

Small Satellite Market by Mass (Small Satellite, CubeSat), Application, Subsystems (Satellite Bus, Payload, Solar Panel, Satellite Antenna), Frequency, End-use (Commercial, Government & Defence, Dual-use), Orbit and Region - Global Forecast to 2028

<https://marketpublishers.com/r/S38313389F0EN.html>

Date: March 2023

Pages: 318

Price: US\$ 4,950.00 (Single User License)

ID: S38313389F0EN

Abstracts

The small satellite market is projected to grow from USD 3.2 Billion in 2022 to USD 7.0 Billion by 2028, at a CAGR of 16.8 % during the forecast period. The growth of this market can be attributed to the increasing need for secure satellite communications for military missions and commercial applications. Additionally technological advancements in small satellite systems, such as laser/optical band communications technologies are driving the market.

The CubeSat segment is projected to witness the highest CAGR during the forecast period.

Based on mass, the CubeSat segment of the small satellite market is projected to hold the highest growth rate during the forecast period. CubeSats are used for a variety of missions by governments, universities, and private businesses due to their low cost and fast turnaround time. The development of new technologies and improvements in launch systems also contributed to the growth of the CubeSat market.

The laser/optical band segment is projected to dominate the small satellite market by frequency

Based on Frequency, the laser/optical band segment is projected to dominate the market share during the forecast period. The laser/optical band enhance the communication capabilities. The most promising commercial applications can be found

in the interconnection of satellites or high-altitude platforms to build high-performance optical backbone networks. Corporations like SpaceX, Facebook, Google, and a series of start-ups are currently working on various concepts based on laser communication technology.

North America is expected to account for the largest market share in 2023

The small satellite market industry has been studied in North America, Europe, Asia Pacific, Middle East and Africa and Latin America. North America accounted for the largest market share in 2022. The US leads the market in North America with a large number of companies and startups operating in the industry. The country is also home to some of the world's leading small satellite manufacturers and operators, such as SpaceX, Blue Origin, and Planet Labs.

The break-up of the profile of primary participants in the SMALL SATELLITE market:

By Company Type: Tier 1 – 40%, Tier 2 – 30%, and Tier 3 – 30%

By Designation: C Level – 30%, Director Level – 20%, Others-50%

By Region: North America –35%, Europe – 20%, Asia Pacific – 30%, Middle East & Africa – 10%, and Latin America – 5%

Prominent companies include Sierra Nevada Corporation (US), L3Harris Technologies, Inc. (US), Lockheed Martin Corporation (US), Northrop Grumman Corporation (US), and Airbus Defence and Space (Germany) among others.

Research Coverage:

This research report categorizes the small satellite market by Application (Communication, Earth Observation, Education, Technology, Others), by Subsystem (Satellite bus, Payload, Solar Panel, Satellite Antenna, Others), by Orbit (LEO, GEO, MEO, Others), by Mass (Small Satellite, CubeSat), by End-use (commercial, government & defense), Frequency (L-Band, S-Band, C-Band, X-Band, Ku-Band, Ka-Band, Q/V Band, HF/VHF/UHF- Band, & Laser/Optical) and region (North America, Europe, Asia Pacific, the Middle East & Africa, and Latin America). The scope of the report covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the small satellite

market. A detailed analysis of the key industry players has been done to provide insights into their business overview, solutions, and services; key strategies; Contracts, partnerships, agreements. new product & service launches, mergers and acquisitions, and recent developments associated with the small satellite market. Competitive analysis of upcoming startups in the small satellite market ecosystem is covered in this report.

Reasons to buy this report:

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

The report provides insights on the following pointers:

Market Penetration: Comprehensive information on small satellite offered by the top players in the market

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

Market Development: Comprehensive information about lucrative markets – the report analyses the small satellite market across varied regions

Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the small satellite market

Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players in the small satellite market

