

# Geotechnical Instrumentation and Monitoring Market with COVID-19 Impact Analysis by Offering, Networking Technology (Wired, Wireless), Structure (Bridges & Tunnels, Buildings & Utilities, Dams, Others), End User and Geography - Global Forecast to 2026

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# **Abstracts**

The geotechnical instrumentation and monitoring market is estimated to be worth USD 3.2 billion in 2021 and is projected to reach USD 5.1 billion by 2026, at a CAGR of 9.6%. Rising infrastructure investments, increasing adoption of geotechnical instruments to prevent structural failures, government regulations for sustainable structures and growing awareness about the benefits of instrumentation and monitoring tools are some of the major factors driving the growth of the geotechnical instrumentation and monitoring market. However, high installation and monitoring costs are likely to hinder market growth.

The market for geotechnical instrumentation and monitoring services to account for the largest share during the forecast period

The number of market players offering geotechnical instrumentation and monitoring services is more than the companies offering instruments and software. Various types of instruments needed for geotechnical monitoring include inclinometers, piezometers, extensometers, and sensors among others. The data collected from these instruments is provided to the software for analysis. These solutions help to identify structural damages at an early stage and enable a high degree of structural safety as the stakeholders can take preventive and corrective actions at the earliest to ensure structural safety. Though the hardware and software solutions can be reused after



purchase, many companies that purchase these solutions rent them to other companies, which is considered as a service. The presence of many geotechnical instrumentation and monitoring service providers to drive the market growth.

The market for wireless networking technology is estimated to register the highest CAGR between 2021 and 2026 in geotechnical instrumentation and monitoring market

Advancements in technology have led to the development of wireless instruments to which conventional instruments such as strain gauges, piezometers, inclinometers, linear voltage displacement transducers, and accelerometers can be attached for centralized data collection and analysis. The growing demand for wireless networking technologies for geotechnical instrumentation and monitoring is a major factor contributing to the high market growth. However, wired networking technology is expected to hold the largest share of the market owing to the higher adoption of wired instruments for geotechnical monitoring.

Geotechnical instrumentation and monitoring market in the Asia Pacific region is expected to witness a robust growth during 2021-2026

Asia Pacific is expected to register the highest market growth during the forecast period. The major factors driving market growth in this region include the increasing investments associated with infrastructure and the subsequent increase in the number of new infrastructure projects and directives by governments for the compulsory use of geotechnical instrumentation and monitoring for various structures. The growing population in many Asia Pacific countries has led to rapid urbanization which has led to the commencement of several infrastructure projects, providing growth opportunities for market players in the geotechnical instrumentation and monitoring market.

The breakup of primaries conducted during the study is depicted below:

By Company Type: Tier 1 – 50 %, Tier 2 – 30%, and Tier 3 –20%

By Designation: C-level Executives – 35%, Directors – 30% and Others – 35%

By Region: North America– 40%, Europe – 25%, Asia Pacific – 20%, and RoW – 15%

The major players in the geotechnical instrumentation and monitoring market are Fugro



(Netherlands), Keller Group (UK), Nova Metrix LLC (US), Geokon (US), Geocomp Corporation (US), Sisgeo S.r.I. (Italy), COWI A/S (Denmark), James Fisher and Sons (UK), Deep Excavation LLC (US), and RST Instruments (Canada).

## Research Coverage

The report segments the geotechnical instrumentation and monitoring market and forecasts its size, by value, based on region, offering, networking technology, structure and end user. The report also provides a comprehensive review of market drivers, restraints, opportunities, and challenges in the market. The report also covers qualitative aspects in addition to the quantitative aspects of the market.

# Key Benefits of Buying This Report

This report includes the market statistics pertaining to offering, networking technology, structure, end user and region

An in-depth value chain analysis has been done to provide deep insight into the geotechnical instrumentation and monitoring market.

Major market drivers, restraints, opportunities, and challenges have been detailed in this report.

The report includes an in-depth analysis and ranking of key players.



# **Contents**

## 1 INTRODUCTION

- 1.1 STUDY OBJECTIVES
- 1.2 MARKET DEFINITION
- 1.3 STUDY SCOPE
  - 1.3.1 MARKETS COVERED

FIGURE 1 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET SEGMENTATION

1.3.2 GEOGRAPHIC SCOPE

FIGURE 2 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET:

## **GEOGRAPHIC SCOPE**

- 1.3.3 INCLUSIONS AND EXCLUSIONS
- 1.3.4 INCLUSIONS AND EXCLUSIONS AT COMPANY LEVEL
- 1.3.5 INCLUSIONS AND EXCLUSIONS AT TECHNOLOGY LEVEL
- 1.3.6 INCLUSIONS AND EXCLUSIONS AT STRUCTURE LEVEL
- 1.3.7 INCLUSIONS AND EXCLUSIONS AT END USER LEVEL
- 1.3.8 INCLUSIONS AND EXCLUSIONS AT REGIONAL LEVEL
- 1.3.9 YEARS CONSIDERED
- 1.4 CURRENCY
- 1.5 LIMITATIONS
- 1.6 STAKEHOLDERS
- 1.7 SUMMARY OF CHANGES

## 2 RESEARCH METHODOLOGY

## 2.1 RESEARCH APPROACH

FIGURE 3 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET: RESEARCH DESIGN

- 2.1.1 SECONDARY DATA
  - 2.1.1.1 Secondary sources
- 2.1.2 PRIMARY DATA
  - 2.1.2.1 Primary interviews with experts
  - 2.1.2.2 List of key primary interview participants
  - 2.1.2.3 Breakdown of primaries
  - 2.1.2.4 Primary sources
- 2.1.3 SECONDARY AND PRIMARY RESEARCH
  - 2.1.3.1 Key industry insights



