

# **Global Distributed Temperature Sensing Market Size study & Forecast, by Operating Principle (Optical Time Domain Reflectometry (OTDR), Optical Frequency Domain Reflectometry (OFDR)), by Fiber Type (Single-Mode Fiber, Multi-Mode Fiber), by Application (Oil & Gas Production, Power Cable Monitoring, Pipeline Leakage Detection, Fire Detection, Environmental Monitoring, Other), and Regional Analysis, 2023-2030**

<https://marketpublishers.com/r/G19C29D6BA90EN.html>

Date: October 2023

Pages: 200

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

ID: G19C29D6BA90EN

## **Abstracts**

Global Distributed Temperature Sensing Market is valued approximately USD XX billion in 2022 and is anticipated to grow with a healthy growth rate of more than XX% over the forecast period 2023-2030. The Distributed Temperature Sensing market encompasses various components and solutions, including DTS interrogators or analyzers, optical fibers, software for data analysis and visualization, and installation and maintenance services. The major driving factors for the Global Distributed Temperature Sensing Market are increasing demand for labor safety at working sites and growing demand for real-time monitoring. Moreover, rising investments in infrastructure projects, supportive government policy and growing focus on preventive maintenance is creating lucrative growth opportunity for the market over the forecast period 2023-2030.

Supportive government policies regarding safety and the increase in industrialization and construction activities, particularly in technologically advancing countries such as China, India, and Brazil, are driving the rapid implementation of Distributed Temperature Sensing (DTS) systems. These factors contribute to the growing demand for DTS solutions in various sectors. For example, in November 2019, AP Sensing, a provider of DTS and Distributed Acoustic Sensing (DAS) solutions, collaborated with Energinet, a

Danish Transmission Operator, to offer a monitoring solution for the Kriegers Flak transmission system. This collaboration involved the deployment of DTS units over a total distance of 300 km. The project utilized nine DAS units and six DTS units. However, the high initial investment of distributed temperature sensing stifles market growth throughout the forecast period of 2023-2030.

The key regions considered for the Global Distributed Temperature Sensing Market study includes Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. North America is a dominating market for DTS systems, driven by the presence of established industries such as oil and gas, power utilities, and infrastructure. The region's focus on safety regulations, increasing investments in pipeline monitoring, and the need for efficient asset management contribute to the growth of the DTS market. The United States and Canada are the major contributors to the market in this region. The Asia Pacific region is witnessing rapid growth in the DTS market due to increasing industrialization, infrastructure development, and urbanization. Countries such as China, India, and Japan are key contributors to the market in this region. The demand for DTS systems is driven by government initiatives, supportive policies, and investments in sectors like oil and gas, power, transportation, and smart cities.

Major market player included in this report are:

Halliburton Company

Innosys Industries, Inc.

Omnisens SA

AP Sensing GMBH

Optromix, Inc.

Ziebel

Silixa Ltd.

OFS Fitel LLC

Schlumberger Ltd.

Omnisens SA

Recent Developments in the Market:

In May 2020, Omnisens SA introduced a new product called ODAS (Optical Distributed Acoustic Sensing) as part of its Distributed Acoustic Sensing (DAS) interrogators lineup. The ODAS platform incorporates Omnisens' programmable chirp coding and modulation techniques along with chirped pulse laser technology. This unique combination enables the ODAS platform to be immune to polarization issues and Rayleigh fading, resulting in a linear response.

Global Distributed Temperature Sensing Market Report Scope:

Historical Data – 2020 - 2021

Base Year for Estimation – 2022

Forecast period - 2023-2030

Report Coverage - Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered - Operating Principle, Fiber Type, Application, Region

Regional Scope - North America; Europe; Asia Pacific; Latin America; Middle East & Africa

Customization Scope - Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope\*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving

factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Operating Principle:

Optical Time Domain Reflectometry (OTDR)

Optical Frequency Domain Reflectometry (OFDR)

By Fiber Type:

Single-Mode Fiber

Multi-Mode Fiber

By Application:

