+44 20 8123 2220
info@marketpublishers.com

Intelligent Power Module Market by Voltage Rating (Up to 600 V, 601-1,200 V, Above 1,200 V), Current Rating, Circuit Configuration (6-Pack, 7-Pack), Power Devices (IGBT, MOSFET), Vertical, Region (North America, Europe, APAC, RoW) - Global Forecast to 2027

https://marketpublishers.com/r/IFD56C8AA46EN.html
Date: June 2022
Pages: 200
Price: US$ 3,217.50 (Single User License)
ID: IFD56C8AA46EN

Abstracts

The global intelligent power module market size is anticipated to grow from USD 1.8billion in 2022 to USD 3.0billion by 2027, at a CAGR of 10.7% from 2022 to 2027. Rising requirements for power generation through renewable sources, focus of OEMs on providing novel and efficient energy and power monitoring modules as well as surging demand for IPMs in industrial, automotive and consumer electronics vertical are some of the major factors propelling the growth of intelligent power module market.

COVID-19 has emerged as a global pandemic that has spread worldwide and disrupted various industries around the world. The prominent players across industries have been affected by this pandemic. The foreseeable decline in the growth of end-user industries may have a considerable direct impact on theintelligent power module market.

“Up to 100 A current rating segment toaccount for the larger share of market from 2022 to 2027”

IPMs with a current rating of up to 100 A suffice for domestic applications, which comprise daily use appliances such as washing machines, air conditioners, and dishwashers. Such IPMs are manufactured by all major players, such as Mitsubishi Electric Corp. (Japan), Fuji Electric Co., Ltd. (Japan), ON Semiconductor Corporation (US), and Infineon Technologies AG (Germany). The key target segment of these IPMs is the consumer electronics sector. Some of the benefits of these IPMs are the cost savings from a smaller footprint and reduced PCB space. Easy implementation of 2- or

3-phase motor drives with half-bridge IPMs and half-bridge configuration enables a more flexible board design with better thermal performance.

“Industrial verticalis expected to contribute largest market share of the intelligent power module market during the forecast period.”

The industrial segment is projected to hold the largest share of the intelligent power module marketduring forecast. Industrial is among the key verticals for the intelligent power module market. The industrial segment comprises industrial manufacturing, process industries, and the energy & power industry. Industrial devices, such as pumps, conveyors, compressors, cranes, winders, extruders, and rollers use powered modules for controlling and protecting the circuitry. Processes such as electroplating, electrolysis, welding, lighting, and induction heating are equipped with power modules to use electric power efficiently and safely. The ease of manufacturing has led to the availability of these devices in a vast range of current ratings and high voltage ratings. IPMs control all motors employed in rolling, textile, and cement mills.

“Asia is expectedto account for the largest share of market during the forecast period.”

Asia Pacific is expected to contribute the largest size of the intelligent power module market in 2022. Rapid industrialization and infrastructure development are driving the growth of consumer electronics and automotive industries in China, which is expected to increase the demand for intelligent power module in the region. China is the world’s largest producer and end user of consumer electronics devices, such as smartphones, tablets, and home appliances. The increasing need for power management in consumer electronics products is fueling the demand for intelligent power modules in the consumer electronics vertical.

Break-up of the profiles ofprimary participants:

By Company Type –Tier 1 – 56%, Tier 2 – 23%, and Tier 3 – 21%

By Designation – C-level Executives – 45%, Directors – 30%, and Others – 25%

By Region– North America - 40%, Europe – 23%, Asia Pacific – 26%, and RoW – 11%

Research Coverage:

+44 20 8123 2220
info@marketpublishers.com

Theintelligent power module markethas been segmentedintocurrent rating, voltage rating, circuit configuration, power devices, vertical and region. The intelligent power module markethas been studied for North America, Europe, AsiaPacific, and the Rest of the World (RoW).

Reasons to buy the report:

Illustrative segmentation, analysis, and forecast of the market based oncurrent rating, voltage rating, circuit configuration, power devices, vertical and region have been conducted to give an overall view of theintelligent power module market.

Avalue chain analysis has been performed to provide in-depth insightsinto the intelligent power module market.

The key drivers, restraints, opportunities, and challengespertaining to the intelligent power module markethave been detailed in this report.

The report includes adetailed competitive landscape of the market,along with key players, as well as an in-depth analysis of their revenues

+44 20 8123 2220
info@marketpublishers.com

Contents

1 INTRODUCTION

1.1 STUDY OBJECTIVES
1.2 MARKET DEFINITION
1.2.1 INCLUSIONS AND EXCLUSIONS
1.3 STUDY SCOPE
1.3.1 MARKETS COVERED
FIGURE 1 INTELLIGENT POWER MODULE MARKET: SEGMENTATION
1.3.2 GEOGRAPHIC SCOPE
1.3.3 YEARS CONSIDERED
1.4 CURRENCY
1.5 STAKEHOLDERS
1.6 SUMMARY OF CHANGES

2 RESEARCH METHODOLOGY

2.1 RESEARCH DATA
FIGURE 2 INTELLIGENT POWER MODULE MARKET: RESEARCH DESIGN
2.1.1 SECONDARY DATA
2.1.1.1 Key data from secondary sources
2.1.2 PRIMARY DATA
2.1.2.1 Breakdown of primaries
2.1.2.2 Key data from primary sources
2.1.2.3 Key industry insights
2.2 MARKET SIZE ESTIMATION
2.2.1 TOP-DOWN APPROACH
2.2.1.1 Approach for estimating market size by top-down analysis (supply side)
FIGURE 3 MARKET SIZE ESTIMATION METHODOLOGY: APPROACH 1—SUPPLY SIDE
FIGURE 4 MARKET SIZE ESTIMATION METHODOLOGY: APPROACH 2—SUPPLY SIDE
2.2.2 BOTTOM-UP APPROACH
2.2.2.1 Approach for estimating market size by bottom-up analysis (demand side)
2.3 MARKET BREAKDOWN AND DATA TRIANGULATION
FIGURE 5 DATA TRIANGULATION

