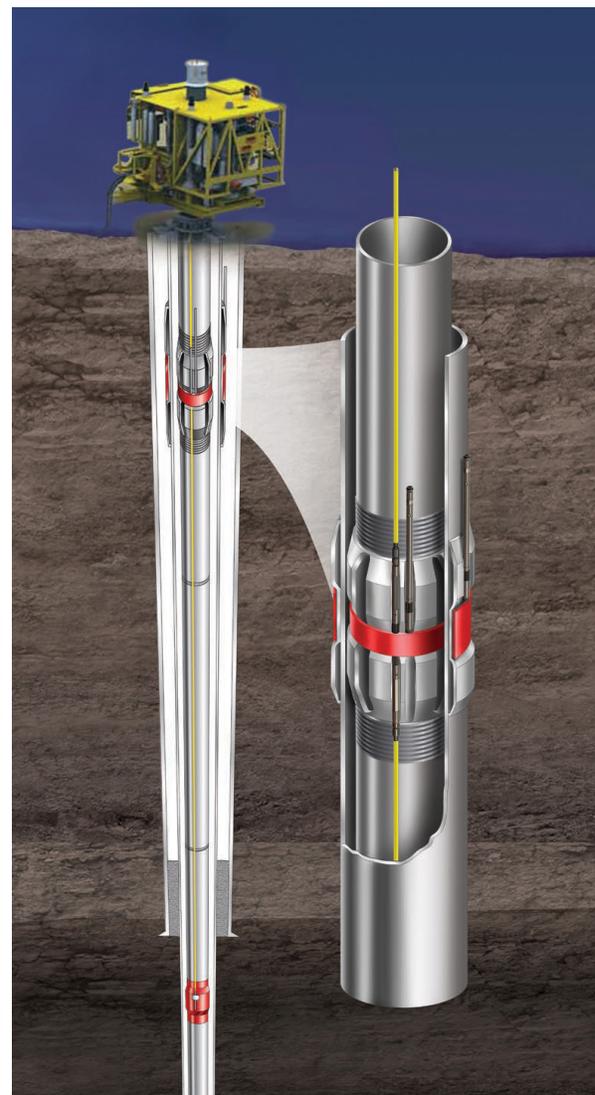
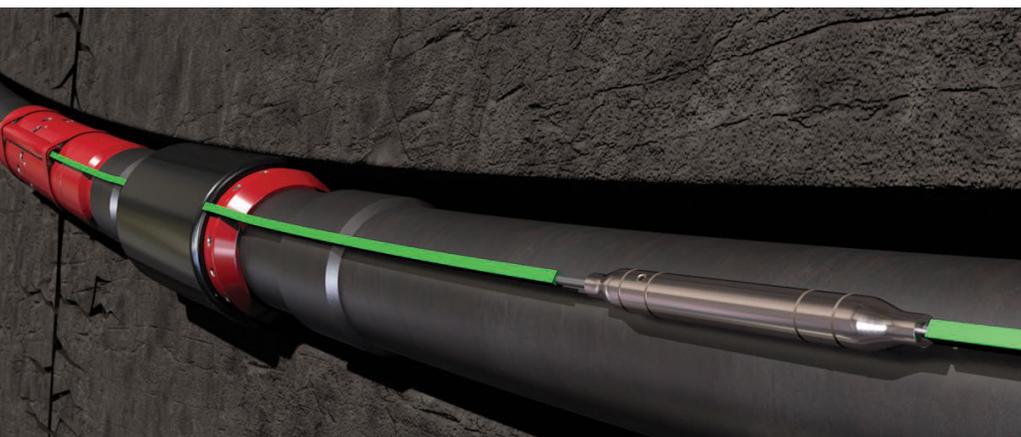




DataSphere[®] permanent monitoring suite

Advanced real-time wellbore monitoring



Your eyes to the Reservoir®

DataSphere® permanent monitoring suite

The DataSphere® permanent monitoring suite encompasses the full line of permanent monitoring systems available from Halliburton. The modularity and compatibility of these tools enables customized monitoring solutions to provide superior performance and enhanced reservoir monitoring capabilities.

