INTERCONNECT SEGMENT DURING FORECAST PERIOD 126

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 50 □ BOARD-TO-BOARD AND RACK-LEVEL OPTICAL INTERCONNECT: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) □ 127

TABLE 51 □ BOARD-TO-BOARD AND RACK-LEVEL OPTICAL INTERCONNECT: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) □ 127

10.4 □ CHIP- AND BOARD-LEVEL OPTICAL INTERCONNECT □ 127

10.4.1 □ SURGING USE OF CHIP- AND BOARD-LEVEL OPTICAL INTERCONNECTIONS IN DATA CENTERS □ 127

FIGURE 51 □ ASIA PACIFIC TO BE LARGEST OPTICAL WAVEGUIDE MARKET FOR CHIP- AND BOARD-LEVEL OPTICAL INTERCONNECT SEGMENT DURING FORECAST PERIOD □ 128

TABLE 52 □ CHIP- AND BOARD-LEVEL OPTICAL INTERCONNECT: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) □ 128

TABLE 53 □ CHIP- AND BOARD-LEVEL OPTICAL INTERCONNECT: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) □ 128

11 □ OPTICAL WAVEGUIDE MARKET, BY END-USER INDUSTRY □ 129

11.1 □ INTRODUCTION □ 130

FIGURE 52 □ TELECOMMUNICATIONS SEGMENT TO LEAD OPTICAL WAVEGUIDE MARKET DURING FORECAST PERIOD □ 130

TABLE 54 □ OPTICAL WAVEGUIDE MARKET, BY END-USER INDUSTRY, 2019-2022 (USD MILLION) □ 131

TABLE 55 □ OPTICAL WAVEGUIDE MARKET, BY END-USER INDUSTRY, 2023-2028 (USD MILLION) □ 131

11.2 □ TELECOMMUNICATIONS □ 131

11.2.1 □ COST EFFICIENCY, HIGHER BANDWIDTH, AND HIGHER SPEED THAN COPPER WAVEGUIDES □ 131

FIGURE 53 □ ASIA PACIFIC TO DOMINATE OPTICAL WAVEGUIDE MARKET FOR TELECOMMUNICATIONS SEGMENT DURING FORECAST PERIOD □ 132

TABLE 56 □ TELECOMMUNICATIONS: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) □ 133

TABLE 57 □ TELECOMMUNICATIONS: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) □ 133

11.3 □ DATA CENTER & HIGH-PERFORMANCE COMPUTING (HPC) □ 133

11.3.1 □ GROWING USE OF OPTICAL WAVEGUIDES FOR HIGH-SPEED DATA TRANSMISSION □ 133

FIGURE 54 □ ASIA PACIFIC TO DOMINATE OPTICAL WAVEGUIDE MARKET FOR DATA CENTER & HIGH-PERFORMANCE COMPUTING (HPC) SEGMENT DURING FORECAST PERIOD □ 134

TABLE 58 □ DATA CENTER & HIGH-PERFORMANCE COMPUTING (HPC): OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) □ 135

TABLE 59 □ DATA CENTER & HIGH-PERFORMANCE COMPUTING (HPC): OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) □ 135

11.4 □ MEDICAL □ 135

11.4.1 □ RISE IN BIO-COMPATIBLE OPTICAL WAVEGUIDES IN PHOTO MEDICAL APPLICATIONS □ 135

FIGURE 55 □ ASIA PACIFIC TO DOMINATE OPTICAL WAVEGUIDE MARKET FOR MEDICAL SEGMENT DURING FORECAST PERIOD □ 136

TABLE 60 □ MEDICAL: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) □ 136

TABLE 61 □ MEDICAL: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) □ 136

11.5 □ METROLOGY □ 137

11.5.1 □ RISING ADOPTION OF OPTICAL WAVEGUIDE-BASED INSPECTION DEVICES □ 137

FIGURE 56 □ ASIA PACIFIC TO DOMINATE OPTICAL WAVEGUIDE MARKET FOR METROLOGY SEGMENT DURING FORECAST PERIOD □ 137

TABLE 62 □ METROLOGY: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) □ 138

