

Digital Isolator Market by Technology (Capacitive, Magnetic, GMR), Data Rate (25 to 75 Mbps, More Than 75 Mbps), Channel, Insulation Material, Application (Gate Drivers, DC/DC Converters, ADCs), Vertical and Region - Global Forecast to 2028

Market Report | 2023-11-23 | 235 pages | MarketsandMarkets

AVAILABLE LICENSES:

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

Report description:

The digital isolator market was valued at USD 1.9 billion in 2022 and is projected to reach USD 3.1 billion by 2028, growing at a CAGR of 8.6% during the forecast period from 2023 to 2028. Accelerated demand for noise-free electronics and electrical devices acts as a driver whereas increasing use of isolators in harsh environmental applications, and growing deployment of digital isolators owing to high operating efficiency and space-saving design provide lucrative opportunities to the digital isolator market. "4-channel segment of the digital isolator market holds the largest market share during the forecast period."

4-channel digital isolators accounted for the largest market share (~31%), in terms of value, in 2022 owing to the rising adoption of these digital isolators in industrial, healthcare, and automotive verticals. Analog Devices, Inc. (US), Broadcom (US), Skyworks Solutions, Inc. (US), and Texas Instruments Incorporated (US) are among a few major players offering 4-channel digital isolators. "Silicon dioxide (SiO2)-based digital isolators segment is expected to hold the largest market share during the forecast period." Silicon dioxide (SiO2)-based digital isolators are estimated to account for the largest market share (~56%), in terms of value, in 2023. SiO2 is a commonly used material in digital isolators manufactured by companies such as Texas Instruments Incorporated (US) and Skyworks Solutions, Inc. (US). Polyimide-based digital isolators are expected to experience the highest CAGR during the forecast period. This growth can be attributed to their superior performance, high protection, and longer lifespan compared to digital isolators based on silicon dioxide (SiO2).

"US in North America is expected to hold the largest market share during the forecast period."

The US accounted for the largest share of the digital isolator market in North America in 2022 and is expected to retain its position during the forecast. The significant presence of key players such as Analog Devices, Inc. (US); Vicor Corporation (US); and NVE Corporation (US) and the growing adoption of gate drivers in the industrial and automotive sectors are the major factors driving the market growth in the US.

In determining and verifying the market size for several segments and subsegments gathered through secondary research, extensive primary interviews have been conducted with key officials in the digital isolator market. Following is the breakup of the profiles of the primary participants for the report.

-[]By Company Type: Tier 1 - 45 %, Tier 2 - 35%, and Tier 3 - 20%

- By Designation: C-Level Executives -32%, Directors- 40%, and Others - 28%

- By Region: North America- 37%, Asia Pacific - 40%, Europe- 15%, and RoW - 8%

The report profiles key digital isolator players and analyzes their market shares. Players profiled in this report are Texas Instruments Incorporated (US); Analog Devices, Inc. (US); Skyworks Solutions, Inc. (US); Infineon Technologies AG (Germany); NVE Corporation (US); ROHM CO., LTD. (Japan); Broadcom (US); Vicor Corporation (US); STMicroelectronics (Switzerland); Renesas Electronics Corporation (Japan); Murata Manufacturing Co., Ltd. (Japan), etc. Research Coverage

The report defines, describes, and forecasts the digital isolator market based on Technology, Data Rate, Channel, Insulating Material, Applications, Vertical, and Region. It provides detailed information regarding drivers, restraints, opportunities, and challenges influencing the growth of the digital isolator market. It also analyzes competitive developments such as product launches, acquisitions, expansions, contracts, partnerships, and actions conducted by the key players to grow in the market. 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 digital isolator market and the subsegments. 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 report provides insights on the following pointers:

-[Analysis of key drivers (Increased adoption of digital isolators as substitute for optocouplers, high demand for digital isolators from electric vehicle and battery pack manufacturers, elevated use of renewable energy sources worldwide, accelerated demand for noise-free electronics and electrical devices, surged adoption of digital isolators as gate drivers, and significant demand for digital isolators in industrial motor-drive applications), restraints (Inability of digital isolators to transmit low-frequency signals without modulators), opportunities (Rising adoption of electric vehicles globally, increasing safety regulations in industrial automation, growing focus on utilizing digital isolators in high-altitude operations, increasing use of isolators in harsh environmental applications, and growing deployment of digital isolators owing to high operating efficiency and space-saving design), and challenges (High cost of digital isolators compared to optocouplers) influencing the growth of the digital isolator market.

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

- Market Development: Comprehensive information about lucrative markets - the report analyses the digital isolator market across varied regions.

-[Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the digital isolator market

- Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players like Texas Instruments Incorporated (US); Analog Devices, Inc. (US); Skyworks Solutions, Inc. (US); Infineon Technologies AG (Germany); NVE Corporation (US); ROHM CO., LTD. (Japan); Broadcom (US); Vicor Corporation (US); STMicroelectronics (Switzerland); Renesas Electronics Corporation (Japan); Murata Manufacturing Co., Ltd. (Japan); Semiconductor Components

Industries, LLC (Onsemi) (US); TT Electronics (UK); TE Connectivity (Switzerland); Advantech Co., Ltd. (Taiwan); Amphenol Corporation (US); NXP Semiconductors (Netherlands); Microchip Technology Inc. (US); Littelfuse, Inc. (US); Monolithic Power Systems, Inc. (US); Kinetic Technologies (US), among others in the digital isolator market strategies. The report also helps stakeholders understand the pulse of the digital isolator market and provides them with information on key market drivers, restraints, challenges, and opportunities.