2.4 LIMITATIONS
2.5 RESEARCH ASSUMPTIONS
TABLE 1 ASSUMPTIONS

3 EXECUTIVE SUMMARY

3.1 INTELLIGENT POWER MODULE MARKET: SCENARIO ANALYSIS
FIGURE 6 INTELLIGENT POWER MODULE MARKET: OPTIMISTIC, REALISTIC, PESSIMISTIC, AND POST-COVID-19 SCENARIO ANALYSIS (2018–2027)
3.2 INTELLIGENT POWER MODULE MARKET: REALISTIC SCENARIO
TABLE 2 REALISTIC SCENARIO (POST-COVID-19): INTELLIGENT POWER MODULE MARKET, 2022–2027 (USD MILLION)
3.3 INTELLIGENT POWER MODULE MARKET: OPTIMISTIC SCENARIO
TABLE 3 OPTIMISTIC SCENARIO (POST-COVID-19): INTELLIGENT POWER MODULE MARKET, 2022–2027 (USD MILLION)
3.4 INTELLIGENT POWER MODULE MARKET: PESSIMISTIC SCENARIO
TABLE 4 PESSIMISTIC SCENARIO (POST-COVID-19): INTELLIGENT POWER MODULE MARKET, 2022–2027 (USD MILLION)
FIGURE 7 UP TO 100 A SEGMENT TO HOLD LARGEST SHARE OF INTELLIGENT POWER MODULE MARKET, BY CURRENT RATING, IN 2022
FIGURE 8 IGBT SEGMENT TO HOLD LARGER SHARE OF INTELLIGENT POWER MODULE MARKET, BY POWER DEVICE, IN 2022
FIGURE 9 6-PACK SEGMENT TO ACCOUNT FOR LARGEST SHARE OF INTELLIGENT POWER MODULE MARKET, BY CIRCUIT CONFIGURATION, IN 2022
FIGURE 10 CONSUMER ELECTRONICS TO BE FASTEST-GROWING VERTICAL IN INTELLIGENT POWER MODULE MARKET DURING FORECAST PERIOD
FIGURE 11 ASIA PACIFIC HELD LARGEST SHARE OF INTELLIGENT POWER MODULE MARKET IN 2021

4 PREMIUM INSIGHTS

4.1 ATTRACTIVE GROWTH OPPORTUNITIES IN INTELLIGENT POWER MODULE MARKET
FIGURE 12 INCREASING DEMAND FOR INTELLIGENT POWER MODULES IN CONSUMER ELECTRONICS AND INDUSTRIAL VERTICALS TO DRIVE MARKET GROWTH
4.2 INTELLIGENT POWER MODULE MARKET, BY VOLTAGE RATING
FIGURE 13 UP TO 600 V SEGMENT TO HOLD LARGEST MARKET SHARE BY 2027
4.3 INTELLIGENT POWER MODULE MARKET, BY POWER DEVICE

FIGURE 14 IGBT SEGMENT TO HOLD LARGER MARKET SHARE IN 2022
4.4 INTELLIGENT POWER MODULE MARKET, BY VERTICAL
FIGURE 15 INDUSTRIAL VERTICAL TO ACCOUNT FOR LARGEST MARKET SHARE DURING 2022–2027
4.5 INTELLIGENT POWER MODULE MARKET, BY COUNTRY
FIGURE 16 CHINA INTELLIGENT POWER MODULE MARKET TO WITNESS HIGHEST GROWTH DURING FORECAST PERIOD

5 MARKET OVERVIEW

5.1 INTRODUCTION
5.2 MARKET DYNAMICS
FIGURE 17 INTELLIGENT POWER MODULE MARKET: MARKET DYNAMICS
5.2.1 DRIVERS
5.2.1.1 Rising focus of governments on generating power using renewable sources
5.2.1.2 Surging global electric vehicle demand
5.2.1.3 Growing need for improving system reliability and performance
5.2.1.4 Compact design and high energy efficiency features of intelligent power modules (IPMs)
FIGURE 18 IMPACT ANALYSIS OF DRIVERS
5.2.2 RESTRAINTS
5.2.2.1 Slow adoption of novel technologies and complex design of intelligent power modules (IPMs)
FIGURE 19 IMPACT ANALYSIS OF RESTRAINTS
5.2.3 OPPORTUNITIES
5.2.3.1 Growing demand for intelligent power modules (IPMs) in consumer electronics industry
5.2.3.2 Growing adoption of GaN and SiC materials in automobile and power semiconductor applications
FIGURE 20 IMPACT ANALYSIS OF OPPORTUNITIES
5.2.4 CHALLENGES
5.2.4.1 Designing and operational challenges related to next-generation intelligent power modules (IPMs)
5.2.4.2 Supply chain disruptions and semiconductor shortage owing to COVID-19
FIGURE 21 IMPACT ANALYSIS OF CHALLENGES
5.3 VALUE CHAIN ANALYSIS
FIGURE 22 VALUE CHAIN ANALYSIS: INTELLIGENT POWER MODULE MARKET