TABLE 63 □ METROLOGY: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) □ 138

11.6 □ AEROSPACE & DEFENSE □ 138

11.6.1 □ INCREASING MILITARY BUDGETS WORLDWIDE □ 138

FIGURE 57 □ ASIA PACIFIC TO DOMINATE OPTICAL WAVEGUIDE MARKET FOR AEROSPACE & DEFENSE SEGMENT DURING FORECAST PERIOD □ 139

TABLE 64 □ AEROSPACE & DEFENSE: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) □ 139

TABLE 65 □ AEROSPACE & DEFENSE: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) □ 140

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

11.7 CONSUMER ELECTRONICS 140

11.7.1 ADVANCEMENTS IN AUGMENTED REALITY/MIXED REALITY (AR/MR) TECHNOLOGIES 140

FIGURE 58 ASIA PACIFIC TO DOMINATE OPTICAL WAVEGUIDE MARKET FOR CONSUMER ELECTRONICS SEGMENT DURING FORECAST PERIOD 141

TABLE 66 CONSUMER ELECTRONICS: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) 141

TABLE 67 CONSUMER ELECTRONICS: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) 141

11.8 INDUSTRIAL 142

11.8.1 RISING ADOPTION OF OPTICAL WAVEGUIDE-BASED SENSORS IN INDUSTRIAL SENSING APPLICATIONS 142

FIGURE 59 ASIA PACIFIC TO DOMINATE OPTICAL WAVEGUIDE MARKET FOR INDUSTRIAL SEGMENT DURING FORECAST PERIOD 143

TABLE 68 INDUSTRIAL: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) 143

TABLE 69 INDUSTRIAL: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) 143

11.9 OTHERS 144

TABLE 70 OTHERS: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) 144

TABLE 71 OTHERS: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) 145

12 OPTICAL WAVEGUIDE MARKET, BY REGION 146

12.1 INTRODUCTION 147

FIGURE 60 ASIA PACIFIC TO DOMINATE OPTICAL WAVEGUIDE MARKET DURING FORECAST PERIOD 147

TABLE 72 OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION) 148

TABLE 73 OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION) 148

12.2 NORTH AMERICA 148

12.2.1 NORTH AMERICA: RECESSION IMPACT 149

FIGURE 61 NORTH AMERICA: SNAPSHOT OF OPTICAL WAVEGUIDE MARKET 150

FIGURE 62 US TO DOMINATE NORTH AMERICAN OPTICAL WAVEGUIDE MARKET DURING FORECAST PERIOD 150

TABLE 74 NORTH AMERICA: OPTICAL WAVEGUIDE MARKET, BY COUNTRY, 2019-2022 (USD MILLION) 151

TABLE 75 NORTH AMERICA: OPTICAL WAVEGUIDE MARKET, BY COUNTRY, 2023-2028 (USD MILLION) 151

TABLE 76 NORTH AMERICA: OPTICAL WAVEGUIDE MARKET, BY TYPE, 2019-2022 (USD MILLION) 151

TABLE 77 NORTH AMERICA: OPTICAL WAVEGUIDE MARKET, BY TYPE, 2023-2028 (USD MILLION) 151