The suite delivers real-time pressure, temperature, flow, and density information from the wellbore, while helping to optimize production and validating reservoir models.

Unconventional completion solutions

The DataSphere® permanent monitoring suite provides precise and reliable downhole information from the reservoir. In unconventional applications, DataSphere Opsis® gauges can be placed at the heel and at the toe of a wellbore to determine tubing and/or annulus pressures. The system is ideal for both single and multiple gauge applications that require long-term reliability and accurate data.

In multistage frac completions, the DataSphere® Array system can be deployed in conjunction with fiber optic DTS and DAS systems to determine the production efficiency of each stage after stimulation has been performed. The flow back temperatures and pressures can be seen in a granular manner, given the high resolution of the Array system.

The DataSphere suite provides advanced reservoir monitoring to help better understand and adjust to reservoir characteristics in a single well or across multiple wells.

DataSphere Opsis® Permanent Downhole Gauges

Latest generation quartz gauge capable of sensing 30,000 psi in a 200° C environment

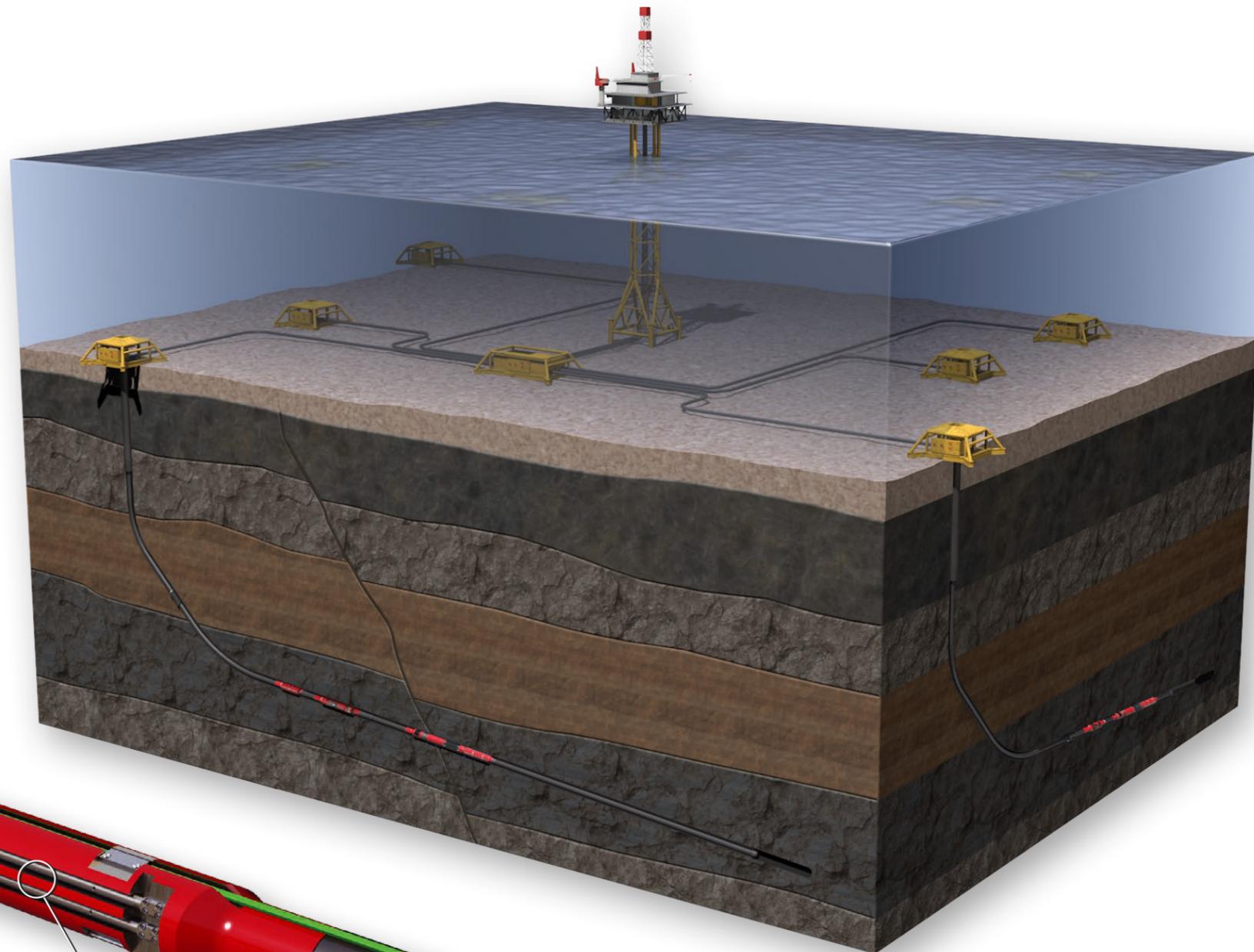
DataSphere® Array System

Multi-point reliable and field-proven resonating quartz crystal technology designed for annular sensing applications without the need for cable terminations or mandrels. Available from 5-50 sensors per array, which can be spaced out to meet your monitoring needs.

FiberWatch DTS system shown in conjunction with DataSphere suite components

DataSphere® LinX® wireless monitoring system

Wireless inductive coupling technology that captures accurate real-time reservoir data without halting production. The system is also ideal for B-annulus monitoring to minimize casing oversizing.



DataSphere® FloStream™ Flowmeter

Modular and retrievable Venturi insert enables accurate flow rate measurement through the use of quartz gauges.

DataSphere® Opsis® + Array system

Modular system architectures enable configurable downhole monitoring capabilities to suit specific needs.

DEEPWATER COMPLETION SOLUTIONS

Deepwater completions have historically exposed downhole tools to significant amounts of pressure and temperature. The DataSphere permanent monitoring suite of tools are designed to withstand some of the most challenging and complex offshore environments.

With the use of the LinX® wireless monitoring system, high pressures and high temperatures can be monitored wirelessly from the caprock, overburden, or directly from the reservoir, providing valuable insight into the formation's dynamic conditions.