Table of Contents:

1 INTRODUCTION 33 1.1 STUDY OBJECTIVES 33 1.2 MARKET DEFINITION 33 1.2.1 INCLUSIONS AND EXCLUSIONS 34 1.3 STUDY SCOPE 35 1.3.1 MARKETS COVERED 35 FIGURE 1 DIGITAL ISOLATOR MARKET SEGMENTATION 35 1.3.2 REGIONAL SCOPE 36 1.3.3 YEARS CONSIDERED 36 1.4 CURRENCY CONSIDERED 36 1.5 UNITS CONSIDERED 37 1.6 STAKEHOLDERS 37 1.7 SUMMARY OF CHANGES 37 1.8 IMPACT OF RECESSION 37 2 RESEARCH METHODOLOGY 38 2.1 RESEARCH DATA 38 FIGURE 2 DIGITAL ISOLATOR MARKET: RESEARCH DESIGN 38 2.1.1 SECONDARY DATA 39 2.1.1.1 List of secondary sources 39 2.1.1.2 Key data from secondary sources 40 2.1.2 PRIMARY DATA 40 2.1.2.1 List of primary interview participants 40 2.1.2.2 Key data from primary sources 41 2.1.2.3 Key industry insights 41 2.1.2.4 Breakdown of primaries 42 2.1.3 SECONDARY AND PRIMARY RESEARCH 2.2 MARKET SIZE ESTIMATION 43 FIGURE 3 MARKET SIZE ESTIMATION METHODOLOGY: SUPPLY-SIDE ANALYSIS 43 2.2.1 BOTTOM-UP APPROACH 44 FIGURE 4 MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH 44 FIGURE 5∏MARKET SIZE ESTIMATION METHODOLOGY: APPROACH 2 (DEMAND-SIDE ANALYSIS)∏44 2.2.2 TOP-DOWN APPROACH 45 FIGURE 6 MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH 45 FIGURE 7[MARKET SIZE ESTIMATION METHODOLOGY: APPROACH 1 (SUPPLY-SIDE ANALYSIS) - REVENUES GENERATED BY COMPANIES FROM SALES OF PRODUCTS OFFERED IN DIGITAL ISOLATOR MARKET[]45 2.3 MARKET BREAKDOWN AND DATA TRIANGULATION 46 FIGURE 8□DATA TRIANGULATION□46 2.4 RESEARCH ASSUMPTIONS 47 2.5 RISK ASSESSMENT 47 2.6 PARAMETERS CONSIDERED TO ANALYZE RECESSION IMPACT ON DIGITAL ISOLATOR MARKET 48

2.7 RESEARCH LIMITATIONS 48

3 EXECUTIVE SUMMARY 49

FIGURE 9[]CAPACITIVE COUPLING TECHNOLOGY TO HOLD LARGEST SHARE OF DIGITAL ISOLATOR MARKET IN 2023[]50 FIGURE 10[]MORE THAN 75 MBPS SEGMENT TO LEAD DIGITAL ISOLATOR MARKET, BY DATA RATE, DURING FORECAST PERIOD[]50 FIGURE 11[]4-CHANNEL DIGITAL ISOLATORS TO CAPTURE MAJORITY OF MARKET SHARE IN 2028[]51

FIGURE 12[]SILICON DIOXIDE (SIO2) SEGMENT TO ACCOUNT FOR LARGEST SHARE OF DIGITAL ISOLATOR MARKET, BY INSULATING MATERIAL, IN 2028[]52

FIGURE 13[]GATE DRIVERS TO CAPTURE LARGEST SHARE OF DIGITAL ISOLATOR MARKET, BY APPLICATION, IN 2028[]52 FIGURE 14[]AUTOMOTIVE VERTICAL TO RECORD HIGHEST CAGR IN DIGITAL ISOLATOR MARKET DURING FORECAST PERIOD[]53 FIGURE 15[]ASIA PACIFIC ACCOUNTED FOR LARGEST SHARE OF DIGITAL ISOLATOR MARKET IN 2022[]54 4[]PREMIUM INSIGHTS[]55

4.1 MAJOR OPPORTUNITIES FOR PLAYERS IN DIGITAL ISOLATOR MARKET 55

FIGURE 16[INCREASING ADOPTION OF DIGITAL ISOLATORS AS SUBSTITUTE FOR OPTOCOUPLERS TO CREATE OPPORTUNITIES FOR PLAYERS IN DIGITAL ISOLATOR MARKET[55]

4.2 DIGITAL ISOLATOR MARKET, BY TECHNOLOGY 56

FIGURE 17 CAPACITIVE COUPLING TECHNOLOGY TO ACCOUNT FOR LARGEST SHARE OF DIGITAL ISOLATOR MARKET THROUGHOUT FORECAST PERIOD 56

4.3 DIGITAL ISOLATOR MARKET, BY DATA RATE 56

FIGURE 18[]DIGITAL ISOLATORS WITH DATA RATES OF MORE THAN 75 MBPS TO COMMAND MARKET FROM 2023 TO 2028[]56 4.4[]DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY APPLICATION AND COUNTRY[]57

FIGURE 19[]GATE DRIVERS AND CHINA TO HOLD LARGEST MARKET SHARES OF ASIA PACIFIC DIGITAL ISOLATOR MARKET, BY APPLICATION AND COUNTRY, RESPECTIVELY, IN 2023[]57

4.5 DIGITAL ISOLATOR MARKET, BY VERTICAL 57

FIGURE 20 INDUSTRIAL VERTICAL TO HOLD LARGEST MARKET SHARE IN 2028 57

4.6 DIGITAL ISOLATOR MARKET, BY COUNTRY 58

FIGURE 21 INDIA TO REGISTER HIGHEST CAGR IN GLOBAL DIGITAL ISOLATOR MARKET DURING FORECAST PERIOD 58 5 MARKET OVERVIEW 59

5.1 INTRODUCTION 59

5.2 MARKET DYNAMICS 59

FIGURE 22 DIGITAL ISOLATOR MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES 59