TABLE 78 NORTH AMERICA: OPTICAL WAVEGUIDE MARKET, BY MATERIAL, 2019-2022 (USD MILLION) 152

TABLE 79 NORTH AMERICA: OPTICAL WAVEGUIDE MARKET, BY MATERIAL, 2023-2028 (USD MILLION) 152

TABLE 80 NORTH AMERICA: OPTICAL WAVEGUIDE MARKET, BY PROPAGATION, 2019-2022 (USD MILLION) 152

TABLE 81 NORTH AMERICA: OPTICAL WAVEGUIDE MARKET, BY PROPAGATION, 2023-2028 (USD MILLION) 152

TABLE 82 NORTH AMERICA: OPTICAL WAVEGUIDE MARKET, BY INTERCONNECT LEVEL, 2019-2022 (USD MILLION) 153

TABLE 83 NORTH AMERICA: OPTICAL WAVEGUIDE MARKET, BY INTERCONNECT LEVEL, 2023-2028 (USD MILLION) 153

TABLE 84 NORTH AMERICA: OPTICAL WAVEGUIDE MARKET, BY END-USER INDUSTRY, 2019-2022 (USD MILLION) 153

TABLE 85 NORTH AMERICA: OPTICAL WAVEGUIDE MARKET, BY END-USER INDUSTRY, 2023-2028 (USD MILLION) 154

12.2.2 US 154

12.2.2.1 Rising investments in development of telecommunication and data center infrastructures 154

12.2.3 CANADA 155

12.2.3.1 Growing demand for high-speed networking 155

12.2.4 MEXICO 156

12.2.4.1 Increasing internet penetration 156

12.3 EUROPE 156

12.3.1 EUROPE: RECESSION IMPACT 157

FIGURE 63 EUROPE: SNAPSHOT OF OPTICAL WAVEGUIDE MARKET 158

FIGURE 64 GERMANY TO DOMINATE EUROPEAN OPTICAL WAVEGUIDE MARKET DURING FORECAST PERIOD 159

TABLE 86 EUROPE: OPTICAL WAVEGUIDE MARKET, BY COUNTRY, 2019-2022 (USD MILLION) 159

TABLE 87 EUROPE: OPTICAL WAVEGUIDE MARKET, BY COUNTRY, 2023-2028 (USD MILLION) 159

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 88	EUROPE: OPTICAL WAVEGUIDE MARKET, BY TYPE, 2019-2022 (USD MILLION)	160
TABLE 89	EUROPE: OPTICAL WAVEGUIDE MARKET, BY TYPE, 2023-2028 (USD MILLION)	160
TABLE 90	EUROPE: OPTICAL WAVEGUIDE MARKET, BY MATERIAL, 2019-2022 (USD MILLION)	160
TABLE 91	EUROPE: OPTICAL WAVEGUIDE MARKET, BY MATERIAL, 2023-2028 (USD MILLION)	160
TABLE 92	EUROPE: OPTICAL WAVEGUIDE MARKET, BY PROPAGATION, 2019-2022 (USD MILLION)	160
TABLE 93	EUROPE: OPTICAL WAVEGUIDE MARKET, BY PROPAGATION, 2023-2028 (USD MILLION)	161
TABLE 94	EUROPE: OPTICAL WAVEGUIDE MARKET, BY INTERCONNECT LEVEL, 2019-2022 (USD MILLION)	161
TABLE 95	EUROPE: OPTICAL WAVEGUIDE MARKET, BY INTERCONNECT LEVEL, 2023-2028 (USD MILLION)	161
TABLE 96	EUROPE: OPTICAL WAVEGUIDE MARKET, BY END-USER INDUSTRY, 2019-2022 (USD MILLION)	162
TABLE 97	EUROPE: OPTICAL WAVEGUIDE MARKET, BY END-USER INDUSTRY, 2023-2028 (USD MILLION)	162