5.3.1 R&D ENGINEERS
5.3.2 MANUFACTURERS
5.3.3 DISTRIBUTORS
5.3.4 END-USER INDUSTRIES
5.4 ECOSYSTEM: POWER ELECTRONICS
FIGURE 23 POWER ELECTRONICS ECOSYSTEM
5.5 PRICING ANALYSIS
TABLE 5 INDICATIVE PRICES OF INTELLIGENT POWER MODULES
5.6 TECHNOLOGY ANALYSIS
5.7 CASE STUDY ANALYSIS
5.7.1 INFINEON TECHNOLOGIES: HOME APPLIANCES CASE STUDY
5.7.1.1 Use of Infineon's IPMs in home appliances
5.7.2 MITSUBISHI ELECTRIC: HOME APPLIANCES CASE STUDY
5.7.2.1 Use of Mitsubishi Electric's IPMs in home appliances
5.7.3 MITSUBISHI ELECTRIC: RENEWABLE ENERGY CASE STUDY
5.7.3.1 Use of Mitsubishi Electric's IPMs in renewable energy
5.7.4 ON SEMICONDUCTOR: 3-PHASE INVERTER CASE STUDY
5.7.4.1 Use of ON Semiconductor's IPMs in 3-phase inverters
5.7.5 ON SEMICONDUCTOR: NIO INC CASE STUDY
5.7.5.1 Use of ON Semiconductor's IPMs in NIO Inc's next-generation EVs
5.7.6 INFINEON TECHNOLOGIES: SHOWA DENKO K.K. CASE STUDY
5.7.6.1 Use of Infineon Technologies' SiC-based modules for EVs
5.8 TRADE ANALYSIS
5.8.1 IMPORT SCENARIO OF ELECTRONIC INTEGRATED CIRCUITS
FIGURE 24 IMPORT DATA FOR HS CODE 8542, BY COUNTRY, 2017–2021 (BILLION UNITS)
TABLE 6 IMPORT DATA FOR HS CODE 8542, BY COUNTRY, 2017–2021 (BILLION UNITS)
5.8.2 EXPORT SCENARIO OF ELECTRONIC INTEGRATED CIRCUITS
FIGURE 25 EXPORT DATA FOR HS CODE 8542, BY COUNTRY, 2017–2021 (BILLION UNITS)
TABLE 7 EXPORT DATA FOR HS CODE 8542, BY COUNTRY, 2017–2021 (BILLION UNITS)
5.9 PATENT ANALYSIS
TABLE 8 KEY PATENTS REGISTERED, 2003–2022
5.10 REGULATORY LANDSCAPE
TABLE 9 KEY REGULATIONS APPLICABLE TO PLAYERS IN IPM MARKET

6 INTELLIGENT POWER MODULE MARKET, BY CURRENT RATING

6.1 INTRODUCTION
FIGURE 26 INTELLIGENT POWER MODULE MARKET, BY CURRENT RATING
FIGURE 27 UP TO 100 A SEGMENT TO LEAD INTELLIGENT POWER MODULE MARKET DURING FORECAST PERIOD
TABLE 10 INTELLIGENT POWER MODULE MARKET, BY CURRENT RATING, 2018–2021 (USD MILLION)
TABLE 11 INTELLIGENT POWER MODULE MARKET, BY CURRENT RATING, 2022–2027 (USD MILLION)
6.2 UP TO 100 A
6.2.1 GROWING USE OF INTELLIGENT POWER MODULES WITH CURRENT RATINGS UP TO 100 A IN CONSUMER ELECTRONICS VERTICAL
6.3 101–600 A
6.3.1 RISING APPLICATIONS OF INTELLIGENT POWER MODULES WITH 101–600 A CURRENT RATINGS IN INDUSTRIAL VERTICAL
6.4 ABOVE 600 A
6.4.1 HIGH PREFERENCE FOR ABOVE 600 A INTELLIGENT POWER MODULES IN HEAVY-DUTY INDUSTRIAL APPLICATIONS

7 INTELLIGENT POWER MODULE MARKET, BY VOLTAGE RATING

7.1 INTRODUCTION
FIGURE 28 INTELLIGENT POWER MODULE MARKET, BY VOLTAGE RATING
FIGURE 29 UP TO 600 V SEGMENT TO DOMINATE INTELLIGENT POWER MODULE MARKET DURING FORECAST PERIOD
TABLE 12 INTELLIGENT POWER MODULE MARKET, BY VOLTAGE RATING, 2018–2021 (USD MILLION)
TABLE 13 INTELLIGENT POWER MODULE MARKET, BY VOLTAGE RATING, 2022–2027 (USD MILLION)
7.2 UP TO 600 V
7.2.1 HIGH USE OF INTELLIGENT POWER MODULES HAVING UP TO 600 V IN CONSUMER ELECTRONICS
7.3 601–1,200 V
7.3.1 RISING ADOPTION OF 601-1,200 V INTELLIGENT POWER MODULES IN INDUSTRIAL APPLICATIONS
7.4 ABOVE 1,200 V
7.4.1 INCREASING PREFERENCE FOR ABOVE 1,200 V INTELLIGENT POWER MODULES IN INDUSTRIAL VERTICAL

8 INTELLIGENT POWER MODULE MARKET, BY CIRCUIT CONFIGURATION

8.1 INTRODUCTION
FIGURE 30 INTELLIGENT POWER MODULE MARKET, BY CIRCUIT CONFIGURATION
FIGURE 31 6-PACK CIRCUIT CONFIGURATION SEGMENT TO LEAD INTELLIGENT POWER MODULE MARKET DURING FORECAST PERIOD
TABLE 14 INTELLIGENT POWER MODULE MARKET, BY CIRCUIT CONFIGURATION, 2018–2021 (USD MILLION)
TABLE 15 INTELLIGENT POWER MODULE MARKET, BY CIRCUIT CONFIGURATION, 2022–2027 (USD MILLION)
8.2 6-PACK
8.2.1 HIGH ADOPTION OF 6-PACK INTELLIGENT POWER MODULES IN CONSUMER ELECTRONICS AND LIGHT-DUTY INDUSTRIAL APPLICATIONS
8.3 7-PACK
8.3.1 RISING PREFERENCE FOR 7-PACK INTELLIGENT POWER MODULES IN HEAVY-DUTY INDUSTRIAL APPLICATIONS
8.4 OTHERS