5.2.1 DRIVERS 60

5.2.1.1 Increased adoption of digital isolators as substitute for optocouplers 60

TABLE 1 COMPARISON OF OPTOCOUPLERS WITH DIGITAL ISOLATORS 60

5.2.1.2 High demand for digital isolators from electric vehicle and battery pack manufacturers 61

5.2.1.3 Elevated use of renewable energy sources worldwide 61

FIGURE 23 GLOBAL SOLAR PV AND WIND INSTALLATIONS, 2018-2027 (GW) 62

FIGURE 24 GLOBAL INVESTMENTS IN CLEAN ENERGY AND ENERGY EFFICIENCY PROJECTS, 2019-2022 62

5.2.1.4 Accelerated demand for noise-free electronics and electrical devices 62

5.2.1.5 Surged adoption of digital isolators as gate drivers 63

5.2.1.6 Significant demand for digital isolators in industrial motor-drive applications 63

FIGURE 25[]IMPACT ANALYSIS OF DRIVERS ON DIGITAL ISOLATOR MARKET[]64

5.2.2 RESTRAINTS 64

5.2.2.1 Inability of digital isolators to transmit low-frequency signals without modulators 64

FIGURE 26[]IMPACT ANALYSIS OF RESTRAINTS ON DIGITAL ISOLATOR MARKET[]65

5.2.3 OPPORTUNITIES 65

5.2.3.1 Rising adoption of electric vehicles globally 65

FIGURE 27 SALES OF ELECTRIC VEHICLES, BY GEOGRAPHY, 2019-2022 (MILLION UNITS) 66

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

5.2.3.2 Increasing safety regulations in industrial automation 66 5.2.3.3 Growing focus on utilizing digital isolators in high-altitude operations 67 TABLE 2[]MULTIPLICATION FACTORS REQUIRED FOR CLEARANCES AT HIGH ALTITUDES[]67 5.2.3.4 Increasing use of isolators in harsh environmental applications 67 5.2.3.5 Growing deployment of digital isolators owing to high operating efficiency and space-saving design 68 FIGURE 28 IMPACT ANALYSIS OF OPPORTUNITIES ON DIGITAL ISOLATOR MARKET 68 5.2.4 CHALLENGES 69 5.2.4.1 High cost of digital isolators than optocouplers 69 FIGURE 29 IMPACT ANALYSIS OF CHALLENGES ON DIGITAL ISOLATOR MARKET 69 5.3 TRENDS/DISRUPTIONS IMPACTING CUSTOMER BUSINESS 69 FIGURE 30 TRENDS/DISRUPTIONS AFFECTING CUSTOMER BUSINESS 69 5.4 PRICING ANALYSIS 70 FIGURE 31⊓AVERAGE SELLING PRICE (ASP) OF DIGITAL ISOLATORS, BY TECHNOLOGY, 2019-2028 (USD)∏70 TABLE 3∏AVERAGE SELLING PRICE OF DIGITAL ISOLATORS OFFERED BY KEY SUPPLIERS (USD)∏70 5.5 VALUE CHAIN ANALYSIS 72 FIGURE 32 DIGITAL ISOLATOR MARKET: VALUE CHAIN ANALYSIS 72 5.6 ECOSYSTEM ANALYSIS 73 FIGURE 33 ECOSYSTEM FOR DIGITAL ISOLATORS 73 TABLE 4 ROLE OF PLAYERS IN DIGITAL ISOLATOR ECOSYSTEM 74 5.7 TECHNOLOGY ANALYSIS 75 5.7.1 5G TECHNOLOGY 75 5.7.2 BATTERY MANAGEMENT SYSTEMS (BMS) IN ELECTRIC VEHICLES 75 5.7.3 GIANT MAGNETORESISTIVE COUPLING TECHNOLOGY 75 5.8 PATENT ANALYSIS 76 FIGURE 34 ANALYSIS OF PATENTS APPLIED AND GRANTED FOR PRODUCTS OFFERED IN DIGITAL ISOLATOR MARKET, 2012-2022 5.8.1 LIST OF MAJOR PATENTS 77 TABLE 5 LIST OF MAJOR PATENTS IN DIGITAL ISOLATOR MARKET 77 5.9 TRADE ANALYSIS 79 5.9.1 TRADE DATA FOR HS CODE 854239 79 FIGURE 35⊓IMPORT DATA FOR PRODUCTS COVERED UNDER HS CODE 854239, BY COUNTRY, 2018-2022 (USD THOUSAND)∏79 FIGURE 36∏EXPORT DATA FOR PRODUCTS COVERED UNDER HS CODE 854239, BY COUNTRY, 2018?2022 (USD THOUSAND)∏80 5.9.2 TARIFF ANALYSIS 80 TABLE 6 MFN TARIFFS FOR HS CODE 854239-COMPLIANT PRODUCTS EXPORTED BY CHINA 80 TABLE 7 MFN TARIFFS FOR HS CODE 854239-COMPLIANT PRODUCTS EXPORTED BY SINGAPORE 181 TABLE 8 MFN TARIFFS FOR HS CODE 854239-COMPLIANT PRODUCTS EXPORTED BY TAIWAN 81 5.10 KEY CONFERENCES AND EVENTS, 2024 81 TABLE 9 DIGITAL ISOLATOR MARKET: LIST OF CONFERENCES AND EVENTS 81 5.11 REGULATORY LANDSCAPE AND STANDARDS 82 5.11.1 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 82 TABLE 10 NORTH AMERICA: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 82 TABLE 11 UROPE: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 183 TABLE 12 ASIA PACIFIC: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 83 TABLE 13 ROW: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 84 TABLE 14 STANDARDS RELATED TO DIGITAL ISOLATORS 84 5.12 PORTER'S FIVE FORCES ANALYSIS 85 TABLE 15□IMPACT OF PORTER'S FIVE FORCES ON DIGITAL ISOLATOR MARKET[]85 FIGURE 37 DIGITAL ISOLATOR MARKET: PORTER'S FIVE FORCES ANALYSIS 85