Contents

1 INTRODUCTION

1.1 STUDY OBJECTIVES

1.2 MARKET DEFINITION

1.3 INCLUSIONS AND EXCLUSIONS

1.3.1 MARKETS COVERED

FIGURE 1 SMALL SATELLITE MARKET SEGMENTATION

1.3.2 REGIONAL SCOPE

1.3.3 YEARS CONSIDERED

1.4 CURRENCY AND PRICING

TABLE 1 USD EXCHANGE RATES

1.5 LIMITATIONS

1.6 STAKEHOLDERS

1.7 SUMMARY OF CHANGES

2 RESEARCH METHODOLOGY

2.1 RESEARCH DATA

FIGURE 2 RESEARCH PROCESS FLOW

FIGURE 3 RESEARCH DESIGN

2.1.1 SECONDARY DATA

2.1.1.1 Secondary sources

2.1.2 PRIMARY DATA

2.1.2.1 Key data from primary sources

2.1.2.2 Key data from primary sources

2.1.2.3 Key primary sources

2.1.3 BREAKDOWN OF PRIMARIES

FIGURE 4 BREAKDOWN OF PRIMARY INTERVIEWS: BY COMPANY TYPE, DESIGNATION, AND REGION

2.2 FACTOR ANALYSIS

2.2.1 INTRODUCTION

2.2.2 DEMAND-SIDE INDICATORS

2.2.3 SUPPLY-SIDE INDICATORS

2.2.4 SEGMENTS AND SUBSEGMENTS

2.3 RESEARCH APPROACH AND METHODOLOGY

2.3.1 BOTTOM-UP APPROACH

2.3.1.1 Market size estimation & methodology

FIGURE 5 MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH

2.3.2 TOP-DOWN APPROACH

FIGURE 6 MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH

2.4 DATA TRIANGULATION

FIGURE 7 DATA TRIANGULATION

2.5 RECESSION IMPACT ANALYSIS

2.6 RESEARCH ASSUMPTIONS

TABLE 2 PARAMETRIC ASSUMPTIONS MADE FOR MARKET FORECAST

2.7 LIMITATIONS

2.8 RISK ANALYSIS

3 EXECUTIVE SUMMARY

FIGURE 8 MINISATELLITES SEGMENT TO LEAD MARKET FROM 2023 TO 2028

FIGURE 9 COMMERCIAL SEGMENT PROJECTED TO DOMINATE MARKET DURING FORECAST PERIOD

FIGURE 10 EARTH OBSERVATION SEGMENT TO LEAD MARKET DURING FORECAST PERIOD

FIGURE 11 LOW EARTH ORBIT SEGMENT TO GROW AT HIGHEST RATE DURING FORECAST PERIOD

FIGURE 12 LASER/OPTICAL SEGMENT TO GROW AT HIGHEST RATE DURING FORECAST PERIOD

FIGURE 13 NORTH AMERICA ESTIMATED TO ACCOUNT FOR LARGEST MARKET SHARE IN 2023

4 PREMIUM INSIGHTS

4.1 ATTRACTIVE GROWTH OPPORTUNITIES FOR PLAYERS IN SMALL SATELLITE MARKET

FIGURE 14 INCREASING USE OF SMALL SATELLITES FOR TRACKING, MONITORING, AND SURVEILLANCE TO DRIVE MARKET

4.2 SMALL SATELLITE MARKET, BY SUBSYSTEM

FIGURE 15 SATELLITE BUS SEGMENT TO LEAD MARKET DURING FORECAST PERIOD

4.3 SMALL SATELLITE BUS MARKET, BY SUBTYPE

FIGURE 16 ATTITUDE & ORBITAL CONTROL SYSTEM SEGMENT TO LEAD MARKET DURING FORECAST PERIOD

4.4 SMALL SATELLITE PROPULSION MARKET, BY TYPE

FIGURE 17 CHEMICAL PROPULSION SEGMENT TO LEAD MARKET DURING

FORECAST PERIOD

4.5 SMALL SATELLITE PAYLOAD MARKET, BY PAYLOAD TYPE

FIGURE 18 TRADITIONAL PAYLOAD SEGMENT TO ACCOUNT FOR LARGER MARKET SHARE THROUGHOUT FORECAST PERIOD

4.6 SMALL SATELLITE PAYLOAD MARKET, BY TRADITIONAL PAYLOAD TYPE

FIGURE 19 OPTICAL & INFRARED SEGMENT PROJECTED TO LEAD MARKET DURING FORECAST PERIOD

4.7 SMALL SATELLITE MARKET, BY COUNTRY

FIGURE 20 SMALL SATELLITE MARKET IN JAPAN TO REGISTER HIGHEST CAGR DURING FORECAST PERIOD

5 MARKET OVERVIEW

5.1 INTRODUCTION

5.2 MARKET DYNAMICS

FIGURE 21 DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES FOR SMALL SATELLITE MARKET

5.2.1 DRIVERS

5.2.1.1 Growing demand for LEO-based small satellites

TABLE 3 KEY INFORMATION ON LEO AND MEO CONSTELLATIONS (OPERATIONAL)

TABLE 4 KEY INFORMATION ON LEO AND MEO CONSTELLATIONS (DEVELOPMENT)

5.2.1.2 Rising need for Earth observation imagery and analytics

5.2.1.3 Technological advancements in software-defined payloads for communication satellites

5.2.1.4 Increasing number of space exploration missions

5.2.1.5 Cost-effectiveness of small satellites compared to conventional satellites

FIGURE 22 NUMBER OF SMALL SATELLITES, BY OPERATOR TYPE, 2022

5.2.2 RESTRAINTS

5.2.2.1 Absence of unified regulations and government policies across nations

5.2.2.2 Lack of dedicated small satellite launch vehicles

5.2.3 OPPORTUNITIES

5.2.3.1 Use of software-defined technology for flexibility to alter space missions

5.2.3.2 Development of satellite network to provide internet access in areas without broadband connectivity

5.2.3.3 Increased government investments in space agencies

FIGURE 23 ORBITAL LAUNCHES, BY COUNTRY, 2022

5.2.3.4 Increased use of small satellites in various applications

5.2.4 CHALLENGES

5.2.4.1 Concerns over space debris

5.2.4.2 Complex propulsion systems

5.2.4.3 Telemetry, tracking, and command issues

5.2.4.4 Raising capital and funding for satellite manufacturing and launch

5.2.4.5 Qualitative limitation of small satellites

5.3 RECESSION IMPACT ANALYSIS

5.4 VALUE CHAIN ANALYSIS OF SMALL SATELLITE MARKET

FIGURE 24 VALUE CHAIN ANALYSIS

5.5 TRENDS/DISRUPTIONS IMPACTING CUSTOMER BUSINESS

5.5.1 REVENUE SHIFT AND NEW REVENUE POCKETS FOR SMALL SATELLITE SYSTEM MANUFACTURERS

FIGURE 25 REVENUE SHIFT CURVE: SMALL SATELLITE MARKET

5.6 SMALL SATELLITE MARKET ECOSYSTEM

5.6.1 PROMINENT COMPANIES

5.6.2 PRIVATE AND SMALL ENTERPRISES

5.6.3 ECOSYSTEM

FIGURE 26 MARKET ECOSYSTEM MAP: SMALL SATELLITE MARKET

TABLE 5 SMALL SATELLITE MARKET ECOSYSTEM

5.7 PORTER'S FIVE FORCES ANALYSIS

TABLE 6 SMALL SATELLITE: PORTER'S FIVE FORCE ANALYSIS

5.7.1 THREAT OF NEW ENTRANTS

5.7.2 THREAT OF SUBSTITUTES

5.7.3 BARGAINING POWER OF SUPPLIERS

5.7.4 BARGAINING POWER OF BUYERS

5.7.5 INTENSITY OF COMPETITIVE RIVALRY

5.8 PRICING ANALYSIS

5.8.1 AVERAGE PRICE ANALYSIS OF SMALL SATELLITES IN 2022

5.9 TARIFF AND REGULATORY LANDSCAPE

5.9.1 NORTH AMERICA

TABLE 7 LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER AGENCIES IN NORTH AMERICA

5.9.2 EUROPE

TABLE 8 LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER AGENCIES IN EUROPE

5.9.3 ASIA PACIFIC

TABLE 9 LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER AGENCIES IN ASIA PACIFIC

5.9.4 REST OF THE WORLD

TABLE 10 LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER AGENCIES IN REST OF THE WORLD

5.10 TRADE ANALYSIS

TABLE 11 SMALL SATELLITE MARKET: COUNTRY-WISE IMPORT, 2019–2021 (USD THOUSAND)

TABLE 12 SMALL SATELLITE MARKET: COUNTRY-WISE EXPORTS, 2019–2021 (USD THOUSAND)