# 2.2 MARKET SIZE ESTIMATION

## 2.2.1 BOTTOM-UP APPROACH

2.2.1.1 Approach for capturing the market share by bottom-up analysis (demand side)

FIGURE 4 BOTTOM-UP APPROACH

2.2.2 TOP-DOWN APPROACH

2.2.2.1 Approach for capturing the market share by top-down analysis (supply side)

FIGURE 5 TOP-DOWN APPROACH

2.2.3 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET

**ESTIMATION: DEMAND-SIDE ANALYSIS** 

FIGURE 6 MARKET SIZE ESTIMATION METHODOLOGY: DEMAND-SIDE ANALYSIS

2.2.4 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET

**ESTIMATION: SUPPLY-SIDE ANALYSIS** 

FIGURE 7 MARKET SIZE ESTIMATION METHODOLOGY: SUPPLY-SIDE ANALYSIS

2.2.5 GROWTH FORECAST ASSUMPTIONS

TABLE 1 MARKET GROWTH ASSUMPTIONS

2.3 MARKET BREAKDOWN AND DATA TRIANGULATION

FIGURE 8 DATA TRIANGULATION

2.4 RESEARCH ASSUMPTIONS

2.5 RISK ASSESSMENT

TABLE 2 RISK ASSESSMENT: GEOTECHNICAL INSTRUMENTATION AND

MONITORING MARKET

## **3 EXECUTIVE SUMMARY**

- 3.1 POST-COVID-19: REALISTIC SCENARIO
- 3.2 POST-COVID-19: OPTIMISTIC SCENARIO
- 3.3 POST-COVID-19: PESSIMISTIC SCENARIO

FIGURE 9 PRE AND POST-COVID-19 SCENARIO ANALYSIS FOR GTIM MARKET, 2017–2026 (USD MILLION)

FIGURE 10 GTIM MARKET, 2021–2026 (USD MILLION)

FIGURE 11 SERVICES ESTIMATED TO ACCOUNT FOR LARGER SHARE OF GTIM MARKET DURING FORECAST PERIOD

FIGURE 12 BRIDGES & TUNNELS ESTIMATED TO ACCOUNT FOR LARGEST SHARE OF GTIM MARKET DURING FORECAST PERIOD

FIGURE 13 WIRELESS NETWORKING TECHNOLOGY TO REGISTER HIGHER GROWTH THAN WIRED NETWORKING TECHNOLOGY DURING FORECAST PERIOD

FIGURE 14 BY END USER, BUILDINGS & INFRASTRUCTURE TO DOMINATE GTIM



MARKET DURING FORECAST PERIOD
FIGURE 15 ASIA PACIFIC TO REGISTER HIGHEST GROWTH IN GTIM MARKET
DURING FORECAST PERIOD

## **4 PREMIUM INSIGHTS**

4.1 ATTRACTIVE GROWTH OPPORTUNITIES IN GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET

FIGURE 16 INCREASING INFRASTRUCTURE INVESTMENTS TO SIGNIFICANTLY CONTRIBUTE TO MARKET GROWTH

4.2 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET, BY NETWORKING TECHNOLOGY

FIGURE 17 WIRED NETWORKING TECHNOLOGY TO ACCOUNT FOR LARGER MARKET SIZE THAN WIRELESS NETWORKING TECHNOLOGY DURING FORECAST PERIOD

4.3 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET, BY STRUCTURE

FIGURE 18 BRIDGES & TUNNELS TO ACCOUNT FOR LARGEST MARKET SHARE DURING FORECAST PERIOD

4.4 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET, BY END USER

FIGURE 19 BUILDINGS & INFRASTRUCTURE TO ACCOUNT FOR LARGEST MARKET SHARE DURING FORECAST PERIOD

4.5 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET, BY OFFERING

FIGURE 20 SERVICES TO ACCOUNT FOR LARGER MARKET SHARE THAN HARDWARE & SOFTWARE DURING FORECAST PERIOD

4.6 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET, BY REGION

FIGURE 21 AMERICAS TO ACCOUNT FOR LARGEST SHARE OF GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET DURING FORECAST PERIOD 4.7 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET IN EUROPE, BY STRUCTURE AND COUNTRY, 2020

FIGURE 22 BRIDGES & TUNNELS AND UK ACCOUNTED FOR LARGEST SHARE OF GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET IN EUROPE IN 2020

## **5 MARKET OVERVIEW**



5.1 INTRODUCTION

5.2 MARKET DYNAMICS

FIGURE 23 MARKET DYNAMICS: GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET

5.2.1 DRIVERS

FIGURE 24 IMPACT ANALYSIS OF DRIVERS ON GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET

- 5.2.1.1 Rising infrastructure investments
- 5.2.1.2 Adoption of geotechnical instrumentation to prevent structural failures
- 5.2.1.3 Government regulations for sustainable structures
- 5.2.1.4 Growing awareness about benefits of instrumentation and monitoring tools

TABLE 3 KEY BENEFITS OF GEOTECHNICAL INSTRUMENTATION AND MONITORING

FIGURE 25 IMPROVING CONDITION OF BRIDGES IN THE US

**5.2.2 RESTRAINTS** 

FIGURE 26 IMPACT ANALYSIS OF RESTRAINTS ON GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET

5.2.2.1 High installation and monitoring costs

5.2.3 OPPORTUNITIES

FIGURE 27 IMPACT ANALYSIS OF RESTRAINTS ON GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET

- 5.2.3.1 Growing opportunities in APAC and GCC countries
- 5.2.3.2 Increasing investments in oil & gas and major energy projects

5.2.4 CHALLENGES

FIGURE 28 IMPACT ANALYSIS OF CHALLENGES ON GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET

- 5.2.4.1 Lack of skilled operators for installation and calibration of geotechnical instruments
  - 5.2.4.2 Technical challenges and operational factors
  - 5.2.4.3 Generation of inaccurate results owing to errors in readings