9 INTELLIGENT POWER MODULE MARKET, BY POWER DEVICE

9.1 INTRODUCTION
FIGURE 32 INTELLIGENT POWER MODULE MARKET, BY POWER DEVICE
FIGURE 33 IGBT SEGMENT TO DOMINATE INTELLIGENT POWER MODULE MARKET DURING FORECAST PERIOD
TABLE 16 INTELLIGENT POWER MODULE MARKET, BY POWER DEVICE, 2018–2021 (USD MILLION)
TABLE 17 INTELLIGENT POWER MODULE MARKET, BY POWER DEVICE, 2022–2027 (USD MILLION)
9.2 IGBT
9.2.1 IGBT SEGMENT TO HOLD LARGER MARKET SHARE DURING REVIEW PERIOD
9.3 MOSFET
9.3.1 RISING DEMAND FOR MOSFET-BASED IPMS TO INCREASE ENERGY EFFICIENCY OF SYSTEMS TO DRIVE MARKET GROWTH

10 INTELLIGENT POWER MODULE MARKET, BY VERTICAL

10.1 INTRODUCTION

FIGURE 34 INTELLIGENT POWER MODULE MARKET, BY VERTICAL
FIGURE 35 INDUSTRIAL VERTICAL TO ACCOUNT FOR LARGEST SHARE OF INTELLIGENT POWER MODULE MARKET DURING FORECAST PERIOD
TABLE 18 INTELLIGENT POWER MODULE MARKET, BY VERTICAL, 2018–2021 (USD MILLION)
TABLE 19 INTELLIGENT POWER MODULE MARKET, BY VERTICAL, 2022–2027 (USD MILLION)
10.2 CONSUMER ELECTRONICS
10.2.1 GROWING ADOPTION OF CONSUMER ELECTRONICS TO PROPEL MARKET GROWTH
TABLE 20 INTELLIGENT POWER MODULE MARKET FOR CONSUMER ELECTRONICS VERTICAL, BY REGION, 2018–2021 (USD MILLION)
TABLE 21 INTELLIGENT POWER MODULE MARKET FOR CONSUMER ELECTRONICS VERTICAL, BY REGION, 2022–2027 (USD MILLION)
TABLE 22 INTELLIGENT POWER MODULE MARKET FOR CONSUMER ELECTRONICS VERTICAL IN NORTH AMERICA, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 23 INTELLIGENT POWER MODULE MARKET FOR CONSUMER ELECTRONICS VERTICAL IN NORTH AMERICA, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 24 INTELLIGENT POWER MODULE MARKET FOR CONSUMER ELECTRONICS VERTICAL IN EUROPE, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 25 INTELLIGENT POWER MODULE MARKET FOR CONSUMER ELECTRONICS VERTICAL IN EUROPE, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 26 INTELLIGENT POWER MODULE MARKET FOR CONSUMER ELECTRONICS VERTICAL IN ASIA PACIFIC, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 27 INTELLIGENT POWER MODULE MARKET FOR CONSUMER ELECTRONICS VERTICAL IN ASIA PACIFIC, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 28 INTELLIGENT POWER MODULE MARKET FOR CONSUMER ELECTRONICS VERTICAL IN ROW, BY REGION, 2018–2021 (USD MILLION)
TABLE 29 INTELLIGENT POWER MODULE MARKET FOR CONSUMER ELECTRONICS VERTICAL IN ROW, BY REGION, 2022–2027 (USD MILLION)
10.3 ICT
10.3.1 RISING DEMAND FOR ADVANCED POWER DEVICES TO BOOST MARKET GROWTH DURING FORECAST PERIOD
TABLE 30 INTELLIGENT POWER MODULE MARKET FOR ICT VERTICAL, BY REGION, 2018–2021 (USD MILLION)

TABLE 31 INTELLIGENT POWER MODULE MARKET FOR ICT VERTICAL, BY REGION, 2022–2027 (USD MILLION)
TABLE 32 INTELLIGENT POWER MODULE MARKET FOR ICT VERTICAL IN NORTH AMERICA, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 33 INTELLIGENT POWER MODULE MARKET FOR ICT VERTICAL IN NORTH AMERICA, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 34 INTELLIGENT POWER MODULE MARKET FOR ICT VERTICAL IN EUROPE, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 35 INTELLIGENT POWER MODULE MARKET FOR ICT VERTICAL IN EUROPE, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 36 INTELLIGENT POWER MODULE MARKET FOR ICT VERTICAL IN ASIA PACIFIC, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 37 INTELLIGENT POWER MODULE MARKET FOR ICT VERTICAL IN ASIA PACIFIC, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 38 INTELLIGENT POWER MODULE MARKET FOR ICT VERTICAL IN ROW, BY REGION, 2018–2021 (USD MILLION)
TABLE 39 INTELLIGENT POWER MODULE MARKET FOR ICT VERTICAL IN ROW, BY REGION, 2022–2027 (USD MILLION)
10.4 INDUSTRIAL
10.4.1 INCREASED USAGE OF INTELLIGENT POWER MODULES IN RENEWABLE POWER SOURCES TO FUEL MARKET GROWTH
TABLE 40 INTELLIGENT POWER MODULE MARKET FOR INDUSTRIAL VERTICAL, BY REGION, 2018–2021 (USD MILLION)
TABLE 41 INTELLIGENT POWER MODULE MARKET FOR INDUSTRIAL VERTICAL, BY REGION, 2022–2027 (USD MILLION)
TABLE 42 INTELLIGENT POWER MODULE MARKET FOR INDUSTRIAL VERTICAL IN NORTH AMERICA, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 43 INTELLIGENT POWER MODULE MARKET FOR INDUSTRIAL VERTICAL IN NORTH AMERICA, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 44 INTELLIGENT POWER MODULE MARKET FOR INDUSTRIAL VERTICAL IN EUROPE, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 45 INTELLIGENT POWER MODULE MARKET FOR INDUSTRIAL VERTICAL IN EUROPE, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 46 INTELLIGENT POWER MODULE MARKET FOR INDUSTRIAL VERTICAL IN ASIA PACIFIC, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 47 INTELLIGENT POWER MODULE MARKET FOR INDUSTRIAL VERTICAL IN ASIA PACIFIC, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 48 INTELLIGENT POWER MODULE MARKET FOR INDUSTRIAL VERTICAL IN ROW, BY REGION, 2018–2021 (USD MILLION)