5.11 PATENT ANALYSIS

FIGURE 27 LIST OF MAJOR PATENTS FOR SMALL SATELLITES

TABLE 13 LIST OF MAJOR PATENTS FOR SMALL SATELLITES

TABLE 14 OTHER INNOVATIONS AND PATENT REGISTRATIONS, 2020–2021

5.12 KEY STAKEHOLDERS AND BUYING CRITERIA

5.12.1 KEY STAKEHOLDERS ON BUYING PROCESS

FIGURE 28 INFLUENCE OF STAKEHOLDERS IN BUYING SMALL SATELLITES, BY END USE

TABLE 15 INFLUENCE OF STAKEHOLDERS ON BUYING SMALL SATELLITES, BY END USE (%)

5.12.2 BUYING CRITERIA

FIGURE 29 KEY BUYING CRITERIA FOR SMALL SATELLITES, BY TYPE

TABLE 16 KEY BUYING CRITERIA FOR SMALL SATELLITES, BY APPLICATION

5.13 KEY CONFERENCES AND EVENTS, 2022–23

TABLE 17 SMALL SATELLITES MARKET: DETAILED LIST OF CONFERENCES AND EVENTS

5.14 TECHNOLOGY ANALYSIS

5.14.1 KEY TECHNOLOGY

5.14.1.1 Development of CubeSat constellations to enhance communication

5.14.1.2 Miniaturization in space technology

5.14.2 SUPPORTING TECHNOLOGY

5.14.2.1 Hyperspectral and multispectral imaging

5.15 USE CASE ANALYSIS

5.15.1 USE CASE: CUBESATS FOR INTERPLANETARY MISSIONS

5.15.2 USE CASE: SMALL SATELLITES FOR IOT AND COMMUNICATIONS

5.15.3 USE CASE: SPACE-BASED GLOBAL WIRELESS MONITORING SYSTEMS

5.15.4 MEASUREMENTS OF MAGNETIC AND ELECTRIC FIELDS ON EARTH'S IONOSPHERE

5.15.5 USE CASE: REAL-TIME DATA FOR EMERGENCY SYSTEMS

5.15.6 USE CASE: SATELLITE RADIATION HARDNESS TEST

5.16 OPERATIONAL DATA

TABLE 18 SMALL SATELLITE LAUNCHES, BY APPLICATION, 2019–2028

6 INDUSTRY TRENDS

6.1 INTRODUCTION

6.2 SUPPLY CHAIN ANALYSIS

FIGURE 30 SUPPLY CHAIN ANALYSIS

6.3 TECHNOLOGY TRENDS

6.3.1 EVOLUTION OF NANOSATELLITES AND MICROSATELLITES

FIGURE 31 EVOLUTION: NANOSATELLITES AND MICROSATELLITES

6.3.2 DEVELOPMENT OF SMALL SATELLITE CONSTELLATIONS TO ENHANCE COMMUNICATION

6.3.3 3D PRINTING OF SATELLITE EQUIPMENT

6.3.4 USE OF SMALL SATELLITES TO PROVIDE ENHANCED SPACE IMAGERY

6.3.5 DEVELOPMENT OF DEDICATED LAUNCH VEHICLES FOR SMALL SATELLITES

TABLE 19 STATE-OF-THE-ART SMALL SATELLITE AND CUBESAT TECHNOLOGIES

6.3.6 DISTRIBUTED ELECTRIC POWER SYSTEM (EPS) IN SMALL SATELLITE APPLICATIONS

TABLE 20 DIFFERENCE BETWEEN DISTRIBUTED AND CENTRALIZED EPS ARCHITECTURE

6.3.7 ENERGY STORAGE (PRIMARY & SECONDARY BATTERIES)

TABLE 21 CUBESAT BATTERY TECHNOLOGIES

6.4 IMPACT OF MEGATRENDS

6.4.1 HYBRID BEAMFORMING METHODS

6.4.2 DEVELOPMENT OF NEW-GENERATION CUBESAT FOR LUNAR EXPLORATION

6.4.3 COGNITIVE RADIO (SDR-CR) TECHNOLOGY

6.4.4 SHIFT IN GLOBAL ECONOMIC POWER

7 SMALL SATELLITE MARKET, BY MASS

7.1 INTRODUCTION

FIGURE 32 CUBESAT SEGMENT TO LEAD MARKET DURING FORECAST PERIOD

TABLE 22 SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 23 SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

7.2 SMALL SATELLITE

TABLE 24 SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 25 SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

7.3 MINISATELLITES (100–500 KG)

7.3.1 WIDELY USED FOR COMMUNICATION AND BROADBAND INTERNET

7.4 MICROSATELLITES (10–100 KG)

7.4.1 CAN FUNCTION AS EFFECTIVE TACTICAL COMMUNICATION DEVICES FOR MILITARY APPLICATIONS

7.5 NANOSATELLITES (1–10 KG)

7.5.1 USED FOR VARIOUS APPLICATIONS, SUCH AS EARTH OBSERVATION AND RECONNAISSANCE MISSIONS

7.6 OTHERS (PICOSATELLITES AND FEMTOSATELLITES)

7.7 CUBESAT

TABLE 26 CUBE SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 27 CUBE SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

7.8 0.25–0.5U

7.8.1 0.25–0.5U CUBESATS DEPLOYED FOR INTERPLANETARY MISSIONS

7.9 1U

7.9.1 KEY FOCUS ON DEVELOPING 1U CUBESATS FOR COMMUNICATION

7.10 2U

7.10.1 2U CUBESATS USED FOR TESTING EMERGING TECHNOLOGIES

7.11 3U

7.11.1 3U CUBESATS USED FOR EARTH OBSERVATION AND TRAFFIC MONITORING

7.12 6U

7.12.1 INCREASING DEMAND FOR 6U CUBESATS FOR SPACE SCIENCE MISSIONS TO DRIVE SEGMENT

7.13 >12U

7.13.1 >12U CUBESATS USED IN DEEP SPACE MISSIONS AND RESEARCH

8 SMALL SATELLITE MARKET, BY SUBSYSTEM

8.1 INTRODUCTION

8.1.1 SUBSYSTEM: MARKET DRIVERS

FIGURE 33 PAYLOAD SEGMENT TO LEAD MARKET DURING FORECAST PERIOD

TABLE 28 SMALL SATELLITE MARKET, BY SUBSYSTEM, 2019–2022 (USD MILLION)