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

5.12.1 THREAT OF NEW ENTRANTS 86 5.12.2 THREAT OF SUBSTITUTES 86 5.12.3 BARGAINING POWER OF SUPPLIERS 86 5.12.4 BARGAINING POWER OF BUYERS 86 5.12.5 INTENSITY OF COMPETITIVE RIVALRY 86 5.13 KEY STAKEHOLDERS AND BUYING CRITERIA 5.13.1⊓KEY STAKEHOLDERS IN BUYING PROCESS∏87 FIGURE 38 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP 3 APPLICATIONS 87 TABLE 16 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP 3 APPLICATIONS 87 5.13.2 BUYING CRITERIA 88 FIGURE 39⊓KEY BUYING CRITERIA FOR TOP 3 APPLICATIONS⊓88 TABLE 17 KEY BUYING CRITERIA, BY TOP 3 APPLICATIONS 88 5.14 CASE STUDY ANALYSIS 89 5.14.1 TEXAS INSTRUMENTS DEPLOYED ISOS141-SEP ISOLATOR TO ENHANCE SYSTEM INTEGRITY AND PERFORMANCE OF LOW EARTH ORBIT SATELLITE[]89 6 DIGITAL ISOLATOR MARKET, BY TECHNOLOGY 90 6.1 INTRODUCTION 91 FIGURE 40 DIGITAL ISOLATOR MARKET, BY TECHNOLOGY 91 FIGURE 41 GIANT MAGNETORESISTIVE DIGITAL ISOLATORS TO RECORD HIGHEST CAGR FROM 2023 TO 2028 91 TABLE 18 DIGITAL ISOLATOR MARKET, BY TECHNOLOGY, 2019-2022 (USD MILLION) 22 TABLE 19∏DIGITAL ISOLATOR MARKET, BY TECHNOLOGY, 2023-2028 (USD MILLION)∏92 TABLE 20[]DIGITAL ISOLATOR MARKET, BY TECHNOLOGY, 2019-2022 (MILLION UNITS)[]92 TABLE 21 DIGITAL ISOLATOR MARKET, BY TECHNOLOGY, 2023-2028 (MILLION UNITS) 22 6.2 CAPACITIVE COUPLING 93 6.2.1 LOW-POWER DISSIPATION AND HIGH-SPEED OPERATIONS TO BOOST DEMAND FOR CAPACITIVE COUPLING DIGITAL ISOLATORS[]93 6.3 MAGNETIC COUPLING 93 6.3.1 USE OF MAGNETIC COUPLING TO ELIMINATE EFFECT OF ELECTRIC FIELD ON ENCLOSED CIRCUITS TO BOOST SEGMENTAL GROWTH[]93 6.4 GIANT MAGNETORESISTIVE 94 6.4.1∏SUPERIOR ISOLATION AND RADIATION TOLERANCE OF GMR TECHNOLOGY TO ACCELERATE DEMAND∏94 7 DIGITAL ISOLATOR MARKET, BY DATA RATE 95 7.1 INTRODUCTION 96 FIGURE 42 DIGITAL ISOLATOR MARKET, BY DATA RATE 96 FIGURE 43 DIGITAL ISOLATORS WITH DATA RATES OF MORE THAN 75 MBPS TO RECORD HIGHEST CAGR DURING FORECAST PERIOD₀96 TABLE 22 DIGITAL ISOLATOR MARKET, BY DATA RATE, 2019-2022 (USD MILLION) 97 TABLE 23 DIGITAL ISOLATOR MARKET, BY DATA RATE, 2023-2028 (USD MILLION) 97 TABLE 24 DIGITAL ISOLATOR MARKET, BY DATA RATE, 2019-2022 (MILLION UNITS) 97 TABLE 25□DIGITAL ISOLATOR MARKET, BY DATA RATE, 2023-2028 (MILLION UNITS)□97 7.2□LESS THAN 25 MBPS□98 7.2.1 GROWING ADOPTION IN SINGLE- AND DUAL-CHANNEL ISOLATION APPLICATIONS TO DRIVE MARKET 98 7.3 25 TO 75 MBPS 98 7.3.1∏INCREASING USE IN 4- AND 6-CHANNEL ISOLATION APPLICATIONS TO BOOST SEGMENTAL GROWTH∏98 7.4 MORE THAN 75 MBPS 99 7.4.1 RISING INTEGRATION INTO PRINTED CIRCUIT BOARD TRACES, BACKPLANES, AND CABLES TO FUEL SEGMENTAL GROWTH 99 8 DIGITAL ISOLATOR MARKET, BY CHANNEL 100

8.1 INTRODUCTION 101 FIGURE 44 DIGITAL ISOLATOR MARKET, BY CHANNEL 101 FIGURE 45[]8-CHANNEL DIGITAL ISOLATORS TO REGISTER HIGHEST CAGR FROM 2023 TO 2028[]102 TABLE 26 DIGITAL ISOLATOR MARKET, BY CHANNEL, 2019-2022 (USD MILLION) 102 TABLE 27 DIGITAL ISOLATOR MARKET, BY CHANNEL, 2023-2028 (USD MILLION) 102 TABLE 28 DIGITAL ISOLATOR MARKET, BY CHANNEL, 2019-2022 (MILLION UNITS) 103 TABLE 29 DIGITAL ISOLATOR MARKET, BY CHANNEL, 2023-2028 (MILLION UNITS) 103 8.2¹²-CHANNEL¹⁰³ 8.2.1 RISING USE AS SUBSTITUTE FOR OPTICAL ISOLATORS TO DRIVE MARKET 103 8.3П4-CHANNELП104 8.3.1∏INCREASING ADOPTION IN DC/DC CONVERTERS AND SERIAL PERIPHERAL INTERFACES TO FUEL MARKET GROWTH∏104 8.4∏6-CHANNEL∏104 8.4.1 □ GROWING DEPLOYMENT IN USB PORTS, SPI-BUS ISOLATORS, PLCS, AND DC/DC CONVERTERS TO SUPPORT MARKET GROWTH₁₀₄ 8.5[8-CHANNEL]105 8.5.1 SURGING UTILIZATION IN INDUSTRIAL AUTOMATION AND AUTOMOTIVE APPLICATIONS TO FOSTER MARKET GROWTH 105 8.6 OTHERS 105 9 DIGITAL ISOLATOR MARKET, BY INSULATING MATERIAL 106 9.1 INTRODUCTION 107 FIGURE 46⊓DIGITAL ISOLATOR MARKET, BY INSULATING MATERIAL⊓107 FIGURE 47 SILICON DIOXIDE (SIO2)-BASED DIGITAL ISOLATORS TO ACCOUNT FOR LARGEST MARKET SHARE IN 2028 108 TABLE 30 DIGITAL ISOLATOR MARKET, BY INSULATING MATERIAL, 2019-2022 (USD MILLION) 108 TABLE 31 DIGITAL ISOLATOR MARKET, BY INSULATING MATERIAL, 2023-2028 (USD MILLION) 108 9.2 SILICON DIOXIDE (SIO2) 109 9.2.1 HIGH DURABILITY AND CAPACITY TO WITHSTAND EXTREMELY HIGH VOLTAGES TO BOOST DEMAND 109 TABLE 32 COMPARISON OF DIELECTRIC STRENGTH OF DIFFERENT INSULATING MATERIALS 109 9.3 POLYIMIDE 109 9.3.1 BETTER PROTECTION AND THERMAL STABILITY AND DELAYED AGING IN POLYIMIDE-BASED DIGITAL ISOLATORS TO DRIVE MARKET[]109 TABLE 33 COMPARISON BETWEEN POLYIMIDE- AND SIO2-BASED INSULATING MATERIALS 110 9.4 OTHER MATERIALS 110 10 DIGITAL ISOLATOR MARKET, BY APPLICATION 111 10.1 INTRODUCTION 112 FIGURE 48 DIGITAL ISOLATOR MARKET, BY APPLICATION 112 FIGURE 49 ANALOG-TO-DIGITAL CONVERTERS TO WITNESS HIGHEST CAGR IN DIGITAL ISOLATOR MARKET DURING FORECAST PERIOD 112 TABLE 34 DIGITAL ISOLATOR MARKET, BY APPLICATION, 2019-2022 (USD MILLION) TABLE 35[]DIGITAL ISOLATOR MARKET, BY APPLICATION, 2023-2028 (USD MILLION)[]113 10.2 GATE DRIVERS 114 10.2.1⊓INCREASING FOCUS ON SAFETY, RELIABILITY, AND PRECISE CONTROL IN POWER ELECTRONICS TO FUEL SEGMENTAL GROWTH 114 TABLE 36 GATE DRIVERS: DIGITAL ISOLATOR MARKET, BY REGION, 2019-2022 (USD MILLION) 114 TABLE 37 GATE DRIVERS: DIGITAL ISOLATOR MARKET, BY REGION, 2023-2028 (USD MILLION) 114 TABLE 38 GATE DRIVERS: DIGITAL ISOLATOR MARKET IN NORTH AMERICA, BY COUNTRY, 2019-2022 (USD MILLION) 115 TABLE 39 GATE DRIVERS: DIGITAL ISOLATOR MARKET IN NORTH AMERICA, BY COUNTRY, 2023-2028 (USD MILLION) 115 TABLE 40∏GATE DRIVERS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2019-2022 (USD MILLION)∏115 TABLE 41∏GATE DRIVERS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2023-2028 (USD MILLION)∏116