TABLE 49 INTELLIGENT POWER MODULE MARKET FOR INDUSTRIAL VERTICAL IN ROW, BY REGION, 2022–2027 (USD MILLION)
10.5 AUTOMOTIVE
10.5.1 SURGING ADOPTION OF EVS, HEVS, AND BEVS TO DRIVE MARKET GROWTH
TABLE 50 INTELLIGENT POWER MODULE MARKET FOR AUTOMOTIVE VERTICAL, BY REGION, 2018–2021 (USD MILLION)
TABLE 51 INTELLIGENT POWER MODULE MARKET FOR AUTOMOTIVE VERTICAL, BY REGION, 2022–2027 (USD MILLION)
TABLE 52 INTELLIGENT POWER MODULE MARKET FOR AUTOMOTIVE VERTICAL IN NORTH AMERICA, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 53 INTELLIGENT POWER MODULE MARKET FOR AUTOMOTIVE VERTICAL IN NORTH AMERICA, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 54 INTELLIGENT POWER MODULE MARKET FOR AUTOMOTIVE VERTICAL IN EUROPE, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 55 INTELLIGENT POWER MODULE MARKET FOR AUTOMOTIVE VERTICAL IN EUROPE, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 56 INTELLIGENT POWER MODULE MARKET FOR AUTOMOTIVE VERTICAL IN ASIA PACIFIC, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 57 INTELLIGENT POWER MODULE MARKET FOR AUTOMOTIVE VERTICAL IN ASIA PACIFIC, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 58 INTELLIGENT POWER MODULE MARKET FOR AUTOMOTIVE VERTICAL IN ROW, BY REGION, 2018–2021 (USD MILLION)
TABLE 59 INTELLIGENT POWER MODULE MARKET FOR AUTOMOTIVE VERTICAL IN ROW, BY REGION, 2022–2027 (USD MILLION)
10.6 AEROSPACE
10.6.1 INCREASED DEMAND FOR ADVANCED MISSION-CRITICAL COMPONENTS IN AEROSPACE VERTICAL TO FUEL MARKET GROWTH
TABLE 60 INTELLIGENT POWER MODULE MARKET FOR AEROSPACE VERTICAL, BY REGION, 2018–2021 (USD MILLION)
TABLE 61 INTELLIGENT POWER MODULE MARKET FOR AEROSPACE VERTICAL, BY REGION, 2022–2027 (USD MILLION)
TABLE 62 INTELLIGENT POWER MODULE MARKET FOR AEROSPACE VERTICAL IN NORTH AMERICA, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 63 INTELLIGENT POWER MODULE MARKET FOR AEROSPACE VERTICAL IN NORTH AMERICA, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 64 INTELLIGENT POWER MODULE MARKET FOR AEROSPACE VERTICAL IN EUROPE, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 65 INTELLIGENT POWER MODULE MARKET FOR AEROSPACE VERTICAL

IN EUROPE, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 66 INTELLIGENT POWER MODULE MARKET FOR AEROSPACE VERTICAL IN ASIA PACIFIC, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 67 INTELLIGENT POWER MODULE MARKET FOR AEROSPACE VERTICAL IN ASIA PACIFIC, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 68 INTELLIGENT POWER MODULE MARKET FOR AEROSPACE VERTICAL IN ROW, BY REGION, 2018–2021 (USD MILLION)
TABLE 69 INTELLIGENT POWER MODULE MARKET FOR AEROSPACE IN ROW, BY REGION, 2022–2027 (USD MILLION)
10.7 OTHERS
TABLE 70 INTELLIGENT POWER MODULE MARKET FOR OTHERS, BY REGION, 2018–2021 (USD MILLION)
TABLE 71 INTELLIGENT POWER MODULE MARKET FOR OTHERS, BY REGION, 2022–2027 (USD MILLION)
TABLE 72 INTELLIGENT POWER MODULE MARKET FOR OTHERS IN NORTH AMERICA, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 73 INTELLIGENT POWER MODULE MARKET FOR OTHERS IN NORTH AMERICA, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 74 INTELLIGENT POWER MODULE MARKET FOR OTHERS IN EUROPE, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 75 INTELLIGENT POWER MODULE MARKET FOR OTHERS IN EUROPE, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 76 INTELLIGENT POWER MODULE MARKET FOR OTHERS IN ASIA PACIFIC, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 77 INTELLIGENT POWER MODULE MARKET FOR OTHERS IN ASIA PACIFIC, BY COUNTRY, 2022–2027 (USD MILLION)
TABLE 78 INTELLIGENT POWER MODULE MARKET FOR OTHERS IN ROW, BY REGION, 2018–2021 (USD MILLION)
TABLE 79 INTELLIGENT POWER MODULE MARKET FOR OTHERS IN ROW, BY REGION, 2022–2027 (USD MILLION)

11 GEOGRAPHIC ANALYSIS

11.1 INTRODUCTION
FIGURE 36 GEOGRAPHIC SNAPSHOT (2022–2027): CHINA TO BE FASTEST-GROWING MARKET FOR INTELLIGENT POWER MODULES
TABLE 80 INTELLIGENT POWER MODULE MARKET, BY REGION, 2018–2021 (USD MILLION)
TABLE 81 INTELLIGENT POWER MODULE MARKET, BY REGION, 2022–2027 (USD