TABLE 29 SMALL SATELLITE MARKET, BY SUBSYSTEM, 2023–2028 (USD MILLION)

8.2 SATELLITE BUS

TABLE 30 SATELLITE BUS MARKET, BY SUBTYPE, 2019–2022 (USD MILLION)

TABLE 31 SATELLITE BUS MARKET, BY SUBTYPE, 2023–2028 (USD MILLION)

8.2.1 ATTITUDE & ORBITAL CONTROL SYSTEM

8.2.1.1 Need for stability of payloads and pointing accuracy to drive segment

8.2.2 COMMAND & DATA HANDLING (C&DH) SYSTEM

8.2.2.1 C&DH system controls overall operations of small satellites

8.2.3 ELECTRICAL POWER SYSTEM (EPS)

8.2.3.1 Technological advancements in electrical power systems drive their demand

8.2.4 PROPULSION SYSTEM

TABLE 32 PROPULSION SYSTEM MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 33 PROPULSION SYSTEM MARKET, BY TYPE, 2023–2028 (USD MILLION)

8.2.4.1 Chemical propulsion

8.2.4.1.1 Technological innovations to drive demand for chemical propulsion

8.2.4.2 Electric propulsion

8.2.4.2.1 Improved performance of new-generation systems to drive market

8.2.4.3 Hybrid propulsion

8.2.4.3.1 Demand for low-cost launch vehicles to drive segment

8.2.5 TELEMETRY, TRACKING, & COMMAND (TT&C)

8.2.5.1 Need for effective communication between satellites and ground stations to fuel segment

8.2.6 STRUCTURE

8.2.6.1 Standardized structures enable proper placement of systems in satellites

8.2.7 THERMAL SYSTEM

8.2.7.1 Need for miniaturized thermal management systems to fuel market

8.3 PAYLOAD

TABLE 34 PAYLOAD SYSTEM MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 35 PAYLOAD SYSTEM MARKET, BY TYPE, 2023–2028 (USD MILLION)

8.3.1 TRADITIONAL PAYLOADS

TABLE 36 TRADITIONAL PAYLOADS MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 37 TRADITIONAL PAYLOADS MARKET, BY TYPE, 2023–2028 (USD MILLION)

8.3.1.1 Optical & infrared

8.3.1.1.1 Increased demand for earth observation and remote sensing applications to drive segment

8.3.1.2 Hyperspectral & multispectral

8.3.1.2.1 Increased need for applications like mapping & remote sensing to drive demand

8.3.1.3 Radar

8.3.1.3.1 Need for high-resolution remote sensing to drive demand

8.3.1.4 Communication payload/transponder

8.3.1.4.1 Increasing need for efficient communication for small satellites to drive demand

8.3.1.5 Others

8.3.2 SOFTWARE-DEFINED PAYLOADS

8.3.2.1 Use of software-defined technology for flexibility to alter space missions to drive segment

8.4 SOLAR PANEL

8.5 SATELLITE ANTENNA

8.5.1 WIRE ANTENNAS

8.5.1.1 Monopole

8.5.1.1.1 Monopole antennas provide shorter signals with wider coverage area

8.5.1.2 Dipole

8.5.1.2.1 Dipole antennas used for radio transmitting and receiving applications

8.5.2 HORN ANTENNAS

8.5.2.1 Horn antennas used for earth observation due to their wide range of frequency

8.5.3 ARRAY ANTENNAS

8.5.3.1 Advancements in solid-state technology to make phased array antennas more cost-effective

8.5.4 REFLECTOR ANTENNAS

8.5.4.1 Used as high-gain antennas in microwave relay

8.5.4.2 Parabolic reflectors

8.5.4.2.1 Parabolic reflectors used for point-to-point communication

8.5.4.3 Double reflectors

8.5.4.3.1 Double reflectors have better gain than other antennas

8.6 OTHERS

9 SMALL SATELLITE MARKET, BY APPLICATION

9.1 INTRODUCTION

9.1.1 APPLICATIONS: MARKET DRIVERS

FIGURE 34 COMMUNICATION SEGMENT TO LEAD MARKET DURING FORECAST PERIOD

TABLE 38 SMALL SATELLITE MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 39 SMALL SATELLITE MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

9.2 COMMUNICATION

9.2.1 DEVELOPMENT OF EFFICIENT MINIATURE COMMUNICATION SYSTEMS

TO DRIVE MARKET

9.3 EARTH OBSERVATION

9.3.1 COMPACT NATURE OF SMALL SATELLITES LED TO EFFICIENT EARTH OBSERVATION AND REMOTE SENSING

9.4 EDUCATION

9.4.1 ADVANCEMENTS IN TECHNOLOGY AND MINIATURIZATION OF SUBCOMPONENTS TO FACILITATE USE OF SMALL SATELLITES FOR NEW SPACE SCIENCE MISSIONS

9.5 TECHNOLOGY

9.5.1 INCREASED INVESTMENTS IN SMALL SATELLITES TO DEVELOP BETTER NAVIGATION AND TRACKING TECHNOLOGIES TO DRIVE MARKET

9.6 OTHERS

9.6.1 INCREASED FOCUS ON SECURITY AND SPACE EXPLORATION & OBSERVATION TO DRIVE MARKET

10 SMALL SATELLITE MARKET, BY END USE

10.1 INTRODUCTION

10.1.1 END USE: MARKET DRIVERS

FIGURE 35 COMMERCIAL SEGMENT TO HOLD LARGEST MARKET SHARE

TABLE 40 SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 41 SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

10.2 COMMERCIAL

TABLE 42 SMALL SATELLITE MARKET, BY COMMERCIAL END USER, 2019–2022 (USD MILLION)

TABLE 43 SMALL SATELLITE MARKET, BY COMMERCIAL END USER, 2023–2028 (USD MILLION)

10.2.1 SATELLITE OPERATORS/OWNERS

10.2.1.1 Extensive use of small satellites for commercialization and data transferability to drive market

10.2.2 MEDIA & ENTERTAINMENT

10.2.2.1 Increasing demand for on-demand and streaming information and entertainment to drive market

10.2.3 ENERGY INDUSTRY

10.2.3.1 Demand for monitoring structural integrity of nuclear power stations to drive market

10.2.4 SCIENTIFIC RESEARCH & DEVELOPMENT

10.2.4.1 Endless prospects in space research to create market opportunities

10.2.5 OTHERS

10.3 GOVERNMENT & DEFENSE

TABLE 44 SMALL SATELLITE MARKET, BY GOVERNMENT & DEFENSE END USER, 2019–2022 (USD MILLION)