Scotts International. EU Vat number: PL 6772247784

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

TABLE 42 GATE DRIVERS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2019-2022 (USD MILLION)[]116 TABLE 43 GATE DRIVERS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2023-2028 (USD MILLION)[]116 TABLE 44 GATE DRIVERS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2019-2022 (USD MILLION)[]117 TABLE 45 GATE DRIVERS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2023-2028 (USD MILLION)[]117 TABLE 46 GATE DRIVERS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2019-2022 (USD MILLION)[]117 TABLE 47 GATE DRIVERS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2019-2022 (USD MILLION)[]117 TABLE 47 GATE DRIVERS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2023-2028 (USD MILLION)[]118 10.3 []DC/DC CONVERTERS[]118

10.3.1 GROWING ADOPTION OF DC/DC CONVERTERS TO REDUCE OPERATING TEMPERATURE OF DEVICES TO BOOST DEMAND FOR DIGITAL ISOLATORS 118

TABLE 48[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET, BY REGION, 2019-2022 (USD MILLION)[119 TABLE 49[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET, BY REGION, 2023-2028 (USD MILLION)[119 TABLE 50[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET IN NORTH AMERICA, BY COUNTRY, 2019-2022 (USD MILLION)[120 TABLE 51[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET IN NORTH AMERICA, BY COUNTRY, 2023-2028 (USD MILLION)[120 TABLE 52[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2019-2022 (USD MILLION)[120 TABLE 53[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2019-2022 (USD MILLION)[121 TABLE 53[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2019-2022 (USD MILLION)[121 TABLE 54[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2019-2022 (USD MILLION)][121 TABLE 55[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2023-2028 (USD MILLION)][121 TABLE 55[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2023-2028 (USD MILLION)][121 TABLE 56[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2019-2022 (USD MILLION)][122 TABLE 57[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2019-2022 (USD MILLION)][122 TABLE 57[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2023-2028 (USD MILLION)][122 TABLE 58[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2023-2028 (USD MILLION)][122 TABLE 58[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2019-2022 (USD MILLION)][122 TABLE 58[DC/DC CONVERTERS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2019-2022 (USD MILLION)][123 10.4[ANALOG-TO-DIGITAL CONVERTERS]]123

10.4.1 INTEGRATION OF DIGITAL ISOLATORS INTO ADCS TO MINIMIZE EMI AND VOLTAGE OFFSET ISSUES TO DRIVE MARKET I23 TABLE 60 ANALOG-TO-DIGITAL CONVERTERS: DIGITAL ISOLATOR MARKET, BY REGION, 2019-2022 (USD MILLION) 124 TABLE 61 ANALOG-TO-DIGITAL CONVERTERS: DIGITAL ISOLATOR MARKET, BY REGION, 2023-2028 (USD MILLION) 124 TABLE 62 ANALOG-TO-DIGITAL CONVERTERS: DIGITAL ISOLATOR MARKET IN NORTH AMERICA, BY COUNTRY, 2019-2022 (USD MILLION) 124

TABLE 63[]ANALOG-TO-DIGITAL CONVERTERS: DIGITAL ISOLATOR MARKET IN NORTH AMERICA, BY COUNTRY, 2023-2028 (USD MILLION)]]125

TABLE 64[]ANALOG-TO-DIGITAL CONVERTERS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2019-2022 (USD MILLION)[]125 TABLE 65[]ANALOG-TO-DIGITAL CONVERTERS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2023-2028 (USD MILLION)[]125 TABLE 66[]ANALOG-TO-DIGITAL CONVERTERS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2019-2022 (USD MILLION)[]126

TABLE 67[]ANALOG-TO-DIGITAL CONVERTERS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2023-2028 (USD MILLION)]126

TABLE 68[]ANALOG-TO-DIGITAL CONVERTERS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2019-2022 (USD MILLION)[]126 TABLE 69[]ANALOG-TO-DIGITAL CONVERTERS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2023-2028 (USD MILLION)[]127 TABLE 70[]ANALOG-TO-DIGITAL CONVERTERS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2019-2022 (USD MILLION)[]127 TABLE 71[]ANALOG-TO-DIGITAL CONVERTERS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2023-2028 (USD MILLION)[]127 10.5[]USB AND OTHER COMMUNICATION PORTS[]128