MILLION)
11.2 NORTH AMERICA
FIGURE 37 INTELLIGENT POWER MODULE MARKET: NORTH AMERICA SNAPSHOT
TABLE 82 INTELLIGENT POWER MODULE MARKET IN NORTH AMERICA, BY VERTICAL, 2018–2021 (USD MILLION)
TABLE 83 INTELLIGENT POWER MODULE MARKET IN NORTH AMERICA, BY VERTICAL, 2022–2027 (USD MILLION)
TABLE 84 INTELLIGENT POWER MODULE MARKET IN NORTH AMERICA, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 85 INTELLIGENT POWER MODULE MARKET IN NORTH AMERICA, BY COUNTRY, 2022–2027 (USD MILLION)
11.2.1 US
11.2.1.1 Rising penetration of power semiconductors in automotive and industrial verticals to boost market growth
11.2.2 CANADA
11.2.2.1 Expanding automotive industry in Canada to spur market growth
11.2.3 MEXICO
11.2.3.1 Large manufacturing base and growing aerospace vertical to provide growth opportunities for market players in Mexico
11.3 EUROPE
FIGURE 38 INTELLIGENT POWER MODULE MARKET: EUROPE SNAPSHOT
TABLE 86 INTELLIGENT POWER MODULE MARKET IN EUROPE, BY VERTICAL, 2018–2021 (USD MILLION)
TABLE 87 INTELLIGENT POWER MODULE MARKET IN EUROPE, BY VERTICAL, 2022–2027 (USD MILLION)
TABLE 88 INTELLIGENT POWER MODULE MARKET IN EUROPE, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 89 INTELLIGENT POWER MODULE MARKET IN EUROPE, BY COUNTRY, 2022–2027 (USD MILLION)
11.3.1 GERMANY
11.3.1.1 Rising investments in manufacturing electric and hybrid vehicles to support market growth in Germany
11.3.2 UK
11.3.2.1 Growth of aerospace and automotive verticals to fuel demand for intelligent power modules in UK
11.3.3 FRANCE
11.3.3.1 Expansion of power electronics, aerospace, and industrial verticals to create growth opportunities for market players

11.3.4 ITALY
11.3.4.1 Growing demand for advanced intelligent power modules in automotive vertical to drive market growth
11.3.5 REST OF EUROPE
11.4 ASIA PACIFIC
FIGURE 39 INTELLIGENT POWER MODULE MARKET: ASIA PACIFIC SNAPSHOT
TABLE 90 INTELLIGENT POWER MODULE MARKET IN ASIA PACIFIC, BY VERTICAL, 2018–2021 (USD MILLION)
TABLE 91 INTELLIGENT POWER MODULE MARKET IN ASIA PACIFIC, BY VERTICAL, 2022–2027 (USD MILLION)
TABLE 92 INTELLIGENT POWER MODULE MARKET IN ASIA PACIFIC, BY COUNTRY, 2018–2021 (USD MILLION)
TABLE 93 INTELLIGENT POWER MODULE MARKET IN ASIA PACIFIC, BY COUNTRY, 2022–2027 (USD MILLION)
11.4.1 JAPAN
11.4.1.1 Expanding automotive and industrial verticals to drive market growth
11.4.2 CHINA
11.4.2.1 Growing consumer electronics and automotive verticals to propel demand for intelligent power modules
11.4.3 INDIA
11.4.3.1 Government-led initiatives to boost domestic manufacturing capacity to fuel demand for intelligent power modules
11.4.4 SOUTH KOREA
11.4.4.1 Rising demand for consumer electronics and automobiles to fuel demand for intelligent power modules
11.4.5 REST OF ASIA PACIFIC
11.5 ROW
TABLE 94 INTELLIGENT POWER MODULE MARKET IN ROW, BY VERTICAL, 2018–2021 (USD MILLION)
TABLE 95 INTELLIGENT POWER MODULE MARKET IN ROW, BY VERTICAL, 2022–2027 (USD MILLION)
TABLE 96 INTELLIGENT POWER MODULE MARKET IN ROW, BY REGION, 2018–2021 (USD MILLION)
TABLE 97 INTELLIGENT POWER MODULE MARKET IN ROW, BY REGION, 2022–2027 (USD MILLION)
11.5.1 MIDDLE EAST & AFRICA
11.5.1.1 Rising demand for and production of renewable energy to propel market growth
11.5.2 SOUTH AMERICA

11.5.2.1 Rising use of motor-based machinery to promote market growth

12 COMPETITIVE LANDSCAPE

12.1 OVERVIEW
12.2 KEY PLAYER STRATEGIES/RIGHT TO WIN
TABLE 98 OVERVIEW OF STRATEGIES ADOPTED BY KEY INTELLIGENT POWER MODULE MANUFACTURERS
12.3 REVENUE ANALYSIS OF TOP COMPANIES
FIGURE 40 FIVE-YEAR REVENUE ANALYSIS OF TOP PLAYERS IN INTELLIGENT POWER MODULE MARKET
12.4 MARKET SHARE ANALYSIS, 2021
TABLE 99 MARKET SHARE OF TOP FIVE PLAYERS IN INTELLIGENT POWER MODULE MARKET IN 2021
12.5 COMPANY EVALUATION QUADRANT
12.5.1 STARS
12.5.2 EMERGING LEADERS
12.5.3 PERVASIVES
12.5.4 PARTICIPANTS
FIGURE 41 INTELLIGENT POWER MODULE MARKET: COMPANY EVALUATION QUADRANT, 2021
12.6 COMPETITIVE SCENARIO
12.6.1 PRODUCT LAUNCHES
TABLE 100 PRODUCT LAUNCHES, 2020–2022
12.6.2 DEALS
TABLE 101 DEALS, 2019–2022
12.6.3 OTHERS
TABLE 102 OTHERS, 2020–2022

13 COMPANY PROFILES

13.1 KEY PLAYERS
(Business Overview, Products Offered, Recent Developments, and MnM View)*
13.1.1 MITSUBISHI ELECTRIC
TABLE 103 MITSUBISHI ELECTRIC: BUSINESS OVERVIEW
FIGURE 42 MITSUBISHI ELECTRIC: COMPANY SNAPSHOT
TABLE 104 MITSUBISHI ELECTRIC: PRODUCTS OFFERED
TABLE 105 MITSUBISHI ELECTRIC: PRODUCT LAUNCHES
TABLE 106 MITSUBISHI: DEALS