TABLE 45 SMALL SATELLITE MARKET, BY GOVERNMENT & DEFENSE END USER, 2023–2028 (USD MILLION)

10.3.1 DEPARTMENT OF DEFENSE & INTELLIGENCE AGENCIES

10.3.1.1 Increasing demand for real-time data and imaging to trigger market growth

10.3.2 NATIONAL SPACE AGENCIES

10.3.2.1 Small satellites lead to efficient Earth observation and remote sensing

10.3.3 SEARCH AND RESCUE ENTITIES

10.3.3.1 Need for Earth observation for search & rescue operations to drive demand

10.3.4 ACADEMIC & RESEARCH INSTITUTIONS

10.3.4.1 Increasing government support to train students in small satellite development to drive demand

10.3.5 NATIONAL MAPPING & TOPOGRAPHIC AGENCIES

10.3.5.1 Increased investments in small satellites to improve GPS-based navigation to trigger demand

10.4 DUAL-USE

10.4.1 INCREASING LAUNCHES OF SATELLITES FOR BETTER CONNECTIVITY AND PROVISION OF HIGH-SPEED DATA TO DRIVE MARKET

11 SMALL SATELLITE MARKET, BY FREQUENCY

11.1 INTRODUCTION

11.1.1 FREQUENCY: MARKET DRIVERS

FIGURE 36 KU-BAND SEGMENT TO LEAD MARKET DURING FORECAST PERIOD

TABLE 46 SMALL SATELLITE MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

TABLE 47 SMALL SATELLITE MARKET, BY FREQUENCY, 2023–2028 (USD MILLION)

11.2 L-BAND

11.2.1 EXTENSIVELY USED IN DATA COMMUNICATIONS AND TRAFFIC INFORMATION

11.3 S-BAND

11.3.1 LOW DRAG AND LIGHTWEIGHT S-BAND ANTENNAS PREFERRED FOR SPACE OPERATIONS

11.4 C-BAND

11.4.1 SMALL SATELLITES WITH C-BAND FREQUENCY USED FOR NAVIGATION PURPOSES

11.5 X-BAND

11.5.1 INCREASED USE OF X-BAND TO PROVIDE HIGH-THROUGHPUT COMMUNICATION FROM SPACECRAFT TO GROUND STATIONS TO DRIVE MARKET

11.6 KU-BAND

11.6.1 NEED FOR WIDER-RANGE DATA COMMUNICATION TO DRIVE DEMAND

11.7 KA-BAND

11.7.1 KA-BAND ANTENNAS USED FOR HIGH-BANDWIDTH COMMUNICATION

11.8 Q/V-BAND

11.8.1 Q/V BAND ANTENNAS REDUCE SIGNAL FADING AT HIGH-FREQUENCY BANDS

11.9 HF/VHF/UHF-BAND

11.9.1 HF/VHF/UHF BAND ANTENNAS EXTENSIVELY USED FOR CUBESAT COMMUNICATION

11.10 LASER/OPTICAL-BAND

11.10.1 LASER/OPTICAL BAND COMMUNICATION IN SPACE OPENS VIRTUALLY UNLIMITED CAPACITIES WITHOUT REGULATIONS

12 SMALL SATELLITE MARKET, BY ORBIT

12.1 INTRODUCTION

FIGURE 37 GEO SEGMENT TO REGISTER HIGHEST CAGR DURING FORECAST PERIOD

TABLE 48 SMALL SATELLITE MARKET, BY ORBIT, 2019–2022 (USD MILLION)

TABLE 49 SMALL SATELLITE MARKET, BY ORBIT, 2023–2028 (USD MILLION)

12.2 LOW EARTH ORBIT (LEO)

12.2.1 INCREASED DEMAND FOR LEO CONSTELLATION SATELLITES DEVELOPED BY SPACEX TO DRIVE SEGMENT

12.3 MEDIUM EARTH ORBIT (MEO)

12.3.1 INCREASING DEMAND FOR SATELLITE SERVICES FOR TELECOMMUNICATIONS & MOBILE BROADBAND APPLICATIONS TO FUEL SEGMENT GROWTH

12.4 GEOSTATIONARY EARTH ORBIT (GEO)

12.4.1 GEO SATELLITES OPERATE AT HIGH ALTITUDES, AND PAYLOADS CARRIED BY THEM HAVE LONG LIFE EXPECTANCY

13 SMALL SATELLITE MARKET, BY REGION

13.1 INTRODUCTION

13.1.1 REGIONAL RECESSION IMPACT ANALYSIS

FIGURE 38 NORTH AMERICA ESTIMATED TO ACCOUNT FOR LARGEST MARKET SHARE IN 2023

TABLE 50 SMALL SATELLITE MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 51 SMALL SATELLITE MARKET, BY REGION, 2023–2028 (USD MILLION)

13.2 NORTH AMERICA

13.2.1 PESTLE ANALYSIS: NORTH AMERICA

FIGURE 39 NORTH AMERICA: SMALL SATELLITE MARKET SNAPSHOT

TABLE 52 NORTH AMERICA: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 53 NORTH AMERICA: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 54 NORTH AMERICA: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 55 NORTH AMERICA: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 56 NORTH AMERICA: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 57 NORTH AMERICA: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

TABLE 58 NORTH AMERICA: SMALL SATELLITE MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 59 NORTH AMERICA: SMALL SATELLITE MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

13.2.2 US

13.2.2.1 Increasing use of small satellites in agriculture to drive market

TABLE 60 US: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 61 US: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 62 US: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 63 US: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 64 US: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 65 US: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.2.3 CANADA

13.2.3.1 Government initiatives towards space exploration and earth observation to drive market

TABLE 66 CANADA: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 67 CANADA: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 68 CANADA: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 69 CANADA: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 70 CANADA: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 71 CANADA: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.3 EUROPE

13.3.1 PESTLE ANALYSIS: EUROPE

FIGURE 40 EUROPE: SMALL SATELLITE MARKET SNAPSHOT

TABLE 72 EUROPE: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 73 EUROPE: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 74 EUROPE: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 75 EUROPE: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 76 EUROPE: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 77 EUROPE: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