10.5.1 [RISING DEMAND FROM HEALTHCARE AND INDUSTRIAL VERTICALS TO ACCELERATE SEGMENTAL GROWTH [] 128 TABLE 72 [] USB AND OTHER COMMUNICATION PORTS: DIGITAL ISOLATOR MARKET, BY REGION, 2019-2022 (USD MILLION) [] 128 TABLE 73 [] USB AND OTHER COMMUNICATION PORTS: DIGITAL ISOLATOR MARKET, BY REGION, 2023-2028 (USD MILLION) [] 128 TABLE 74 [] USB AND OTHER COMMUNICATION PORTS: DIGITAL ISOLATOR MARKET IN NORTH AMERICA, BY COUNTRY, 2019-2022 (USD MILLION) [] 129

TABLE 75[]USB AND OTHER COMMUNICATION PORTS: DIGITAL ISOLATOR MARKET IN NORTH AMERICA, BY COUNTRY, 2023-2028 (USD MILLION)]]129

Scotts International. EU Vat number: PL 6772247784

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

TABLE 76□USB AND OTHER COMMUNICATION PORTS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2019-2022 (USD MILLION)□129

TABLE 77□USB AND OTHER COMMUNICATION PORTS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2023-2028 (USD MILLION)□129

TABLE 78□USB AND OTHER COMMUNICATION PORTS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2019-2022 (USD MILLION)□130

TABLE 79[]USB AND OTHER COMMUNICATION PORTS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2023-2028 (USD MILLION)[]130

TABLE 80□USB AND OTHER COMMUNICATION PORTS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2019-2022 (USD MILLION)□130

TABLE 81 USB AND OTHER COMMUNICATION PORTS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2023-2028 (USD MILLION) 130

TABLE 82[JUSB AND OTHER COMMUNICATION PORTS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2019-2022 (USD MILLION)[]131 TABLE 83[JUSB AND OTHER COMMUNICATION PORTS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2023-2028 (USD MILLION)[]131 10.6[]CAN ISOLATORS[]132

10.6.1[IINSTALLATION OF CAN BUS INTO EVS AND HEVS TO ACCELERATE DEMAND FOR DIGITAL ISOLATORS[132 TABLE 84[CAN ISOLATORS: DIGITAL ISOLATOR MARKET, BY REGION, 2019-2022 (USD MILLION)[132 TABLE 85[CAN ISOLATORS: DIGITAL ISOLATOR MARKET, BY REGION, 2023-2028 (USD MILLION)[132 TABLE 86[CAN ISOLATORS: DIGITAL ISOLATOR MARKET IN NORTH AMERICA, BY COUNTRY, 2019-2022 (USD MILLION)[133 TABLE 87[CAN ISOLATORS: DIGITAL ISOLATOR MARKET IN NORTH AMERICA, BY COUNTRY, 2023-2028 (USD MILLION)[133 TABLE 88[CAN ISOLATORS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2019-2022 (USD MILLION)[133 TABLE 88[CAN ISOLATORS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2019-2022 (USD MILLION)[134 TABLE 89]CAN ISOLATORS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2023-2028 (USD MILLION)[134 TABLE 90]CAN ISOLATORS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2019-2022 (USD MILLION)[134 TABLE 91]CAN ISOLATORS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2019-2022 (USD MILLION)[134 TABLE 91]CAN ISOLATORS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2023-2028 (USD MILLION)[134 TABLE 92]CAN ISOLATORS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2019-2022 (USD MILLION)[135 TABLE 93]CAN ISOLATORS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2019-2022 (USD MILLION)[135 TABLE 93]CAN ISOLATORS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2023-2028 (USD MILLION)[135 TABLE 93]CAN ISOLATORS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2023-2028 (USD MILLION)[135 TABLE 93]CAN ISOLATORS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2019-2022 (USD MILLION)[135 TABLE 94]CAN ISOLATORS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2019-2022 (USD MILLION)[135 TABLE 95]CAN ISOLATORS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2023-2028 (USD MILLION)[136 10.7[]OTHER APPLICATIONS[136

TABLE 96[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET, BY REGION, 2019-2022 (USD MILLION)]]137 TABLE 97[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET, BY REGION, 2023-2028 (USD MILLION)]]137 TABLE 98[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET IN NORTH AMERICA, BY COUNTRY, 2019-2022 (USD MILLION)]]137 TABLE 99[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET IN NORTH AMERICA, BY COUNTRY, 2023-2028 (USD MILLION)]]138 TABLE 100[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2019-2022 (USD MILLION)]]138 TABLE 101[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2019-2022 (USD MILLION)]]138 TABLE 101[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET IN EUROPE, BY COUNTRY, 2023-2028 (USD MILLION)]]138 TABLE 102[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2019-2022 (USD MILLION)]]139 TABLE 103[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2023-2028 (USD MILLION)]]139 TABLE 104[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC, BY COUNTRY, 2023-2028 (USD MILLION)]]139 TABLE 104[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2019-2022 (USD MILLION)]]140 TABLE 105[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2023-2028 (USD MILLION)]]140 TABLE 106[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET IN ROW, BY REGION, 2023-2028 (USD MILLION)]]140 TABLE 106[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2019-2022 (USD MILLION)]]140 TABLE 107[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2019-2022 (USD MILLION)]]140 TABLE 107[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2019-2022 (USD MILLION)]]140 TABLE 107[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2023-2028 (USD MILLION)]]140 TABLE 107[]OTHER APPLICATIONS: DIGITAL ISOLATOR MARKET, BY VERTICAL, 2023-2028 (USD MILLION)]]140

11.1 INTRODUCTION 142

FIGURE 50 DIGITAL ISOLATOR MARKET, BY VERTICAL 142

FIGURE 51[]INDUSTRIAL VERTICAL TO HOLD LARGEST SHARE OF DIGITAL ISOLATOR MARKET IN 2028[]142 TABLE 108[]DIGITAL ISOLATOR MARKET, BY VERTICAL, 2019-2022 (USD MILLION)[]143 TABLE 109[]DIGITAL ISOLATOR MARKET, BY VERTICAL, 2023-2028 (USD MILLION)[]143

11.2[INDUSTRIAL]144

11.2.1 INCREASING FOCUS ON RESOLVING SAFETY, NOISE, AND COMMON-MODE VOLTAGE ISSUES IN INDUSTRIAL AUTOMATION TO BOOST DEMAND 144