TABLE 107 MITSUBISHI ELECTRIC: OTHERS
13.1.2 ON SEMICONDUCTOR
TABLE 108 ON SEMICONDUCTOR: BUSINESS OVERVIEW
FIGURE 43 ON SEMICONDUCTOR: COMPANY SNAPSHOT
TABLE 109 ON SEMICONDUCTOR: PRODUCTS OFFERED
TABLE 110 ON SEMICONDUCTOR: PRODUCT LAUNCHES
TABLE 111 ON SEMICONDUCTOR: DEALS
13.1.3 INFINEON TECHNOLOGIES
TABLE 112 INFINEON TECHNOLOGIES: BUSINESS OVERVIEW
FIGURE 44 INFINEON TECHNOLOGIES: COMPANY SNAPSHOT
TABLE 113 INFINEON TECHNOLOGIES: PRODUCTS OFFERED
TABLE 114 INFINEON TECHNOLOGIES: PRODUCT LAUNCHES
TABLE 115 INFINEON TECHNOLOGIES: DEALS
TABLE 116 INFINEON TECHNOLOGIES: OTHERS
13.1.4 FUJI ELECTRIC
TABLE 117 FUJI ELECTRIC: BUSINESS OVERVIEW
FIGURE 45 FUJI ELECTRIC: COMPANY SNAPSHOT
TABLE 118 FUJI ELECTRIC: PRODUCTS OFFERED
TABLE 119 FUJI ELECTRIC: PRODUCT LAUNCHES
TABLE 120 FUJI ELECTRIC: DEALS
13.1.5 SEMIKRON
TABLE 121 SEMIKRON: BUSINESS OVERVIEW
TABLE 122 SEMIKRON: PRODUCTS OFFERED
TABLE 123 SEMIKRON: PRODUCT LAUNCHES
TABLE 124 SEMIKRON: DEALS
TABLE 125 SEMIKRON: OTHERS
13.1.6 ROHM SEMICONDUCTOR
TABLE 126 ROHM SEMICONDUCTOR: BUSINESS OVERVIEW
FIGURE 46 ROHM SEMICONDUCTOR: COMPANY SNAPSHOT
TABLE 127 ROHM SEMICONDUCTOR: PRODUCTS OFFERED
TABLE 128 ROHM SEMICONDUCTOR: PRODUCT LAUNCHES
TABLE 129 ROHM SEMICONDUCTOR: DEALS
13.1.7 SANKEN ELECTRIC
TABLE 130 SANKEN ELECTRIC: BUSINESS OVERVIEW
FIGURE 47 SANKEN ELECTRIC: COMPANY SNAPSHOT
TABLE 131 SANKEN ELECTRIC: PRODUCTS OFFERED
TABLE 132 SANKEN ELECTRIC: DEALS
13.1.8 STMICROELECTRONICS
TABLE 133 STMICROELECTRONICS: BUSINESS OVERVIEW

FIGURE 48 STMICROELECTRONICS: COMPANY SNAPSHOT
TABLE 134 STMICROELECTRONICS: PRODUCTS OFFERED
TABLE 135 STMICROELECTRONICS: DEALS
13.1.9 HANGZHOU SILAN MICROELECTRONICS
TABLE 136 HANGZHOU SILAN MICROELECTRONICS: BUSINESS OVERVIEW
TABLE 137 HANGZHOU SILAN MICROELECTRONICS: PRODUCTS OFFERED
13.1.10 SINO MICROELECTRONICS
TABLE 138 SINO MICROELECTRONICS: BUSINESS OVERVIEW
TABLE 139 SINO MICROELECTRONICS: PRODUCTS OFFERED
* Business Overview, Products Offered, Recent Developments, and MnM View might not be captured in case of unlisted companies.
13.2 OTHER PLAYERS
13.2.1 ALPHA & OMEGA SEMICONDUCTOR
TABLE 140 ALPHA & OMEGA SEMICONDUCTOR: COMPANY OVERVIEW
13.2.2 CISSOID
TABLE 141 CISSOID: COMPANY OVERVIEW
13.2.3 SENSITRON SEMICONDUCTOR
TABLE 142 SENSITRON SEMICONDUCTOR: COMPANY OVERVIEW
13.2.4 RONGTECH INDUSTRY
TABLE 143 RONGTECH INDUSTRY: COMPANY OVERVIEW
13.2.5 POWEREX
TABLE 144 POWEREX: COMPANY OVERVIEW
13.2.6 OZTEK CORPORATION
TABLE 145 OZTEK CORPORATION: COMPANY OVERVIEW
13.2.7 HIRATA CORPORATION
TABLE 146 HIRATA CORPORATION: COMPANY OVERVIEW
13.2.8 MICROSEMI CORPORATION
TABLE 147 MICROSEMI CORPORATION: COMPANY OVERVIEW
13.2.9 TOSHIBA ELECTRONIC DEVICES & STORAGE CORPORATION
TABLE 148 TOSHIBA ELECTRONIC DEVICES & STORAGE CORPORATION: COMPANY OVERVIEW
13.2.10 TEXAS INSTRUMENTS
TABLE 149 TEXAS INSTRUMENTS: COMPANY OVERVIEW
13.2.11 RENESAS ELECTRONICS
TABLE 150 RENESAS ELECTRONICS: COMPANY OVERVIEW
13.2.12 SOLITRON DEVICES
TABLE 151 SOLITRON DEVICES: COMPANY OVERVIEW
13.2.13 VINCOTECH-A GROUP COMPANY OF MITSUBISHI ELECTRIC
TABLE 152 VINCOTECH: COMPANY OVERVIEW