12.3.2	GERMANY	162
12.3.2.1	Strengthening of FTTH network under "Gigabit Strategy"	162
12.3.3	UK	163
12.3.3.1	Presence of large-scale telecommunication service providers	163
12.3.4	FRANCE	164
12.3.4.1	Increasing investments in deployment of submarine fiber network	164
12.3.5	REST OF EUROPE	164
12.4	ASIA PACIFIC	165
12.4.1	ASIA PACIFIC: RECESSION IMPACT	166
FIGURE 65	ASIA PACIFIC: SNAPSHOT OF OPTICAL WAVEGUIDE MARKET	167
FIGURE 66	CHINA TO DOMINATE ASIA PACIFIC OPTICAL WAVEGUIDE MARKET DURING FORECAST PERIOD	168
TABLE 98	ASIA PACIFIC: OPTICAL WAVEGUIDE MARKET, BY COUNTRY, 2019-2022 (USD MILLION)	168
TABLE 99	ASIA PACIFIC: OPTICAL WAVEGUIDE MARKET, BY COUNTRY, 2023-2028 (USD MILLION)	168
TABLE 100	ASIA PACIFIC: OPTICAL WAVEGUIDE MARKET, BY TYPE, 2019-2022 (USD MILLION)	169
TABLE 101	ASIA PACIFIC: OPTICAL WAVEGUIDE MARKET, BY TYPE, 2023-2028 (USD MILLION)	169
TABLE 102	ASIA PACIFIC: OPTICAL WAVEGUIDE MARKET, BY MATERIAL, 2019-2022 (USD MILLION)	169
TABLE 103	ASIA PACIFIC: OPTICAL WAVEGUIDE MARKET, BY MATERIAL, 2023-2028 (USD MILLION)	169
TABLE 104	ASIA PACIFIC: OPTICAL WAVEGUIDE MARKET, BY PROPAGATION, 2019-2022 (USD MILLION)	169
TABLE 105	ASIA PACIFIC: OPTICAL WAVEGUIDE MARKET, BY PROPAGATION, 2023-2028 (USD MILLION)	170
TABLE 106	ASIA PACIFIC: OPTICAL WAVEGUIDE MARKET, BY INTERCONNECT LEVEL, 2019-2022 (USD MILLION)	170
TABLE 107	ASIA PACIFIC: OPTICAL WAVEGUIDE MARKET, BY INTERCONNECT LEVEL, 2023-2028 (USD MILLION)	170
TABLE 108	ASIA PACIFIC: OPTICAL WAVEGUIDE MARKET, BY END-USER INDUSTRY, 2019-2022 (USD MILLION)	171
TABLE 109	ASIA PACIFIC: OPTICAL WAVEGUIDE MARKET, BY END-USER INDUSTRY, 2023-2028 (USD MILLION)	171
12.4.2	CHINA	172
12.4.2.1	Increasing investments by Chinese telecommunication operators in deployment of 5G infrastructure	172
12.4.3	INDIA	173
12.4.3.1	Government-led initiatives to increase broadband connectivity across rural areas	173
12.4.4	JAPAN	173
12.4.4.1	Presence of prominent optical waveguide component manufacturers	173
12.4.5	SOUTH KOREA	174
12.4.5.1	Proliferation of data centers	174
12.4.6	REST OF ASIA PACIFIC	175
12.5	ROW	175
12.5.1	ROW: RECESSION IMPACT	176
TABLE 110	ROW: OPTICAL WAVEGUIDE MARKET, BY REGION, 2019-2022 (USD MILLION)	176
TABLE 111	ROW: OPTICAL WAVEGUIDE MARKET, BY REGION, 2023-2028 (USD MILLION)	176
TABLE 112	ROW: OPTICAL WAVEGUIDE MARKET, BY TYPE, 2019-2022 (USD MILLION)	176