TABLE 4 ERRORS AND CORRECTIVE MEASURES

5.2.4.4 Adverse impact of COVID-19 on various industries

FIGURE 29 GLOBAL OIL AND GAS SUPPLY INVESTMENT REDUCED BY 32% FROM 2019 TO 2020 DUE TO PANDEMIC

#### 6 INDUSTRY TRENDS

6.1 INTRODUCTION

6.2 VALUE CHAIN ANALYSIS



FIGURE 30 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET: VALUE CHAIN ANALYSIS

TABLE 5 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET:

**VALUE CHAIN ANALYSIS** 

6.3 PRICING ANALYSIS: AVERAGE SELLING PRICE TRENDS

FIGURE 31 AVERAGE SELLING PRICE (ASP) OF STANDPIPE PIEZOMETERS, BY DIMENSION (USD)

6.4 LIST OF KEY PATENTS AND INNOVATIONS

FIGURE 32 NUMBER OF PATENTS GRANTED FOR GEOTECHNICAL

INSTRUMENTATION AND MONITORING (2010–2020)

FIGURE 33 TOP 10 COMPANIES WITH HIGHEST NUMBER OF PATENT

APPLICATIONS FOR GEOTECHNICAL INSTRUMENTATION AND MONITORING, 2010–2020

TABLE 6 TOP 20 PATENT OWNERS FOR GEOTECHNICAL INSTRUMENTATION AND MONITORING, 2010–2020

TABLE 7 KEY PATENTS AND INNOVATIONS IN GEOTECHNICAL

INSTRUMENTATION AND MONITORING MARKET, 2010-2020

6.5 KEY TECHNOLOGY TRENDS

6.5.1 NON-DESTRUCTIVE FIELD TESTING

6.5.2 WIRED AND WIRELESS SENSOR NETWORKS

6.5.3 DISTRIBUTION OF PROCESSED DATA OVER INTERNET

6.5.4 ULTRA-LOW-POWER STRAIN GAUGES

6.6 PORTER'S FIVE FORCES ANALYSIS

FIGURE 34 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET:

PORTER'S FIVE FORCES ANALYSIS, 2020

FIGURE 35 IMPACT OF PORTER'S FIVE FORCES ON GEOTECHNICAL

INSTRUMENTATION AND MONITORING MARKET, 2020

TABLE 8 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET:

PORTER'S FIVE FORCES ANALYSIS, 2020

6.6.1 THREAT OF NEW ENTRANTS

6.6.2 THREAT OF SUBSTITUTES

6.6.3 BARGAINING POWER OF SUPPLIERS

6.6.4 BARGAINING POWER OF BUYERS

6.6.5 INTENSITY OF COMPETITIVE RIVALRY

6.7 CASE STUDIES

6.7.1 TUNNEL MONITORING

TABLE 9 ENCARDIO-RITE: ROHTANG PASS TUNNEL MONITORING

6.7.2 BRIDGE MONITORING

TABLE 10 GEOCOMP CORPORATION: BAYONNE BRIDGE INSTRUMENTATION



## AND MONITORING

6.7.3 GEOTECHNICAL INSTRUMENTATION AND MONITORING FOR HYDROELECTRIC POWER PLANT

TABLE 11 HMA GEOTECHNICAL: INSTRUMENTATION AND MONITORING FOR ASAHAN NO.3 HYDROELECTRIC POWER PLANT, INDONESIA 6.8 TRADE DATA

TABLE 12 EXPORT DATA FOR INSTRUMENTS USED FOR SURVEYING, HS CODE:

## **9015 (USD MILLION)**

FIGURE 36 INSTRUMENTS USED FOR SURVEYING, EXPORT VALUES FOR MAJOR COUNTRIES, 2016—2020

TABLE 13 IMPORT DATA FOR INSTRUMENTS USED FOR SURVEYING, HS CODE:

## **9015 (USD MILLION)**

FIGURE 37 INSTRUMENTS USED FOR SURVEYING, IMPORT VALUES FOR MAJOR COUNTRIES, 2016–2020

TABLE 14 EXPORT DATA FOR INSTRUMENTS FOR MEASURING LIQUID AND GAS PARAMETERS, HS CODE: 9026 (USD MILLION)

FIGURE 38 INSTRUMENTS FOR MEASURING LIQUID AND GAS PARAMETERS, EXPORT VALUE FOR MAJOR COUNTRIES, 2016-2020

TABLE 15 INSTRUMENTS FOR MEASURING LIQUID AND GAS PARAMETERS, HS CODE: 9026 (USD MILLION)

FIGURE 39 INSTRUMENTS FOR MEASURING LIQUID AND GAS PARAMETERS, IMPORT VALUE FOR MAJOR COUNTRIES, 2016–2020

**6.9 REGULATORY ENVIRONMENT** 

**6.9.1 EUROPE** 

6.9.2 US

6.10 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET ECOSYSTEM

FIGURE 40 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET ECOSYSTEM

6.11 TRENDS/DISRUPTIONS IMPACTING CUSTOMER'S BUSINESS FIGURE 41 REVENUE SHIFT FOR GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET

6.11.1 REVENUE SHIFT AND NEW REVENUE POCKETS FOR MARKET PLAYERS

## 7 GTIM MARKET, BY OFFERING



#### 7.1 INTRODUCTION

FIGURE 42 GTIM MARKET, BY OFFERING

TABLE 16 GTIM MARKET, BY OFFERING, 2017–2020 (USD MILLION)

FIGURE 43 BY OFFERING, SERVICES TO LEAD GTIM MARKET DURING

FORECAST PERIOD

TABLE 17 GTIM MARKET, BY OFFERING, 2021–2026 (USD MILLION)

FIGURE 44 PRE-COVID-19 AND POST-COVID-19 ANALYSIS FOR GTIM MARKET

FOR HARDWARE & SOFTWARE, 2021–2026 (USD MILLION)