14 ADJACENT MARKET

14.1 IGBT AND THYRISTOR MARKET
14.2 INTRODUCTION
FIGURE 49 IGBT MARKET, BY PACKAGING TYPE
FIGURE 50 IGBT MODULE MARKET TO GROW AT HIGHER CAGR FROM 2020 TO 2025
TABLE 153 IGBT MARKET, BY PACKAGING TYPE, 2017–2025 (USD BILLION)
14.3 IGBT DISCRETE
14.3.1 IGBT DISCRETE OFFERS FAST RESPONSE WITH NO OVERSHOOT
TABLE 154 IGBT DISCRETE MARKET, BY POWER RATING, 2017–2025 (USD MILLION)
TABLE 155 IGBT DISCRETE MARKET, BY APPLICATION, 2017–2025 (USD MILLION)
TABLE 156 IGBT DISCRETE MARKET FOR POWER TRANSMISSION SYSTEMS, BY REGION, 2017–2025 (USD MILLION)
TABLE 157 IGBT DISCRETE MARKET FOR RENEWABLE ENERGY, BY REGION, 2017–2025 (USD MILLION)
TABLE 158 IGBT DISCRETE MARKET FOR RAIL TRACTION SYSTEMS, BY REGION, 2017–2025 (USD MILLION)
TABLE 159 IGBT DISCRETE MARKET FOR UPS, BY REGION, 2017–2025 (USD MILLION)
TABLE 160 IGBT DISCRETE MARKET FOR ELECTRIC AND HYBRID VEHICLES, BY REGION, 2017–2025 (USD MILLION)
TABLE 161 IGBT DISCRETE MARKET FOR MOTOR DRIVES, BY REGION, 2017–2025 (USD MILLION)
TABLE 162 IGBT DISCRETE MARKET FOR CONSUMER ELECTRONICS, BY REGION, 2017–2025 (USD MILLION)
TABLE 163 IGBT DISCRETE MARKET FOR OTHERS, BY REGION, 2017–2025 (USD THOUSAND)
TABLE 164 IGBT DISCRETE MARKET, BY REGION, 2017–2025 (USD THOUSAND)
TABLE 165 IGBT DISCRETE MARKET IN NORTH AMERICA, BY COUNTRY, 2017–2025 (USD THOUSAND)
TABLE 166 IGBT DISCRETE MARKET IN EUROPE, BY COUNTRY, 2017–2025 (USD THOUSAND)
TABLE 167 IGBT DISCRETE MARKET IN ASIA PACIFIC, BY COUNTRY, 2017–2025 (USD THOUSAND)
TABLE 168 IGBT DISCRETE MARKET IN ROW, BY REGION, 2017–2025 (USD

THOUSAND)
14.4 IGBT MODULE
14.4.1 HIGH DURABILITY AND LOW DOWNTIME TO DRIVE MARKET FOR IGBT MODULE
TABLE 169 IGBT MODULE MARKET, BY POWER RATING, 2017–2025 (USD MILLION)
TABLE 170 IGBT MODULE MARKET, BY APPLICATION, 2017–2025 (USD MILLION)
TABLE 171 IGBT MODULE MARKET FOR POWER TRANSMISSION SYSTEMS, BY REGION, 2017–2025 (USD MILLION)
FIGURE 51 ASIA PACIFIC TO REGISTER HIGHEST CAGR IN IGBT MODULE MARKET FOR RENEWABLE ENERGY FROM 2020 TO 2025
TABLE 172 IGBT MODULE MARKET FOR RENEWABLE ENERGY, BY REGION, 2017–2025 (USD MILLION)
TABLE 173 IGBT MODULE MARKET FOR RAIL TRACTION SYSTEMS, BY REGION, 2017–2025 (USD MILLION)
TABLE 174 IGBT MODULE MARKET FOR UPS, BY REGION, 2017–2025 (USD MILLION)
FIGURE 52 IGBT MODULE MARKET FOR ELECTRIC AND HYBRID ELECTRIC VEHICLES IN ASIA PACIFIC TO GROW AT HIGHER CAGR FROM 2020 TO 2025
TABLE 175 IGBT MODULE MARKET FOR ELECTRIC AND HYBRID ELECTRIC VEHICLES, BY REGION, 2017–2025 (USD MILLION)
TABLE 176 IGBT MODULE MARKET FOR MOTOR DRIVES, BY REGION, 2017–2025 (USD MILLION)
TABLE 177 IGBT MODULE MARKET FOR CONSUMER ELECTRONICS, BY REGION, 2017–2025 (USD MILLION)
TABLE 178 IGBT MODULE MARKET FOR OTHERS, BY REGION, 2017–2025 (USD MILLION)
TABLE 179 IGBT MODULE MARKET, BY REGION, 2017–2025 (USD THOUSAND)
TABLE 180 IGBT MODULE MARKET IN NORTH AMERICA, BY COUNTRY, 2017–2025 (USD THOUSAND)
TABLE 181 IGBT MODULE MARKET IN EUROPE, BY COUNTRY, 2017–2025 (USD THOUSAND)
TABLE 182 IGBT MODULE MARKET IN ASIA PACIFIC, BY COUNTRY, 2017–2025 (USD THOUSAND)
TABLE 183 IGBT MODULE MARKET IN ROW, BY REGION, 2017–2025 (USD THOUSAND)

15 APPENDIX

+44 20 8123 2220
info@marketpublishers.com

15.1 KEY INDUSTRY INSIGHTS
15.2 DISCUSSION GUIDE
15.3 KNOWLEDGE STORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL
15.4 AVAILABLE CUSTOMIZATIONS
15.5 RELATED REPORTS
15.6 AUTHOR DETAILS

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: Intelligent Power Module Market by Voltage Rating (Up to 600 V, 601-1,200 V, Above 1,200 V), Current Rating, Circuit Configuration (6-Pack, 7-Pack), Power Devices (IGBT, MOSFET), Vertical, Region (North America, Europe, APAC, RoW) - Global Forecast to 2027

Product link: https://marketpublishers.com/r/IFD56C8AA46EN.html

Price: US$ 3,217.50 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/IFD56C8AA46EN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

**All fields are required

Custumer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

+44 20 8123 2220
info@marketpublishers.com

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970