TABLE 78 EUROPE: SMALL SATELLITE MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 79 EUROPE: SMALL SATELLITE MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

13.3.2 RUSSIA

13.3.2.1 Growing reliance on self-developed space systems to drive market

TABLE 80 RUSSIA: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 81 RUSSIA: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 82 RUSSIA: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 83 RUSSIA: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 84 RUSSIA: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 85 RUSSIA: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.3.3 UK

13.3.3.1 Innovations in satellite technologies to drive market

TABLE 86 UK: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 87 UK: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 88 UK: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 89 UK: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 90 UK: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 91 UK: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.3.4 GERMANY

13.3.4.1 Increasing demand for Earth observation and communication to drive market

TABLE 92 GERMANY: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 93 GERMANY: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 94 GERMANY: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 95 GERMANY: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 96 GERMANY: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 97 GERMANY: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.3.5 FINLAND

13.3.5.1 Increasing partnerships among local companies to boost market

TABLE 98 FINLAND: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 99 FINLAND: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 100 FINLAND: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 101 FINLAND: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 102 FINLAND: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

MILLION)

TABLE 103 FINLAND: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.3.6 ITALY

13.3.6.1 Demand for Earth observation and science missions to drive market

TABLE 104 ITALY: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 105 ITALY: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 106 ITALY: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 107 ITALY: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 108 ITALY: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 109 ITALY: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.3.7 REST OF EUROPE

TABLE 110 REST OF EUROPE: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 111 REST OF EUROPE: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 112 REST OF EUROPE: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 113 REST OF EUROPE: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 114 REST OF EUROPE: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 115 REST OF EUROPE: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.4 ASIA PACIFIC

13.4.1 PESTLE ANALYSIS: ASIA PACIFIC

FIGURE 41 ASIA PACIFIC: SMALL SATELLITE SNAPSHOT

TABLE 116 ASIA PACIFIC: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 117 ASIA PACIFIC: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 118 ASIA PACIFIC: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 119 ASIA PACIFIC: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 120 ASIA PACIFIC: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 121 ASIA PACIFIC: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

TABLE 122 ASIA PACIFIC: SMALL SATELLITE MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 123 ASIA PACIFIC: SMALL SATELLITE MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

13.4.2 CHINA

13.4.2.1 Dependence on self-made space technology led to increased satellite launches in China

TABLE 124 CHINA: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 125 CHINA: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 126 CHINA: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 127 CHINA: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 128 CHINA: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 129 CHINA: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.4.3 INDIA

13.4.3.1 12.4.4.1 Upcoming space initiatives to drive market

TABLE 130 INDIA: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 131 INDIA: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 132 INDIA: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 133 INDIA: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 134 INDIA: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 135 INDIA: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.4.4 JAPAN

13.4.4.1 Involvement of private companies in government space programs to drive market

TABLE 136 JAPAN: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 137 JAPAN: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 138 JAPAN: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 139 JAPAN: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 140 JAPAN: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 141 JAPAN: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.4.5 SOUTH KOREA

13.4.5.1 Increased government funding to provide significant opportunities for market growth

TABLE 142 SOUTH KOREA: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 143 SOUTH KOREA: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 144 SOUTH KOREA: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 145 SOUTH KOREA: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 146 SOUTH KOREA: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 147 SOUTH KOREA: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.4.6 AUSTRALIA

13.4.6.1 Government support to new manufacturers for opening new facilities to drive market

TABLE 148 AUSTRALIA: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 149 AUSTRALIA: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 150 AUSTRALIA: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 151 AUSTRALIA: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 152 AUSTRALIA: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 153 AUSTRALIA: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.4.7 REST OF ASIA PACIFIC

TABLE 154 REST OF ASIA PACIFIC: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 155 REST OF ASIA PACIFIC: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 156 REST OF ASIA PACIFIC: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 157 REST OF ASIA PACIFIC: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 158 REST OF ASIA PACIFIC: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 159 REST OF ASIA PACIFIC: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.5 MIDDLE EAST & AFRICA

13.5.1 PESTLE ANALYSIS: MIDDLE EAST & AFRICA

FIGURE 42 MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET SNAPSHOT

TABLE 160 MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 161 MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 162 MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 163 MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 164 MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 165 MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

TABLE 166 MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 167 MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

13.5.2 SAUDI ARABIA

13.5.2.1 Collaboration between government and universities for technological advancements in space systems to drive market

TABLE 168 SAUDI ARABIA: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 169 SAUDI ARABIA: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 170 SAUDI ARABIA: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 171 SAUDI ARABIA: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 172 SAUDI ARABIA: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 173 SAUDI ARABIA: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.5.3 ISRAEL

13.5.3.1 Increased private investments in space technology to drive market

TABLE 174 ISRAEL: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 175 ISRAEL: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 176 ISRAEL: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 177 ISRAEL: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 178 ISRAEL: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 179 ISRAEL: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.5.4 UAE

13.5.4.1 Need for advanced satellite systems for border control to drive market

TABLE 180 UAE: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 181 UAE: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 182 UAE: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 183 UAE: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 184 UAE: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 185 UAE: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

MILLION)

13.5.5 REST OF MIDDLE EAST & AFRICA

TABLE 186 REST OF MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 187 REST OF MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 188 REST OF MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 189 REST OF MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 190 REST OF MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 191 REST OF MIDDLE EAST & AFRICA: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.6 LATIN AMERICA

13.6.1 PESTLE ANALYSIS: LATIN AMERICA

FIGURE 43 LATIN AMERICA: SMALL SATELLITE MARKET SNAPSHOT

TABLE 192 LATIN AMERICA: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 193 LATIN AMERICA: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 194 LATIN AMERICA: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 195 LATIN AMERICA: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 196 LATIN AMERICA: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 197 LATIN AMERICA: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

TABLE 198 LATIN AMERICA: SMALL SATELLITE MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 199 LATIN AMERICA: SMALL SATELLITE MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

13.6.2 MEXICO

13.6.2.1 Collaborative studies and CubeSat launch initiatives by universities to drive market

TABLE 200 MEXICO: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 201 MEXICO: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD

MILLION)

TABLE 202 MEXICO: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 203 MEXICO: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 204 MEXICO: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 205 MEXICO: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.6.3 ARGENTINA