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 113	ROW: OPTICAL WAVEGUIDE MARKET, BY TYPE, 2023-2028 (USD MILLION)	177
TABLE 114	ROW: OPTICAL WAVEGUIDE MARKET, BY MATERIAL, 2019-2022 (USD MILLION)	177
TABLE 115	ROW: OPTICAL WAVEGUIDE MARKET, BY MATERIAL, 2023-2028 (USD MILLION)	177
TABLE 116	ROW: OPTICAL WAVEGUIDE MARKET, BY PROPAGATION, 2019-2022 (USD MILLION)	177
TABLE 117	ROW: OPTICAL WAVEGUIDE MARKET, BY PROPAGATION, 2023-2028 (USD MILLION)	177
TABLE 118	ROW: OPTICAL WAVEGUIDE MARKET, BY INTERCONNECT LEVEL, 2019-2022 (USD MILLION)	178
TABLE 119	ROW: OPTICAL WAVEGUIDE MARKET, BY INTERCONNECT LEVEL, 2023-2028 (USD MILLION)	178
TABLE 120	ROW: OPTICAL WAVEGUIDE MARKET, BY END-USER INDUSTRY, 2019-2022 (USD MILLION)	178
TABLE 121	ROW: OPTICAL WAVEGUIDE MARKET, BY END-USER INDUSTRY, 2023-2028 (USD MILLION)	179
12.5.2	MIDDLE EAST & AFRICA	179
12.5.2.1	Increasing data center establishments	179
12.5.3	SOUTH AMERICA	180
12.5.3.1	Rising investments in deployment of subsea communication cables	180
13	COMPETITIVE LANDSCAPE	181
13.1	OVERVIEW	181
13.1.1	OVERVIEW OF KEY GROWTH STRATEGIES ADOPTED BY MAJOR COMPANIES	181
TABLE 122	OVERVIEW OF KEY GROWTH STRATEGIES ADOPTED BY MAJOR COMPANIES	181
13.2	REVENUE ANALYSIS	183
FIGURE 67	OPTICAL WAVEGUIDE REVENUE ANALYSIS OF TOP FIVE COMPANIES, 2018-2022	183
13.3	MARKET SHARE ANALYSIS (2022)	183
TABLE 123	OPTICAL WAVEGUIDE MARKET: DEGREE OF COMPETITION	184
13.4	COMPANY EVALUATION MATRIX	186
13.4.1	STARS	186
13.4.2	EMERGING LEADERS	186
13.4.3	PERVASIVE PLAYERS	186
13.4.4	PARTICIPANTS	186
FIGURE 68	OPTICAL WAVEGUIDE MARKET: COMPANY EVALUATION MATRIX, 2022	187
13.5	STARTUP/ SMALL AND MEDIUM-SIZED ENTERPRISES (SME) EVALUATION MATRIX	188
TABLE 124	OPTICAL WAVEGUIDE MARKET: STARTUPS	188
13.5.1	PROGRESSIVE COMPANIES	189
13.5.2	RESPONSIVE COMPANIES	189
13.5.3	DYNAMIC COMPANIES	189
13.5.4	STARTING BLOCKS	189
FIGURE 69	STARTUP/SME EVALUATION MATRIX, 2022	190
TABLE 125	STARTUP/SME MATRIX: DETAILED LIST OF KEY STARTUPS	191
13.6	COMPETITIVE BENCHMARKING	192
TABLE 126	OPTICAL WAVEGUIDE MARKET: COMPETITIVE BENCHMARKING OF KEY STARTUPS/SME	192
13.7	OPTICAL WAVEGUIDE MARKET: COMPANY FOOTPRINT	193
TABLE 127	COMPANY FOOTPRINT	193
TABLE 128	COMPANY TYPE FOOTPRINT	194
TABLE 129	COMPANY MATERIAL FOOTPRINT	195
TABLE 130	COMPANY PROPAGATION FOOTPRINT	196
TABLE 131	COMPANY INTERCONNECT LEVEL FOOTPRINT	197
TABLE 132	COMPANY END-USER INDUSTRY FOOTPRINT	198
TABLE 133	COMPANY REGIONAL FOOTPRINT	200
13.8	COMPETITIVE SCENARIO AND TRENDS	201
13.8.1	PRODUCT LAUNCHES	201