7.2 HARDWARE & SOFTWARE

7.2.1 PROPER HARDWARE COMPONENTS ESSENTIAL FOR MONITORING

PRESSURE, LOAD, AND STRAIN AFFECTING THE STRUCTURE

TABLE 18 GTIM MARKET FOR HARDWARE & SOFTWARE, BY REGION, 2017–2020 (USD MILLION)

TABLE 19 GTIM MARKET FOR HARDWARE & SOFTWARE, BY REGION, 2021–2026 (USD MILLION)

- 7.2.2 SENSORS
- 7.2.3 PIEZOMETERS
- 7.2.4 INCLINOMETERS
- 7.2.5 EXTENSOMETERS
  - 7.2.5.1 Settlement extensometer
  - 7.2.5.2 Magnet extensometer
  - 7.2.5.3 Rod extensometer
- 7.2.6 SETTLEMENT GAUGES
- 7.2.7 SETTLEMENT PLATES
- 7.2.8 GEODETIC TARGETS AND SURVEY MARKERS
- 7.2.9 DATA ACQUISITION SYSTEM (DAS)
- 7.2.10 SOFTWARE
- 7.2.11 OTHERS
- 7.3 SERVICES

7.3.1 SEVERAL MARKET PLAYERS OFFER SERVICES RELATED TO DESIGN,

INSTALLATION OF INSTRUMENTS, AND CONSULTATION

TABLE 20 GTIM MARKET FOR SERVICES, BY REGION, 2017–2020 (USD MILLION)

FIGURE 45 APAC TO WITNESS HIGHEST GROWTH RATE IN GTIM SERVICES

MARKET DURING FORECAST PERIOD

TABLE 21 GTIM MARKET FOR SERVICES, BY REGION, 2021–2026 (USD MILLION)

7.4 IMPACT OF COVID-19 ON OFFERING

## **8 GTIM MARKET, BY NETWORKING TECHNOLOGY**



#### 8.1 INTRODUCTION

FIGURE 46 GTIM MARKET, BY NETWORKING TECHNOLOGY

FIGURE 47 WIRED NETWORKING TECHNOLOGY TO LEAD GTIM MARKET DURING FORECAST PERIOD

TABLE 22 GTIM MARKET, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 23 GTIM MARKET, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

8.2 WIRED NETWORKING TECHNOLOGY

8.2.1 WIRED TECHNOLOGY USED FOR SEVERAL APPLICATIONS THAT ARE ESSENTIAL FOR EFFECTIVE MONITORING OF STRUCTURES

TABLE 24 GTIM MARKET FOR WIRED NETWORKING TECHNOLOGY, BY REGION, 2017–2020 (USD MILLION)

TABLE 25 GTIM MARKET FOR WIRED NETWORKING TECHNOLOGY, BY REGION, 2021–2026 (USD MILLION)

FIGURE 48 PRE-COVID-19 AND POST-COVID-19 ANALYSIS OF GTIM MARKET FOR WIRELESS NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION) 8.3 WIRELESS NETWORKING TECHNOLOGY

8.3.1 WIRELESS INSTRUMENTS EXTENSIVELY USED IN GEOTECHNICAL APPLICATIONS

TABLE 26 GTIM MARKET FOR WIRELESS NETWORKING TECHNOLOGY, BY REGION, 2017–2020 (USD MILLION)

TABLE 27 GTIM MARKET FOR WIRELESS NETWORKING TECHNOLOGY, BY REGION, 2021–2026 (USD MILLION)

8.4 IMPACT OF COVID-19 ON GTIM MARKET, BY NETWORKING TECHNOLOGY

## 9 GTIM MARKET, BY STRUCTURE

## 9.1 INTRODUCTION

FIGURE 49 GTIM MARKET, BY STRUCTURE

TABLE 28 GTIM MARKET, BY STRUCTURE, 2017-2020 (USD MILLION)

FIGURE 50 BY STRUCTURE, BRIDGES & TUNNELS TO ACCOUNT FOR LARGEST MARKET SHARE DURING FORECAST PERIOD

TABLE 29 GTIM MARKET, BY STRUCTURE, 2021–2026 (USD MILLION)

FIGURE 51 PRE-COVID-19 AND POST-COVID-19 ANALYSIS OF GTIM MARKET

FOR TUNNELS & BRIDGES, 2021–2026 (USD MILLION)

9.2 BRIDGES & TUNNELS

9.2.1 INCREASING NUMBER OF TUNNEL PROJECTS EXPECTED TO DRIVE



**GROWTH OF GTIM MARKET FOR BRIDGES & TUNNELS** 

TABLE 30 MAJOR BRIDGE & TUNNEL PROJECTS

TABLE 31 GTIM MARKET FOR BRIDGES & TUNNELS, BY REGION, 2017–2020 (USD MILLION)

FIGURE 52 AMERICAS TO ACCOUNT FOR LARGEST SHARE OF GTIM MARKET FOR BRIDGES & TUNNELS DURING FORECAST PERIOD

TABLE 32 GTIM MARKET FOR BRIDGES & TUNNELS, BY REGION, 2021–2026 (USD MILLION)

9.3 BUILDINGS & UTILITIES

9.3.1 GROWING URBANIZATION HAS LED TO INCREASING NUMBER OF BUILDINGS GLOBALLY

TABLE 33 MAJOR BUILDING & UTILITY PROJECTS

TABLE 34 GTIM MARKET FOR BUILDINGS & UTILITIES, BY REGION, 2017–2020 (USD MILLION)

TABLE 35 GTIM MARKET FOR BUILDINGS & UTILITIES, BY REGION, 2021–2026 (USD MILLION)

9.4 DAMS

9.4.1 NEED TO ENSURE SAFETY LED TO INCREASED ADOPTION OF GTIM TECHNIQUES FOR DAMS

TABLE 36 GTIM MARKET FOR DAMS, BY REGION, 2017–2020 (USD MILLION)
FIGURE 53 APAC TO REGISTER HIGHEST GROWTH IN GTIM MARKET FOR DAMS
DURING FORECAST PERIOD