13.6.3.1 Increasing need for improving space situational awareness to drive market

TABLE 206 ARGENTINA: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 207 ARGENTINA: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 208 ARGENTINA: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 209 ARGENTINA: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 210 ARGENTINA: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 211 ARGENTINA: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

13.6.4 REST OF LATIN AMERICA

TABLE 212 REST OF LATIN AMERICA: SMALL SATELLITE MARKET, BY MASS, 2019–2022 (USD MILLION)

TABLE 213 REST OF LATIN AMERICA: SMALL SATELLITE MARKET, BY MASS, 2023–2028 (USD MILLION)

TABLE 214 REST OF LATIN AMERICA: SMALL SATELLITE MARKET, BY TYPE, 2019–2022 (USD MILLION)

TABLE 215 REST OF LATIN AMERICA: SMALL SATELLITE MARKET, BY TYPE, 2023–2028 (USD MILLION)

TABLE 216 REST OF LATIN AMERICA: SMALL SATELLITE MARKET, BY END USE, 2019–2022 (USD MILLION)

TABLE 217 REST OF LATIN AMERICA: SMALL SATELLITE MARKET, BY END USE, 2023–2028 (USD MILLION)

14 COMPETITIVE LANDSCAPE

14.1 INTRODUCTION

14.2 MARKET SHARE ANALYSIS OF KEY PLAYERS, 2022

TABLE 218 SMALL SATELLITE MARKET: DEGREE OF COMPETITION

FIGURE 44 SHARE OF TOP PLAYERS IN SMALL SATELLITE MARKET, 2022

TABLE 219 KEY DEVELOPMENTS BY LEADING PLAYERS IN SMALL SATELLITE MARKET, 2019–2022

14.3 RANKING ANALYSIS OF TOP 5 PLAYERS, 2022

FIGURE 45 MARKET RANKING OF LEADING PLAYERS IN SMALL SATELLITE MARKET, 2022

14.4 REVENUE ANALYSIS OF TOP 5 MARKET PLAYERS, 2022

14.5 COMPANY PRODUCT FOOTPRINT ANALYSIS

TABLE 220 COMPANY PRODUCT FOOTPRINT

TABLE 221 COMPANY SUBSYSTEM FOOTPRINT

TABLE 222 COMPANY MASS FOOTPRINT

TABLE 223 COMPANY REGIONAL FOOTPRINT

14.6 COMPANY EVALUATION QUADRANT

14.6.1 STARS

14.6.2 EMERGING LEADERS

14.6.3 PERVASIVE PLAYERS

14.6.4 PARTICIPANTS

FIGURE 46 MARKET COMPETITIVE LEADERSHIP MAPPING, 2022

14.6.5 START-UP/SME EVALUATION QUADRANT

14.6.5.1 Progressive companies

14.6.5.2 Responsive companies

14.6.5.3 Starting blocks

14.6.5.4 Dynamic companies

TABLE 224 SMALL SATELLITE MARKET: DETAILED LIST OF KEY START-UPS/SMES

TABLE 225 COMPETITIVE BENCHMARKING OF KEY START-UPS/SMES

FIGURE 47 SMALL SATELLITE MARKET (START-UPS) COMPETITIVE LEADERSHIP MAPPING, 2022

14.7 COMPETITIVE SCENARIO AND TRENDS

14.7.1 PRODUCT LAUNCHES

TABLE 226 SMALL SATELLITE MARKET: PRODUCT LAUNCHES, 2019–MARCH 2023

14.7.2 DEALS

TABLE 227 SMALL SATELLITE MARKET: DEALS, 2019–MARCH 2023

14.7.3 OTHERS

TABLE 228 SMALL SATELLITE MARKET: OTHERS, 2019–MARCH 2023

15 COMPANY PROFILES

(Business Overview, Products Offered, Recent Developments, MnM View Right to win, Strategic choices made, Weaknesses and competitive threats) *

15.1 INTRODUCTION

15.2 KEY PLAYERS

15.2.1 LOCKHEED MARTIN CORPORATION

TABLE 229 LOCKHEED MARTIN CORPORATION: BUSINESS OVERVIEW

TABLE 230 LOCKHEED MARTIN CORPORATION:

PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 231 LOCKHEED MARTIN CORPORATION: DEALS

15.2.2 SIERRA NEVADA CORPORATION

TABLE 232 SIERRA NEVADA CORPORATION: BUSINESS OVERVIEW

TABLE 233 SIERRA NEVADA CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 234 SIERRA NEVADA CORPORATION: DEALS

15.2.3 L3HARRIS TECHNOLOGIES, INC.

TABLE 235 L3HARRIS TECHNOLOGIES, INC.: BUSINESS OVERVIEW

TABLE 236 L3HARRIS TECHNOLOGIES, INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 237 L3HARRIS TECHNOLOGIES, INC.: DEALS

TABLE 238 L3HARRIS TECHNOLOGIES, INC.: OTHERS

15.2.4 NORTHROP GRUMMAN CORPORATION

TABLE 239 NORTHROP GRUMMAN CORPORATION: BUSINESS OVERVIEW

TABLE 240 NORTHROP GRUMMAN CORPORATION:

PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 241 NORTHROP GRUMMAN CORPORATION: DEALS

15.2.5 AIRBUS DEFENCE AND SPACE

TABLE 242 AIRBUS DEFENCE AND SPACE: BUSINESS OVERVIEW

TABLE 243 AIRBUS DEFENCE AND SPACE: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 244 AIRBUS DEFENCE AND SPACE: DEALS

15.2.6 SURREY SATELLITE TECHNOLOGY LTD.

TABLE 245 SURREY SATELLITE TECHNOLOGY LTD.: BUSINESS OVERVIEW

TABLE 246 SURREY SATELLITE TECHNOLOGY LTD.:

PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 247 SURREY SATELLITE TECHNOLOGY LTD.: DEALS

TABLE 248 SURREY SATELLITE TECHNOLOGY LTD.: OTHERS

15.2.7 THALES GROUP

TABLE 249 THALES GROUP: BUSINESS OVERVIEW

TABLE 250 THALES GROUP: PRODUCTS/SOLUTIONS/SERVICES OFFERED

15.2.8 GOMSPACE

TABLE 251 GOMSPACE: BUSINESS OVERVIEW

TABLE 252 GOMSPACE: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 253 GOMSPACE: DEALS