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 134	PRODUCT LAUNCHES, 2019-2022	201
13.8.2	DEALS	206
TABLE 135	DEALS, 2019-2022	206
14	COMPANY PROFILES	212
(Business Overview, Products Offered, Recent Developments, MnM View Right to win, Strategic choices made, Weaknesses and competitive threats) *		
14.1	KEY PLAYERS	212
14.1.1	CORNING INCORPORATED	212
TABLE 136	CORNING INCORPORATED: COMPANY OVERVIEW	212
FIGURE 70	CORNING INCORPORATED: COMPANY SNAPSHOT	213
TABLE 137	CORNING INCORPORATED: PRODUCTS/SOLUTIONS/SERVICES OFFERED	213
TABLE 138	CORNING INCORPORATED: DEALS	215
TABLE 139	CORNING INCORPORATED: PRODUCT LAUNCHES	216
TABLE 140	CORNING INCORPORATED: OTHERS	217
14.1.2	SUMITOMO ELECTRIC INDUSTRIES, LTD.	219
TABLE 141	SUMITOMO ELECTRIC INDUSTRIES, LTD.: COMPANY OVERVIEW	219
FIGURE 71	SUMITOMO ELECTRIC INDUSTRIES, LTD.: COMPANY SNAPSHOT	220
TABLE 142	SUMITOMO ELECTRIC INDUSTRIES, LTD.: PRODUCTS/SOLUTIONS/SERVICES OFFERED	221
TABLE 143	SUMITOMO ELECTRIC INDUSTRIES, LTD.: DEALS	222
TABLE 144	SUMITOMO ELECTRIC INDUSTRIES, LTD.: PRODUCT LAUNCHES	223
14.1.3	YANGTZE OPTICAL FIBRE AND CABLE JOINT STOCK LIMITED COMPANY (YOFC)	225
TABLE 145	YANGTZE OPTICAL FIBRE AND CABLE JOINT STOCK LIMITED COMPANY (YOFC): COMPANY OVERVIEW	225
FIGURE 72	YANGTZE OPTICAL FIBRE AND CABLE JOINT STOCK LIMITED COMPANY (YOFC): COMPANY SNAPSHOT	226
TABLE 146	YANGTZE OPTICAL FIBRE AND CABLE JOINT STOCK LIMITED COMPANY (YOFC): PRODUCT/SOLUTION/SERVICE OFFERINGS	227
TABLE 147	YANGTZE OPTICAL FIBRE AND CABLE JOINT STOCK LIMITED COMPANY (YOFC): DEALS	229
TABLE 148	YANGTZE OPTICAL FIBRE AND CABLE JOINT STOCK LIMITED COMPANY (YOFC): PRODUCT LAUNCHES	229
TABLE 149	YANGTZE OPTICAL FIBRE AND CABLE JOINT STOCK LIMITED COMPANY (YOFC): OTHERS	230
14.1.4	FUJIKURA LTD.	232
TABLE 150	FUJIKURA LTD.: COMPANY OVERVIEW	232
FIGURE 73	FUJIKURA LTD.: COMPANY SNAPSHOT	233
TABLE 151	FUJIKURA LTD.: PRODUCT/SOLUTION/SERVICE OFFERINGS	234
TABLE 152	FUJIKURA LTD.: DEALS	235
TABLE 153	FUJIKURA LTD.: PRODUCT LAUNCHES	235
TABLE 154	FUJIKURA LTD.: OTHERS	236
14.1.5	PRYSMIAN GROUP	237
TABLE 155	PRYSMIAN GROUP: COMPANY OVERVIEW	237
FIGURE 74	PRYSMIAN GROUP: COMPANY SNAPSHOT	238
TABLE 156	PRYSMIAN GROUP: PRODUCTS/SOLUTIONS/SERVICES OFFERED	239
TABLE 157	PRYSMIAN GROUP: DEALS	240
TABLE 158	PRYSMIAN GROUP: PRODUCT LAUNCHES	241
TABLE 159	PRYSMIAN GROUP: OTHERS	241
14.1.6	FURUKAWA ELECTRIC CO., LTD.	243
TABLE 160	FURUKAWA ELECTRIC CO., LTD.: COMPANY OVERVIEW	243
FIGURE 75	FURUKAWA ELECTRIC CO., LTD.: COMPANY SNAPSHOT	244
TABLE 161	FURUKAWA ELECTRIC CO., LTD.: PRODUCT/SOLUTION/SERVICE OFFERINGS	245
TABLE 162	FURUKAWA ELECTRIC CO., LTD.: DEALS	245