TABLE 37 GTIM MARKET FOR DAMS, BY REGION, 2021–2026 (USD MILLION) 9.5 OTHERS

TABLE 38 GTIM MARKET FOR OTHER STRUCTURES, BY REGION, 2017–2020 (USD MILLION)

TABLE 39 GTIM MARKET FOR OTHER STRUCTURES, BY REGION, 2021–2026 (USD MILLION)

9.6 IMPACT OF COVID-19 ON STRUCTURES

## 10 APPLICATIONS OF GTIM TECHNIQUES

10.1 INTRODUCTION

FIGURE 54 APPLICATIONS OF GTIM TECHNIQUES

TABLE 40 APPLICATIONS, PURPOSE OF MONITORING, AND INSTRUMENTS USED

10.2 MEASUREMENT OF PORE WATER PRESSURE

10.2.1 PREDICTION OF SLOPE STABILITY

10.3 MEASUREMENT OF ROCK AND SOIL STRESS



10.3.1 SOIL STABILITY 10.3.2 ROCK STABILITY

10.4 MONITORING OF LATERAL DEFORMATION

10.5 MONITORING OF VERTICAL DEFORMATION

## 11 GTIM MARKET, BY END USER

## 11.1 INTRODUCTION

FIGURE 55 GTIM MARKET, BY END USER

TABLE 41 GTIM MARKET, BY END USER, 2017-2020 (USD MILLION)

FIGURE 56 BY END USER, BUILDINGS & INFRASTRUCTURE TO ACCOUNT FOR

LARGEST MARKET SHARE DURING FORECAST PERIOD

TABLE 42 GTIM MARKET, BY END USER, 2021–2026 (USD MILLION)

FIGURE 57 PRE-COVID-19 AND POST-COVID-19 ANALYSIS OF GTIM MARKET

FOR BUILDINGS & INFRASTRUCTURE, 2021–2026 (USD MILLION)

11.2 BUILDINGS & INFRASTRUCTURE

11.2.1 INCREASING INFRASTRUCTURE INVESTMENTS TO PROPEL GTIM MARKET FOR BUILDINGS & INFRASTRUCTURE IN AMERICAS

TABLE 43 GTIM MARKET FOR BUILDINGS & INFRASTRUCTURE, BY REGION,

FIGURE 58 AMERICAS TO ACCOUNT FOR LARGEST SHARE OF GTIM MARKET FOR BUILDINGS & INFRASTRUCTURE DURING FORECAST PERIOD

TABLE 44 GTIM MARKET FOR BUILDINGS & INFRASTRUCTURE, BY REGION, 2021–2026 (USD MILLION)

11.3 ENERGY & POWER

2017-2020 (USD MILLION)

11.3.1 INCREASING NUCLEAR, WIND ENERGY, HYDROELECTRIC POWER, AND GEOTHERMAL PROJECTS TO PROPEL MARKET GROWTH

TABLE 45 GTIM MARKET FOR ENERGY & POWER, BY REGION, 2017–2020 (USD MILLION)

TABLE 46 GTIM MARKET FOR ENERGY & POWER, BY REGION, 2021–2026 (USD MILLION)

11.4 OIL & GAS

11.4.1 GTIM TECHNIQUES ENABLE EVALUATION OF SUBSURFACE STABILITY IN OIL & GAS SECTOR

TABLE 47 GTIM MARKET FOR OIL & GAS, BY REGION, 2017–2020 (USD MILLION) FIGURE 59 APAC TO REGISTER HIGHEST CAGR IN GTIM MARKET FOR OIL & GAS DURING FORECAST PERIOD

TABLE 48 GTIM MARKET FOR OIL & GAS, BY REGION, 2021–2026 (USD MILLION) 11.5 MINING



11.5.1 GTIM TECHNIQUES HELP IN PREDICTING ALARMING SITUATIONS TO ENSURE SAFETY OF MINES AND MINERS FROM HAZARDS
TABLE 49 GTIM MARKET FOR MINING, BY REGION, 2017–2020 (USD MILLION)
TABLE 50 GTIM MARKET FOR MINING, BY REGION, 2021–2026 (USD MILLION)
11.6 IMPACT OF COVID-19 ON END USER

## 12 GEOGRAPHIC ANALYSIS

#### 12.1 INTRODUCTION

FIGURE 60 GTIM MARKET IN INDIA TO REGISTER HIGHEST CAGR DURING FORECAST PERIOD

TABLE 51 GTIM MARKET, BY REGION, 2017–2020 (USD MILLION)

TABLE 52 GTIM MARKET, BY REGION, 2021–2026 (USD MILLION)

FIGURE 61 PRE-COVID-19 AND POST-COVID-19 ANALYSIS OF GTIM MARKET IN AMERICAS, 2021–2026 (USD MILLION)

12.2 AMERICAS

TABLE 53 GTIM MARKET IN AMERICAS, BY REGION, 2017–2020 (USD MILLION)

TABLE 54 GTIM MARKET IN AMERICAS, BY REGION, 2021–2026 (USD MILLION)

TABLE 55 GTIM MARKET IN AMERICAS, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 56 GTIM MARKET IN AMERICAS, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 57 GTIM MARKET IN AMERICAS, BY NETWORKING TECHNOLOGY,

2017-2020 (USD MILLION)

TABLE 58 GTIM MARKET IN AMERICAS, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

TABLE 59 GTIM MARKET IN AMERICAS, BY STRUCTURE, 2017–2020 (USD MILLION)

TABLE 60 GTIM MARKET IN AMERICAS, BY STRUCTURE, 2021–2026 (USD MILLION)

TABLE 61 GTIM MARKET IN AMERICAS, BY END USER, 2017–2020 (USD MILLION)