Oil & Gas Production

Power Cable Monitoring

Pipeline Leakage Detection

Fire Detection

Environmental Monitoring

Other

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

ROE

Asia Pacific

China

India

Japan

Australia

South Korea

RoAPAC

Latin America

Brazil

Mexico

Middle East & Africa

Saudi Arabia

South Africa

Rest of Middle East & Africa

## Contents

### CHAPTER 1. EXECUTIVE SUMMARY

- 1.1. Market Snapshot
- 1.2. Global & Segmental Market Estimates & Forecasts, 2020-2030 (USD Billion)
  - 1.2.1. Distributed Temperature Sensing Market, by Region, 2020-2030 (USD Billion)
  - 1.2.2. Distributed Temperature Sensing Market, by Operating Principle, 2020-2030 (USD Billion)
  - 1.2.3. Distributed Temperature Sensing Market, by Fiber Type, 2020-2030 (USD Billion)
  - 1.2.4. Distributed Temperature Sensing Market, by Application, 2020-2030 (USD Billion)
- 1.3. Key Trends
- 1.4. Estimation Methodology
- 1.5. Research Assumption

### CHAPTER 2. GLOBAL DISTRIBUTED TEMPERATURE SENSING MARKET DEFINITION AND SCOPE

- 2.1. Objective of the Study
- 2.2. Market Definition & Scope
  - 2.2.1. Industry Evolution
  - 2.2.2. Scope of the Study
- 2.3. Years Considered for the Study
- 2.4. Currency Conversion Rates

### CHAPTER 3. GLOBAL DISTRIBUTED TEMPERATURE SENSING MARKET DYNAMICS

- 3.1. Distributed Temperature Sensing Market Impact Analysis (2020-2030)
  - 3.1.1. Market Drivers
    - 3.1.1.1. Increasing demand for labor safety at working sites
    - 3.1.1.2. Growing Demand for Real-Time Monitoring
  - 3.1.2. Market Challenges
    - 3.1.2.1. High initial investment of Distributed Temperature Sensing
    - 3.1.2.2. Complex fault detection and troubleshooting process
  - 3.1.3. Market Opportunities
    - 3.1.3.1. Rising Investments in Infrastructure Projects

- 3.1.3.2. Growing Focus on Preventive Maintenance
- 3.1.3.3. Supportive government policy

## **CHAPTER 4. GLOBAL DISTRIBUTED TEMPERATURE SENSING MARKET INDUSTRY ANALYSIS**

- 4.1. Porter's 5 Force Model
  - 4.1.1. Bargaining Power of Suppliers
  - 4.1.2. Bargaining Power of Buyers
  - 4.1.3. Threat of New Entrants
  - 4.1.4. Threat of Substitutes
  - 4.1.5. Competitive Rivalry
- 4.2. Porter's 5 Force Impact Analysis
- 4.3. PEST Analysis
  - 4.3.1. Political
  - 4.3.2. Economical
  - 4.3.3. Social
  - 4.3.4. Technological
  - 4.3.5. Environmental
  - 4.3.6. Legal
- 4.4. Top investment opportunity
- 4.5. Top winning strategies
- 4.6. COVID-19 Impact Analysis
- 4.7. Disruptive Trends
- 4.8. Industry Expert Perspective
- 4.9. Analyst Recommendation & Conclusion

## **CHAPTER 5. GLOBAL DISTRIBUTED TEMPERATURE SENSING MARKET, BY OPERATING PRINCIPLE**

- 5.1. Market Snapshot
- 5.2. Global Distributed Temperature Sensing Market by Operating Principle, Performance - Potential Analysis
- 5.3. Global Distributed Temperature Sensing Market Estimates & Forecasts by Operating Principle 2020-2030 (USD Billion)
- 5.4. Distributed Temperature Sensing Market, Sub Segment Analysis
  - 5.4.1. Optical Time Domain Reflectometry (OTDR)
  - 5.4.2. Optical Frequency Domain Reflectometry (OFDR)



## **CHAPTER 6. GLOBAL DISTRIBUTED TEMPERATURE SENSING MARKET, BY FIBER TYPE**

- 6.1. Market Snapshot
- 6.2. Global Distributed Temperature Sensing Market by Fiber Type, Performance - Potential Analysis
- 6.3. Global Distributed Temperature Sensing Market Estimates & Forecasts by Fiber Type 2020-2030 (USD Billion)
- 6.4. Distributed Temperature Sensing Market, Sub Segment Analysis
  - 6.4.1. Single-Mode Fiber
  - 6.4.2. Multi-Mode Fiber