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 163	FURUKAWA ELECTRIC CO., LTD.: PRODUCT LAUNCHES	246
TABLE 164	FURUKAWA ELECTRIC CO., LTD.: OTHERS	246
14.1.7	COHERENT CORP. (FORMER II-VI INCORPORATED)	247
TABLE 165	COHERENT CORP.: COMPANY OVERVIEW	247
FIGURE 76	COHERENT CORP.: COMPANY SNAPSHOT	248
TABLE 166	COHERENT CORP.: PRODUCT/SOLUTION/SERVICE OFFERINGS	249
TABLE 167	COHERENT CORP.: DEALS	249
TABLE 168	COHERENT CORP.: PRODUCT LAUNCHES	250
TABLE 169	COHERENT CORP.: OTHERS	251
14.1.8	COMMSCOPE HOLDING COMPANY, INC.	252
TABLE 170	COMMSCOPE HOLDING COMPANY, INC.: COMPANY OVERVIEW	252
FIGURE 77	COMMSCOPE HOLDING COMPANY, INC.: COMPANY SNAPSHOT	253
TABLE 171	COMMSCOPE HOLDING COMPANY, INC.: PRODUCT/SOLUTION/SERVICE OFFERINGS	253
TABLE 172	COMMSCOPE HOLDING COMPANY, INC.: DEALS	254
TABLE 173	COMMSCOPE HOLDING COMPANY, INC.: PRODUCT LAUNCHES	255
14.1.9	STERLITE TECHNOLOGIES LIMITED	256
TABLE 174	STERLITE TECHNOLOGIES LIMITED: COMPANY OVERVIEW	256
FIGURE 78	STERLITE TECHNOLOGIES LIMITED: COMPANY SNAPSHOT	257
TABLE 175	STERLITE TECHNOLOGIES LIMITED: PRODUCT/SOLUTION/SERVICE OFFERINGS	257
TABLE 176	STERLITE TECHNOLOGIES LIMITED: DEALS	258
TABLE 177	STERLITE TECHNOLOGIES LIMITED: PRODUCT LAUNCHES	258
14.1.10	DIGILENS INC.	259
TABLE 178	DIGILENS INC.: COMPANY OVERVIEW	259
TABLE 179	DIGILENS INC.: PRODUCT/SOLUTION/SERVICE OFFERINGS	259
TABLE 180	DIGILENS INC.: DEALS	260
TABLE 181	DIGILENS INC.: PRODUCT LAUNCHES	260
14.2	OTHER PLAYERS	261
14.2.1	COVESION LTD.	261
14.2.2	HFCL	262
14.2.3	QUINSTAR TECHNOLOGY, INC.	263
14.2.4	AKSH OPTIFIBRE	264
14.2.5	ART PHOTONICS GMBH	265
14.2.6	RPG CABLES (DIVISION OF KEC INTERNATIONAL LIMITED)	266
14.2.7	MITSUBISHI CHEMICAL GROUP CORPORATION	267
14.2.8	ASAHI KASEI CORPORATION	268
14.2.9	BIRLA CABLE LTD.	269
14.2.10	ORBIS OY	270
14.2.11	AUXORA (SHENZHEN), INC.	271
14.2.12	BELDEN INC.	272
14.2.13	LS CABLE & SYSTEM LTD.	273
14.2.14	OPTICAL CABLE CORPORATION	274
14.2.15	HC PHOTONICS CORP.	275
14.2.16	HOLOGRAPHIX LLC	276
14.2.17	TEEM PHOTONICS	277
*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.		
15	APPENDIX	278

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

15.1 DISCUSSION GUIDE 278

15.2 KNOWLEDGESTORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL 282

15.3 CUSTOMIZATION OPTIONS 284

15.4 RELATED REPORTS 284

15.5 AUTHOR DETAILS 285

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

Optical Waveguide Market by Type (Planar, Channel), Material (Glass, Polymer, Semiconductor), Propagation (Single-mode, Multi-mode), Refractive Index (Step-index, Graded-index), Interconnect Level, End-user Industry and Region - Global Forecast to 2028

Market Report | 2023-01-27 | 277 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@scott's-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@scott's-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@scott's-international.com

www.scott's-international.com

Zip Code*

Country*

Date

2026-03-10

Signature

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com