TABLE 62 GTIM MARKET IN AMERICAS, BY END USER, 2021–2026 (USD MILLION) 12.2.1 NORTH AMERICA

FIGURE 62 SNAPSHOT OF GTIM MARKET IN NORTH AMERICA

TABLE 63 GTIM MARKET IN NORTH AMERICA, BY COUNTRY, 2017–2020 (USD MILLION)

TABLE 64 GTIM MARKET IN NORTH AMERICA, BY COUNTRY, 2021–2026 (USD MILLION)

TABLE 65 GTIM MARKET IN NORTH AMERICA, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 66 GTIM MARKET IN NORTH AMERICA, BY OFFERING, 2021-2026 (USD



MILLION)

TABLE 67 GTIM MARKET IN NORTH AMERICA, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 68 GTIM MARKET IN NORTH AMERICA, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.2.1.1 US

12.2.1.1.1 Increasing infrastructure investments and aging infrastructure to drive market growth in US

TABLE 69 GTIM MARKET IN US, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 70 GTIM MARKET IN US, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 71 GTIM MARKET IN US, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 72 GTIM MARKET IN US, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.2.1.2 Canada & Mexico

12.2.1.2.1 Growing infrastructure projects in Canada & Mexico to drive market growth

TABLE 73 GTIM MARKET IN CANADA & MEXICO, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 74 GTIM MARKET IN CANADA & MEXICO, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 75 GTIM MARKET IN CANADA & MEXICO, BY NETWORKING

TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 76 GTIM MARKET IN CANADA & MEXICO, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.2.2 SOUTH AMERICA

12.2.2.1 Growing demand for new infrastructure to create growth opportunities in South America

FIGURE 63 SNAPSHOT OF GTIM MARKET IN SOUTH AMERICA

TABLE 77 GTIM MARKET IN SOUTH AMERICA, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 78 GTIM MARKET IN SOUTH AMERICA, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 79 GTIM MARKET IN SOUTH AMERICA, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 80 GTIM MARKET IN SOUTH AMERICA, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.2.3 IMPACT OF COVID-19 ON AMERICAS

12.3 EUROPE



FIGURE 64 SNAPSHOT OF GTIM MARKET IN EUROPE

TABLE 81 GTIM MARKET IN EUROPE, BY COUNTRY, 2017–2020 (USD MILLION)

TABLE 82 GTIM MARKET IN EUROPE, BY COUNTRY, 2021–2026 (USD MILLION)

TABLE 83 GTIM MARKET IN EUROPE, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 84 GTIM MARKET IN EUROPE, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 85 GTIM MARKET IN EUROPE, BY NETWORKING TECHNOLOGY,

2017-2020 (USD MILLION)

TABLE 86 GTIM MARKET IN EUROPE, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

TABLE 87 GTIM MARKET IN EUROPE, BY STRUCTURE, 2017–2020 (USD MILLION)

TABLE 88 GTIM MARKET IN EUROPE, BY STRUCTURE, 2021–2026 (USD MILLION)

TABLE 89 GTIM MARKET IN EUROPE, BY END USER, 2017–2020 (USD MILLION)

TABLE 90 GTIM MARKET IN EUROPE, BY END USER, 2021–2026 (USD MILLION) 12.3.1 UK

12.3.1.1 Growing demand for monitoring increasing number of structures expected to drive market growth in UK

TABLE 91 GTIM MARKET IN UK, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 92 GTIM MARKET IN UK, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 93 GTIM MARKET IN UK, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 94 GTIM MARKET IN UK, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

**12.3.2 GERMANY** 

12.3.2.1 Growing number of infrastructure projects expected to drive market growth in Germany

TABLE 95 GTIM MARKET IN GERMANY, BY OFFERING, 2017–2020 (USD MILLION) TABLE 96 GTIM MARKET IN GERMANY, BY OFFERING, 2021–2026 (USD MILLION) TABLE 97 GTIM MARKET IN GERMANY, BY NETWORKING TECHNOLOGY,

2017-2020 (USD MILLION)

TABLE 98 GTIM MARKET IN GERMANY, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.3.3 NETHERLANDS

12.3.3.1 Growing R&D activities related to GTIM solutions to drive market growth in Netherlands

TABLE 99 GTIM MARKET IN NETHERLANDS, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 100 GTIM MARKET IN NETHERLANDS, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 101 GTIM MARKET IN NETHERLANDS, BY NETWORKING TECHNOLOGY,



2017-2020 (USD MILLION)

TABLE 102 GTIM MARKET IN NETHERLANDS, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.3.4 FRANCE

12.3.4.1 Increasing construction projects and infrastructure investments to fuel market growth in France

TABLE 103 GTIM MARKET IN FRANCE, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 104 GTIM MARKET IN FRANCE, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 105 GTIM MARKET IN FRANCE, BY NETWORKING TECHNOLOGY,

2017-2020 (USD MILLION)

TABLE 106 GTIM MARKET IN FRANCE, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.3.5 ITALY

12.3.5.1 Market in Italy expected to witness robust growth due to increasing number of construction projects

TABLE 107 GTIM MARKET IN ITALY, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 108 GTIM MARKET IN ITALY, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 109 GTIM MARKET IN ITALY, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 110 GTIM MARKET IN ITALY, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.3.6 REST OF EUROPE

TABLE 111 GTIM MARKET IN REST OF EUROPE, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 112 GTIM MARKET IN REST OF EUROPE, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 113 GTIM MARKET IN REST OF EUROPE, BY NETWORKING

TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 114 GTIM MARKET IN REST OF EUROPE, BY NETWORKING

TECHNOLOGY, 2021–2026 (USD MILLION)

12.3.7 IMPACT OF COVID-19 ON EUROPE

12.4 ASIA PACIFIC (APAC)

FIGURE 65 SNAPSHOT OF GTIM MARKET IN APAC

TABLE 115 GTIM MARKET IN APAC, BY COUNTRY, 2017–2020 (USD MILLION)