TABLE 110[INDUSTRIAL: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2019-2022 (USD MILLION)[]144 TABLE 111[INDUSTRIAL: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2023-2028 (USD MILLION)[]145 11.3[]HEALTHCARE[]145

11.3.1 GROWING USE OF DIGITAL ISOLATORS IN PATIENT MONITORING SYSTEMS, IMAGING EQUIPMENT, AND ANALYZERS TO DRIVE MARKET 145

TABLE 112[]HEALTHCARE: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2019-2022 (USD MILLION)[]146 TABLE 113[]HEALTHCARE: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2023-2028 (USD MILLION)[]146 11.4[]AUTOMOTIVE[]147

11.4.1 RISING ADOPTION OF ELECTRIC VEHICLES TO FUEL NEED FOR DIGITAL ISOLATORS TO IMPROVE SAFETY AND NOISE IMMUNITY 147

TABLE 114[AUTOMOTIVE: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2019-2022 (USD MILLION)[]148 TABLE 115[AUTOMOTIVE: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2023-2028 (USD MILLION)[]148 11.5[]TELECOMMUNICATIONS[]149

11.5.1 DEPLOYMENT OF DIGITAL ISOLATORS IN TELECOM EQUIPMENT TO ENSURE SIGNAL INTEGRITY AND RELIABILITY TO SUPPORT MARKET GROWTH 149

TABLE 116[TELECOMMUNICATIONS: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2019-2022 (USD MILLION)[]149 TABLE 117[TELECOMMUNICATIONS: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2023-2028 (USD MILLION)[]150 11.6[]AEROSPACE & DEFENSE[]150

11.6.1 HIGH RELIABILITY, NOISE IMMUNITY, AND FAULT TOLERANCE OF DIGITAL ISOLATORS TO STIMULATE ADOPTION IN AEROSPACE & DEFENSE APPLICATIONS 150

TABLE 118 AEROSPACE & DEFENSE: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2019-2022 (USD MILLION) 150 TABLE 119 AEROSPACE & DEFENSE: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 151 11.7 ENERGY & POWER 151

11.7.1 STRONG FOCUS ON MINIMIZING POWER LOSSES TO ACCELERATE DEMAND FOR DIGITAL ISOLATORS 151 TABLE 120 ENERGY & POWER: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2019-2022 (USD MILLION) 152 TABLE 121 ENERGY & POWER: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 152 11.8 OTHER VERTICALS 153

TABLE 122[OTHER VERTICALS: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2019-2022 (USD MILLION)[]153 TABLE 123[OTHER VERTICALS: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2023-2028 (USD MILLION)[]153 12[]DIGITAL ISOLATOR MARKET, BY REGION[]154

12.1 INTRODUCTION 155

FIGURE 52 DIGITAL ISOLATOR MARKET: BY REGION 155

FIGURE 53]ASIA PACIFIC TO DOMINATE DIGITAL ISOLATOR MARKET DURING FORECAST PERIOD]155

TABLE 124 DIGITAL ISOLATOR MARKET, BY REGION, 2019-2022 (USD MILLION) 156

TABLE 125[]DIGITAL ISOLATOR MARKET, BY REGION, 2023-2028 (USD MILLION)[]156

12.2 NORTH AMERICA 156

FIGURE 54 NORTH AMERICA: DIGITAL ISOLATOR MARKET, BY COUNTRY 157

FIGURE 55 SNAPSHOT: DIGITAL ISOLATOR MARKET IN NORTH AMERICA 157

TABLE 126 NORTH AMERICA: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2019-2022 (USD MILLION) 158

TABLE 127[NORTH AMERICA: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2023-2028 (USD MILLION)]158

TABLE 128 NORTH AMERICA: DIGITAL ISOLATOR MARKET, BY COUNTRY, 2019-2022 (USD MILLION) 158

TABLE 129 NORTH AMERICA: DIGITAL ISOLATOR MARKET, BY COUNTRY, 2023-2028 (USD MILLION) 159

12.2.1 IMPACT OF RECESSION ON DIGITAL ISOLATOR MARKET IN NORTH AMERICA 159

FIGURE 56 ANALYSIS OF DIGITAL ISOLATOR MARKET IN NORTH AMERICA: PRE- AND POST-RECESSION SCENARIOS 160

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

12.2.2 US 160

12.2.2.1 Growing need for battery management systems in US to fuel demand for digital isolators 160

12.2.3[]CANADA[]161

12.2.3.1 Increasing sales of electric vehicles in Canada to support market growth 161

12.2.4[]MEXICO[]161

12.2.4.1 Prominent presence of major automobile manufacturers to stimulate demand for digital isolators 161 12.3 EUROPE 162

FIGURE 57[]EUROPE: DIGITAL ISOLATOR MARKET, BY COUNTRY[]162

FIGURE 58 SNAPSHOT: DIGITAL ISOLATOR MARKET IN EUROPE 163

TABLE 130 EUROPE: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2019-2022 (USD MILLION) 163

TABLE 131 EUROPE: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 164

TABLE 132[EUROPE: DIGITAL ISOLATOR MARKET, BY COUNTRY, 2019-2022 (USD MILLION)[]164

TABLE 133[]EUROPE: DIGITAL ISOLATOR MARKET, BY COUNTRY, 2023-2028 (USD MILLION)[]164

12.3.1 IMPACT OF RECESSION ON DIGITAL ISOLATOR MARKET IN EUROPE 164

FIGURE 59 ANALYSIS OF DIGITAL ISOLATOR MARKET IN EUROPE: PRE- AND POST-RECESSION SCENARIOS 12.3.2 UK 165

12.3.2.1 Presence of several medical device manufacturers to spur demand for digital isolators 165

12.3.3[]GERMANY[]165

12.3.3.1 Significant presence of OEMs in robotics and automation fields to drive market 165

12.3.4[]FRANCE[]166

12.3.4.1 Smart factory initiatives to boost demand for digital isolators 166

12.3.5 REST OF EUROPE 166

12.4 ASIA PACIFIC 166

FIGURE 60]ASIA PACIFIC: DIGITAL ISOLATOR MARKET, BY COUNTRY]167

FIGURE 61 SNAPSHOT: DIGITAL ISOLATOR MARKET IN ASIA PACIFIC 167

TABLE 134 ASIA PACIFIC: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2019-2022 (USD MILLION) 168

