

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

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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

South Africa

Saudi Arabia

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Rest of Middle East & Africa



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