TABLE 116 GTIM MARKET IN APAC, BY COUNTRY, 2021–2026 (USD MILLION)

TABLE 117 GTIM MARKET IN APAC, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 118 GTIM MARKET IN APAC, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 119 GTIM MARKET IN APAC, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)



TABLE 120 GTIM MARKET IN APAC, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

TABLE 121 GTIM MARKET IN APAC, BY STRUCTURE, 2017–2020 (USD MILLION)

TABLE 122 GTIM MARKET IN APAC, BY STRUCTURE, 2021–2026 (USD MILLION)

TABLE 123 GTIM MARKET IN APAC, BY END USER, 2017–2020 (USD MILLION)

TABLE 124 GTIM MARKET IN APAC, BY END USER, 2021–2026 (USD MILLION) 12.4.1 CHINA

12.4.1.1 Development of advanced GTIM solutions and growing infrastructure investments to drive market growth in China

TABLE 125 GTIM MARKET IN CHINA, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 126 GTIM MARKET IN CHINA, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 127 GTIM MARKET IN CHINA, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 128 GTIM MARKET IN CHINA, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.4.2 JAPAN

12.4.2.1 Increasing number of infrastructure projects and need for regular monitoring of structures to drive market growth in Japan

TABLE 129 GTIM MARKET IN JAPAN, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 130 GTIM MARKET IN JAPAN, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 131 GTIM MARKET IN JAPAN, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 132 GTIM MARKET IN JAPAN, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.4.3 AUSTRALIA

12.4.3.1 Adoption of GTIM solutions for almost all structures expected to drive market growth in Australia

TABLE 133 GTIM MARKET IN AUSTRALIA, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 134 GTIM MARKET IN AUSTRALIA, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 135 GTIM MARKET IN AUSTRALIA, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 136 GTIM MARKET IN AUSTRALIA, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.4.4 SOUTH KOREA

12.4.4.1 Increasing number of skyscrapers and other infrastructure projects expected to drive market growth in South Korea

TABLE 137 GTIM MARKET IN SOUTH KOREA, BY OFFERING, 2017–2020 (USD



MILLION)

TABLE 138 GTIM MARKET IN SOUTH KOREA, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 139 GTIM MARKET IN SOUTH KOREA, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 140 GTIM MARKET IN SOUTH KOREA, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.4.5 INDIA

12.4.5.1 Growing number of infrastructure projects to boost market growth in India TABLE 141 GTIM MARKET IN INDIA, BY OFFERING, 2017–2020 (USD MILLION) TABLE 142 GTIM MARKET IN INDIA, BY OFFERING, 2021–2026 (USD MILLION) TABLE 143 GTIM MARKET IN INDIA, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 144 GTIM MARKET IN INDIA, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.4.6 INDONESIA

12.4.6.1 Aggressive investments to drive market growth in Indonesia TABLE 145 GTIM MARKET IN INDONESIA, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 146 GTIM MARKET IN INDONESIA, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 147 GTIM MARKET IN INDONESIA, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 148 GTIM MARKET IN INDONESIA, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.4.7 SINGAPORE

12.4.7.1 Commencement of mega construction projects to drive market growth in Singapore

TABLE 149 GTIM MARKET IN SINGAPORE, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 150 GTIM MARKET IN SINGAPORE, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 151 GTIM MARKET IN SINGAPORE, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 152 GTIM MARKET IN SINGAPORE, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.4.8 REST OF APAC

TABLE 153 GTIM MARKET IN REST OF APAC, BY OFFERING, 2017–2020 (USD MILLION)



TABLE 154 GTIM MARKET IN REST OF APAC, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 155 GTIM MARKET IN REST OF APAC, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 156 GTIM MARKET IN REST OF APAC, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.4.9 IMPACT OF COVID-19 ON APAC

12.5 REST OF THE WORLD (ROW)

TABLE 157 GTIM MARKET IN ROW, BY REGION, 2017–2020 (USD MILLION)

TABLE 158 GTIM MARKET IN ROW, BY REGION, 2021–2026 (USD MILLION)

TABLE 159 GTIM MARKET IN ROW, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 160 GTIM MARKET IN ROW, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 161 GTIM MARKET IN ROW, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 162 GTIM MARKET IN ROW, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

TABLE 163 GTIM MARKET IN ROW, BY STRUCTURE, 2017–2020 (USD MILLION)

TABLE 164 GTIM MARKET IN ROW, BY STRUCTURE, 2021–2026 (USD MILLION)

TABLE 165 GTIM MARKET IN ROW, BY END USER, 2017–2020 (USD MILLION)

TABLE 166 GTIM MARKET IN ROW, BY END USER, 2021–2026 (USD MILLION)

12.5.1 MIDDLE EAST

12.5.1.1 Increasing number of buildings and growing need to monitor skyscrapers to drive market growth in Middle East

TABLE 167 GTIM MARKET IN MIDDLE EAST, BY OFFERING, 2017–2020 (USD MILLION)

TABLE 168 GTIM MARKET IN MIDDLE EAST, BY OFFERING, 2021–2026 (USD MILLION)

TABLE 169 GTIM MARKET IN MIDDLE EAST, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 170 GTIM MARKET IN MIDDLE EAST, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)

12.5.2 AFRICA

12.5.2.1 Mega infrastructure and energy projects to drive market growth in Africa TABLE 171 GTIM MARKET IN AFRICA, BY OFFERING, 2017–2020 (USD MILLION) TABLE 172 GTIM MARKET IN AFRICA, BY OFFERING, 2021–2026 (USD MILLION) TABLE 173 GTIM MARKET IN AFRICA, BY NETWORKING TECHNOLOGY, 2017–2020 (USD MILLION)