15.2.9 PLANET LABS INC.

TABLE 254 PLANET LABS INC.: BUSINESS OVERVIEW

TABLE 255 PLANET LABS INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 256 PLANET LABS INC.: DEALS

TABLE 257 PLANET LAB INC.: OTHERS

15.2.10 RAYTHEON TECHNOLOGIES CORPORATION

TABLE 258 RAYTHEON TECHNOLOGIES CORPORATION: BUSINESS OVERVIEW

TABLE 259 RAYTHEON TECHNOLOGIES CORPORATION:
PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 260 RAYTHEON TECHNOLOGIES CORPORATION: DEALS

TABLE 261 RAYTHEON TECHNOLOGIES CORPORATION: OTHERS

15.2.11 OHB SE

TABLE 262 OHB SE: BUSINESS OVERVIEW

TABLE 263 OHB SE: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 264 OHB SE: DEALS

TABLE 265 OHB SE: OTHERS

15.2.12 MAXAR TECHNOLOGIES

TABLE 266 MAXAR TECHNOLOGIES: BUSINESS OVERVIEW

TABLE 267 MAXAR TECHNOLOGIES: PRODUCTS/SOLUTIONS/SERVICES
OFFERED

15.2.13 SPACE EXPLORATION TECHNOLOGIES CORP. (SPACEX)

TABLE 268 SPACEX: BUSINESS OVERVIEW

TABLE 269 SPACEX: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 270 SPACEX: DEALS

TABLE 271 SPACEX: OTHERS

15.2.14 AEROSPACE CORPORATION

TABLE 272 AEROSPACE CORPORATION: BUSINESS OVERVIEW

TABLE 273 AEROSPACE CORPORATION: PRODUCTS/SOLUTIONS/SERVICES
OFFERED

TABLE 274 AEROSPACE CORPORATION: DEALS

TABLE 275 AEROSPACE CORPORATION: OTHERS

15.2.15 MITSUBISHI ELECTRIC CORPORATION

TABLE 276 MITSUBISHI ELECTRIC CORPORATION: BUSINESS OVERVIEW

TABLE 277 MITSUBISHI ELECTRIC CORPORATION:

PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 278 MITSUBISHI ELECTRIC CORPORATION: DEALS

TABLE 279 MITSUBISHI ELECTRIC CORPORATION: OTHERS

15.2.16 EXOLAUNCH GMBH

TABLE 280 EXOLAUNCH GMBH: BUSINESS OVERVIEW

TABLE 281 EXOLAUNCH GMBH: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 282 EXOLAUNCH GMBH: DEALS

TABLE 283 EXOLAUNCH GMBH: OTHERS

15.2.17 PUMPKIN, INC.

TABLE 284 PUMPKIN, INC.: BUSINESS OVERVIEW

TABLE 285 PUMPKIN, INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

15.2.18 BALL AEROSPACE & TECHNOLOGIES

TABLE 286 BALL AEROSPACE & TECHNOLOGIES: BUSINESS OVERVIEW

TABLE 287 BALL AEROSPACE & TECHNOLOGIES:

PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 288 BALL AEROSPACE & TECHNOLOGIES: OTHERS

15.2.19 DAURIA AEROSPACE LTD.

TABLE 289 DAURIA AEROSPACE LTD.: BUSINESS OVERVIEW

TABLE 290 DAURIA AEROSPACE LTD.: PRODUCTS/SOLUTIONS/SERVICES
OFFERED

15.2.20 AAC CLYDE SPACE

TABLE 291 AAC CLYDE SPACE: BUSINESS OVERVIEW

TABLE 292 AAC CLYDE SPACE: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 293 AAC CLYDE SPACE: DEALS

TABLE 294 AAC CLYDE SPACE: OTHERS

15.2.21 MILLENNIUM SPACE SYSTEMS, INC.

TABLE 295 MILLENNIUM SPACE SYSTEMS, INC.: BUSINESS OVERVIEW

TABLE 296 MILLENNIUM SPACE SYSTEMS, INC.:

PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 297 MILLENNIUM SPACE SYSTEMS, INC.: OTHERS

15.3 OTHER PLAYERS

15.3.1 ENDUROSAT

TABLE 298 ENDUROSAT: BUSINESS OVERVIEW

15.3.2 SWARM TECHNOLOGIES

TABLE 299 SWARM TECHNOLOGIES: BUSINESS OVERVIEW

15.3.3 NANOAVIONICS

TABLE 300 NANOAVIONICS: BUSINESS OVERVIEW

15.3.4 AL?N SPACE

TABLE 301 AL?N SPACE: BUSINESS OVERVIEW

15.3.5 NEARSPACE LAUNCH, INC.

TABLE 302 NEARSPACE LAUNCH, INC.: BUSINESS OVERVIEW

15.3.6 SPIRE GLOBAL, INC.

TABLE 303 SPIRE GLOBAL, INC.: BUSINESS OVERVIEW

15.3.7 EARTH-I, INC.

TABLE 304 EARTH-I, INC.: BUSINESS OVERVIEW

15.3.8 TERRAN ORBITAL

TABLE 305 TERRAN ORBITAL: BUSINESS OVERVIEW

15.3.9 ALBA ORBITAL

TABLE 306 ALBA ORBITAL: BUSINESS OVERVIEW

15.3.10 SATELLOGIC

TABLE 307 SATELLOGIC: BUSINESS OVERVIEW

*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.

16 APPENDIX

16.1 DISCUSSION GUIDE

16.1.1 SMALL SATELLITE MARKET (2023–2028)

16.1.2 SECTION-1: INTRODUCTION

16.1.3 SECTION-2: MARKET DYNAMICS

16.2 KNOWLEDGESTORE: MARKET SAND MARKETS' SUBSCRIPTION PORTAL

16.3 CUSTOMIZATION OPTIONS

16.4 RELATED REPORTS

16.5 AUTHOR DETAILS

I would like to order

Product name: Small Satellite Market by Mass (Small Satellite, CubeSat), Application, Subsystems (Satellite Bus, Payload, Solar Panel, Satellite Antenna), Frequency, End-use (Commercial, Government & Defence, Dual-use), Orbit and Region - Global Forecast to 2028

Product link: <https://marketpublishers.com/r/S38313389F0EN.html>

Price: US\$ 4,950.00 (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/S38313389F0EN.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**

Customer signature _____

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

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