

Distributed Temperature Sensing Market by Operating Principle (OTDR, OFDR), Fiber Type (Single-mode Fibers, Multimode Fibers), Scattering Method (Rayleigh Effect, Raman Effect, Brillouin Effect), Application, and Geography - Global Forecast to 2025

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Abstracts

"Distributed temperature sensing market to grow at 5.5% CAGR from 2020 to 2025"

The overall distributed temperature sensing market is expected to grow from USD 734 million in 2020 to USD 958 million by 2025, at a CAGR of 5.5%. Growing demand for labor safety at workplaces, reliability of DTS systems/sensors for sensing and monitoring applications in harsh environments, and increasing applications in the oil & gas industry are driving the growth of this market. However, optical cables are prone to physical damage; this factor restrains the market growth.

"Oil & gas application to hold largest share of distributed temperature sensing market until 2025"

The oil & gas application is expected to hold the largest market size during the forecast period. DTS technology has become an integral part of the oil & gas industry. DTS systems help in continuous, real-time downhole monitoring to optimize the operational and economic performance of assets. This enables reservoir engineers to gain a better understanding of the injection and production dynamics, and accordingly optimizing the production and improving recovery, subsequently leading to improved profits. Hence, there is an increasing focus on adopting the technology for improving the productivity of brownfield operations.

"Rest of the World (RoW) to be largest market for distributed temperature sensing until



2025"

Rest of the World (RoW) is expected to hold the largest share of the distributed temperature sensing market during the forecast period. The Middle East is expected to offer a huge platform for the potential growth of the distributed temperature sensing market. Countries in the Middle East are the largest producers of crude oil in the world; the increasing use of DTS systems for various oil and gas applications is driving the growth of the DTS market in this region. With the increasing global demand for energy, the oil & gas industry in this region is also going through changes and is increasingly incorporating innovative technologies in its processes and operations.

Breakdown of Profiles of Primary Participants:

By Company Type: Tier 1 - 45%, Tier 2 - 30%, and Tier 3 - 25%

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

By Region: North America - 45%, Europe - 30%, APAC - 20%, and RoW - 5%

Major Players Profiled:

Schlumberger Limited (US)

Halliburton Company (US)

Yokogawa Electric Corporation (Japan)

Weatherford International PLC (Switzerland)

Sumitomo Electric Industries (Japan)

OFS Fitel (US)

AP Sensing GmbH (Germany)

Bandweaver Technologies (China)

NKT Photonics (Germany)



GESO GmbH & Co. (Germany)

Research Coverage

This report offers detailed insights into the distributed temperature sensing market by operating principle, which is further classified into optical time domain reflectometry (OTDR) and optical frequency domain reflectometry (OFDR). Based on fiber type, the market is segmented into single-mode fibers and multimode fibers. By scattering method, the market is segmented into Rayleigh scattering effect, Raman scattering effect, and Brillouin scattering effect. By application, the market is segmented into oil & gas, power cable monitoring, fire detection, process & pipeline monitoring, and environmental monitoring. The study also forecasts the size of the market for four regions—North America, Europe, APAC, and RoW.

Reasons to Buy the Report

The report would help market leaders/new entrants in the following ways:

- 1. This report segments the distributed temperature sensing market comprehensively and provides the closest approximations of the overall and segment-based market sizes across different operating principles, scattering methods, fiber types, applications, and regions.
- 2. The report would help stakeholders understand the pulse of the market and provide them with information on key drivers, restraints, challenges, and opportunities influencing the market growth.
- 3. This report would help stakeholders understand their competitors better and gain more insights to enhance their market position. The competitive landscape section includes the competitive analysis of top players, as well as strategies such as product launches and developments, acquisitions, contracts, collaborations, agreements, partnerships, and expansions adopted by the major market players.



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