TABLE 174 GTIM MARKET IN AFRICA, BY NETWORKING TECHNOLOGY, 2021–2026 (USD MILLION)



## 12.5.3 IMPACT OF COVID-19 ON ROW

## 13 COMPETITIVE LANDSCAPE

13.1 INTRODUCTION

FIGURE 66 COMPANIES ADOPTED CONTRACT AS KEY GROWTH STRATEGY FROM 2018 TO 2020

13.2 MARKET SHARE ANALYSIS

TABLE 175 MARKET SHARE ANALYSIS OF KEY COMPANIES IN GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET, 2020

13.3 MARKET EVALUATION FRAMEWORK

FIGURE 67 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET EVALUATION FRAMEWORK

13.4 HISTORICAL REVENUE ANALYSIS, 2016-2020

FIGURE 68 HISTORICAL REVENUE ANALYSIS OF MAJOR COMPANIES IN GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET, 2016-2020 (USD BILLION)

13.5 COMPANY EVALUATION QUADRANT

13.5.1 STAR

13.5.2 EMERGING LEADER

13.5.3 PERVASIVE

13.5.4 PARTICIPANT

FIGURE 69 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET (GLOBAL): COMPANY EVALUATION MATRIX, 2020

13.6 STARTUP/SME EVALUATION QUADRANT

13.6.1 PROGRESSIVE COMPANIES

13.6.2 RESPONSIVE COMPANIES

13.6.3 DYNAMIC COMPANIES

13.6.4 STARTING BLOCKS

FIGURE 70 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET (GLOBAL): STARTUP/SME EVALUATION MATRIX, 2020

TABLE 176 COMPANY PRODUCT FOOTPRINT

TABLE 177 COMPANY APPLICATION FOOTPRINT

TABLE 178 COMPANY INDUSTRY FOOTPRINT

TABLE 179 COMPANY REGION FOOTPRINT

13.7 COMPETITIVE SCENARIO

13.7.1 PRODUCT LAUNCHES & DEVELOPMENTS

TABLE 180 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET, PRODUCT LAUNCHES & DEVELOPMENTS, 2016-2021



13.7.2 DEALS

TABLE 181 GEOTECHNICAL INSTRUMENTATION AND MONITORING MARKET, DEALS (CONTRACTS, PARTNERSHIPS, AGREEMENTS, COLLABORATIONS, AND MERGERS & ACQUISITIONS), 2015–2021

## 14 COMPANY PROFILES

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

14.1 INTRODUCTION

14.2 KEY PLAYERS

14.2.1 FUGRO

TABLE 182 FUGRO: COMPANY OVERVIEW FIGURE 71 FUGRO: COMPANY SNAPSHOT

TABLE 183 FUGRO: DEALS

14.2.1.4 MnM view

14.2.2 KELLER GROUP

TABLE 184 KELLER GROUP: COMPANY OVERVIEW FIGURE 72 KELLER GROUP: COMPANY SNAPSHOT

TABLE 185 KELLER GROUP: DEALS TABLE 186 KELLER GROUP: OTHERS

14.2.3 NOVA METRIX LLC

TABLE 187 NOVA METRIX LLC: COMPANY OVERVIEW TABLE 188 NOVA METRIX LLC: PRODUCT LAUNCHES

14.2.4 GEOKON

TABLE 189 GEOKON: COMPANY OVERVIEW TABLE 190 GEOKON: PRODUCT LAUNCHES

TABLE 191 GEOKON: OTHERS

14.2.5 GEOCOMP CORPORATION

TABLE 192 GEOCOMP CORPORATION: COMPANY OVERVIEW

TABLE 193 GEOCOMP CORPORATION: DEALS

14.2.6 SISGEO S.R.L.

TABLE 194 SISGEO S.R.L.: COMPANY OVERVIEW TABLE 195 SISGEO S.R.L.: PRODUCT LAUNCHES

TABLE 196 SISGEO S.R.L.: DEALS

14.2.7 COWI A/S

TABLE 197 COWI A/S: COMPANY OVERVIEW FIGURE 73 COWI A/S: COMPANY SNAPSHOT

TABLE 198 COWI A/S: DEALS



14.2.8 JAMES FISHER AND SONS

TABLE 199 JAMES FISHER AND SONS: COMPANY OVERVIEW

FIGURE 74 JAMES FISHER AND SONS: COMPANY SNAPSHOT

TABLE 200 JAMES FISHER AND SONS: DEALS

14.2.9 DEEP EXCAVATION LLC

TABLE 201 DEEP EXCAVATION LLC: COMPANY OVERVIEW

TABLE 202 DEEP EXCAVATION LLC: PRODUCT LAUNCHES

14.2.10 RST INSTRUMENTS

TABLE 203 RST INSTRUMENTS: COMPANY OVERVIEW

TABLE 204 RST INSTRUMENTS: PRODUCT LAUNCHES

14.3 OTHER KEY PLAYERS

14.3.1 GEOMOTION SINGAPORE

14.3.2 EUSTIS ENGINEERING

14.3.3 DST CONSULTING ENGINEERS INC.

14.3.4 GEOSIG LTD.

14.3.5 SMART STRUCTURES

14.3.6 AMBERG TECHNOLOGIES

14.3.7 PMT INFRASCIENCE

14.3.8 TERRACON

14.3.9 GAIACOMM LTD.

14.3.10 GEOTECHNICS LIMITED

14.3.11 MAE ADVANCED GEOPHYSICS INSTRUMENTS

14.3.12 PETRA GEOSCIENCES, INC.

14.3.13 GEOCISA UK

14.3.14 GEOSENSE

14.3.15 S.W. COLE ENGINEERING, INC.

14.3.16 WOOD PLC

\*Details on Business Overview, Products Offered, Recent Developments, MnM View, Right to win, Strategic choices made, Weaknesses and competitive threats might not be captured in case of unlisted companies.

#### 15 APPENDIX

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



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