TABLE 135[ASIA PACIFIC: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2023-2028 (USD MILLION)]168

TABLE 136 ASIA PACIFIC: DIGITAL ISOLATOR MARKET, BY COUNTRY, 2019-2022 (USD MILLION) 168

TABLE 137 ASIA PACIFIC: DIGITAL ISOLATOR MARKET, BY COUNTRY, 2023-2028 (USD MILLION) 169

12.4.1 IMPACT OF RECESSION ON DIGITAL ISOLATOR MARKET IN ASIA PACIFIC 169

FIGURE 62[]ANALYSIS OF DIGITAL ISOLATOR MARKET IN ASIA PACIFIC: PRE- AND POST-RECESSION SCENARIOS[]170 12.4.2[]CHINA[]170

12.4.2.1 Increasing investments in medical equipment and devices to support market growth 170

12.4.3[]JAPAN[]170

12.4.3.1 Presence of major manufacturers of electronic devices and components to drive market 170 12.4.4 INDIA 171

12.4.4.1 Make in India initiatives by government to fuel demand for digital isolators 171

12.4.5[]SOUTH KOREA[]171

12.4.5.1 Rising investments in EV industry to accelerate market growth 171

12.4.6 REST OF ASIA PACIFIC 172

12.5[ROW]172

FIGURE 63 ROW: DIGITAL ISOLATOR MARKET, BY REGION 172

TABLE 138 ROW: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2019-2022 (USD MILLION) 172

TABLE 139 ROW: DIGITAL ISOLATOR MARKET, BY APPLICATION, 2023-2028 (USD MILLION) 173

TABLE 140 ROW: DIGITAL ISOLATOR MARKET, BY REGION, 2019-2022 (USD MILLION) 173

TABLE 141 ROW: DIGITAL ISOLATOR MARKET, BY REGION, 2023-2028 (USD MILLION) 173

12.5.1 IMPACT OF RECESSION ON DIGITAL ISOLATOR MARKET IN ROW 173

Scotts International. EU Vat number: PL 6772247784

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

FIGURE 64 ANALYSIS OF DIGITAL ISOLATOR MARKET IN ROW: PRE- AND POST-RECESSION SCENARIOS 174 12.5.2 MIDDLE EAST & AFRICA 174 12.5.2.1 Increasing use of digital isolators in solar energy applications to drive market 174 12.5.3 SOUTH AMERICA 174 12.5.3.1 Growing renewable energy production to boost demand for digital isolators 174 13 COMPETITIVE LANDSCAPE 176 13.1 OVERVIEW 176 13.1.1 INTRODUCTION 176 13.2 STRATEGIES ADOPTED BY KEY PLAYERS 176 TABLE 142 OVERVIEW OF STRATEGIES ADOPTED BY KEY PLAYERS IN DIGITAL ISOLATOR MARKET 176 13.3 REVENUE ANALYSIS OF TOP 5 PLAYERS 178 FIGURE 65 THREE-YEAR REVENUE ANALYSIS OF TOP PLAYERS IN DIGITAL ISOLATOR MARKET, 2020-2022 178 13.4 MARKET SHARE ANALYSIS 178 TABLE 143 DIGITAL ISOLATOR MARKET: DEGREE OF COMPETITION 179 TABLE 144 DIGITAL ISOLATOR MARKET: RANKING ANALYSIS 179 FIGURE 66⊓MARKET SHARE ANALYSIS OF KEY PLAYERS, 2022⊓180 13.5 EVALUATION MATRIX FOR MAJOR PLAYERS, 2022 181 13.5.1 STARS 181 13.5.2 EMERGING LEADERS 181 13.5.3 PERVASIVE PLAYERS 182 13.5.4 PARTICIPANTS 182 FIGURE 67 DIGITAL ISOLATOR MARKET: EVALUATION MATRIX FOR MAJOR COMPANIES, 2022 182 13.5.5 COMPANY FOOTPRINT 183 TABLE 145 DATA RATE FOOTPRINT (16 COMPANIES) 183 TABLE 146 CHANNEL FOOTPRINT (16 COMPANIES) 183 TABLE 147 TECHNOLOGY FOOTPRINT (16 COMPANIES) 184 TABLE 148 VERTICAL FOOTPRINT (16 COMPANIES) 185 TABLE 149 REGION FOOTPRINT (16 COMPANIES) 185 TABLE 150 OVERALL FOOTPRINT 186 13.6 EVALUATION MATRIX FOR STARTUPS/SMALL AND MEDIUM-SIZED ENTERPRISES (SMES), 2022 187 13.6.1 PROGRESSIVE COMPANIES 187 13.6.2 RESPONSIVE COMPANIES 187 13.6.3 DYNAMIC COMPANIES 187 13.6.4 STARTING BLOCKS 187 FIGURE 68 DIGITAL ISOLATOR MARKET: EVALUATION MATRIX FOR STARTUPS/SMES, 2022 188 TABLE 151 DIGITAL ISOLATOR MARKET: LIST OF KEY STARTUPS/SMES 188 TABLE 152 DIGITAL ISOLATOR MARKET: COMPETITIVE BENCHMARKING OF KEY STARTUPS/SMES 189 13.7 COMPETITIVE SCENARIOS AND TRENDS 190 13.7.1 PRODUCT LAUNCHES/DEVELOPMENTS 190 TABLE 153 DIGITAL ISOLATOR MARKET: PRODUCT LAUNCHES/DEVELOPMENTS, 2020-2021 190 13.7.2 DEALS 191 TABLE 154 DEALS, 2021-2023 191

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



Digital Isolator Market by Technology (Capacitive, Magnetic, GMR), Data Rate (25 to 75 Mbps, More Than 75 Mbps), Channel, Insulation Material, Application (Gate Drivers, DC/DC Converters, ADCs), Vertical and Region - Global Forecast to 2028

Market Report | 2023-11-23 | 235 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 |
| <u> </u> | · | 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* | Phone* | |
|---------------|-------------------------------|--|
| First Name* | Last Name* | |
| Job title* | | |
| Company Name* | EU Vat / Tax ID / NIP number* | |
| Address* | City* | |
| Zip Code* | Country* | |

Date

2025-05-20

Signature