## **CHAPTER 7. GLOBAL DISTRIBUTED TEMPERATURE SENSING MARKET, BY APPLICATION**

- 7.1. Market Snapshot
- 7.2. Global Distributed Temperature Sensing Market by Application, Performance - Potential Analysis
- 7.3. Global Distributed Temperature Sensing Market Estimates & Forecasts by Application 2020-2030 (USD Billion)
- 7.4. Distributed Temperature Sensing Market, Sub Segment Analysis
  - 7.4.1. Oil & Gas Production
  - 7.4.2. Power Cable Monitoring
  - 7.4.3. Pipeline Leakage Detection
  - 7.4.4. Fire Detection
  - 7.4.5. Environmental Monitoring
  - 7.4.6. Other

## **CHAPTER 8. GLOBAL DISTRIBUTED TEMPERATURE SENSING MARKET, REGIONAL ANALYSIS**

- 8.1. Top Leading Countries
- 8.2. Top Emerging Countries
- 8.3. Distributed Temperature Sensing Market, Regional Market Snapshot
- 8.4. North America Distributed Temperature Sensing Market
  - 8.4.1. U.S. Distributed Temperature Sensing Market
    - 8.4.1.1. Operating Principle breakdown estimates & forecasts, 2020-2030
    - 8.4.1.2. Fiber Type breakdown estimates & forecasts, 2020-2030
    - 8.4.1.3. Application breakdown estimates & forecasts, 2020-2030

- 8.4.2. Canada Distributed Temperature Sensing Market
- 8.5. Europe Distributed Temperature Sensing Market Snapshot
  - 8.5.1. U.K. Distributed Temperature Sensing Market
  - 8.5.2. Germany Distributed Temperature Sensing Market
  - 8.5.3. France Distributed Temperature Sensing Market
  - 8.5.4. Spain Distributed Temperature Sensing Market
  - 8.5.5. Italy Distributed Temperature Sensing Market
  - 8.5.6. Rest of Europe Distributed Temperature Sensing Market
- 8.6. Asia-Pacific Distributed Temperature Sensing Market Snapshot
  - 8.6.1. China Distributed Temperature Sensing Market
  - 8.6.2. India Distributed Temperature Sensing Market
  - 8.6.3. Japan Distributed Temperature Sensing Market
  - 8.6.4. Australia Distributed Temperature Sensing Market
  - 8.6.5. South Korea Distributed Temperature Sensing Market
  - 8.6.6. Rest of Asia Pacific Distributed Temperature Sensing Market
- 8.7. Latin America Distributed Temperature Sensing Market Snapshot
  - 8.7.1. Brazil Distributed Temperature Sensing Market
  - 8.7.2. Mexico Distributed Temperature Sensing Market
- 8.8. Middle East & Africa Distributed Temperature Sensing Market
  - 8.8.1. Saudi Arabia Distributed Temperature Sensing Market
  - 8.8.2. South Africa Distributed Temperature Sensing Market
  - 8.8.3. Rest of Middle East & Africa Distributed Temperature Sensing Market

## **CHAPTER 9. COMPETITIVE INTELLIGENCE**

- 9.1. Key Company SWOT Analysis
  - 9.1.1. Company
  - 9.1.2. Company
  - 9.1.3. Company
- 9.2. Top Market Strategies
- 9.3. Company Profiles
  - 9.3.1. Halliburton Company
    - 9.3.1.1. Key Information
    - 9.3.1.2. Overview
    - 9.3.1.3. Financial (Subject to Data Availability)
    - 9.3.1.4. Product Summary
    - 9.3.1.5. Recent Developments
  - 9.3.2. Innosys Industries, Inc.
  - 9.3.3. Omnisens SA

- 9.3.4. AP Sensing GMBH
- 9.3.5. Optromix, Inc.
- 9.3.6. Ziebel
- 9.3.7. Silixa Ltd.
- 9.3.8. OFS Fitel LLC
- 9.3.9. Schlumberger Ltd.
- 9.3.10. Omnisens SA

## **CHAPTER 10. RESEARCH PROCESS**

- 10.1. Research Process
  - 10.1.1. Data Mining
  - 10.1.2. Analysis
  - 10.1.3. Market Estimation
  - 10.1.4. Validation
  - 10.1.5. Publishing
- 10.2. Research Attributes
- 10.3. Research Assumption

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