Relying upon field-proven electrical subsea tree connections, the Opsis® and Array systems are able to provide production or injection efficiency information in deepwater environments where Halliburton interval control valves are deployed.

In addition, the FloStream™ flowmeter can be deployed to determine zonal flow contribution.

Mature field completion solutions

The DataSphere permanent monitoring suite provides valuable insight in determining the efficiency of stimulations, interventions, and other workover operations necessary to prolong the production curve of reservoirs.

In a multizone completion with EquiFlow® autonomous inflow control devices (AICDs), water ingress can be characterized and mitigated by analysis of annular pressure and temperature data obtained from a DataSphere Array system.

By measuring differential pressures between the annular readings of the Array system and the tubing readings of an Opsis® or ERD gauge, operators can determine the zones where production is coming from and the zones where water is being choked.

The DataSphere family of permanent monitoring tools is also ideal for applications with injector/producer pairs.

Additionally, SmartLog piezo gauge system can be used in conjunction with ESP systems for economic applications to optimize the remaining years of production.



DataSphere® Array System + EquiFlow® AICD

When combined with other Halliburton completion technology, the DataSphere® Array system can help determine production efficiency per zone, and help pinpoint specific areas in the reservoir where water ingress is beginning to occur.

High temperature geothermal solutions

The DataSphere Permanent Monitoring suite can provide reliable and accurate pressure and temperature data in ultra-high temperature environments up to 315° C.

The ERD HXT gauge can aid in optimizing the cyclic steam process by providing data that is used to develop models for real-time reservoir surveillance.

With no downhole electronics, its electrical resonating diaphragm (ERD) technology has proven to be highly reliable and provides unequaled reliability in extreme environments.



Cost-effective completion solutions

With a variety of different products to meet market demands, the DataSphere permanent monitoring suite can also provide cost-effective solutions for less complex well completion designs that do not require quartz accuracy.

The DataSphere SmartLog™ downhole gauge system provides reliable pressure, temperature, and vibration measurements that enable operators to monitor and perform critical well adjustments throughout the life of a well.

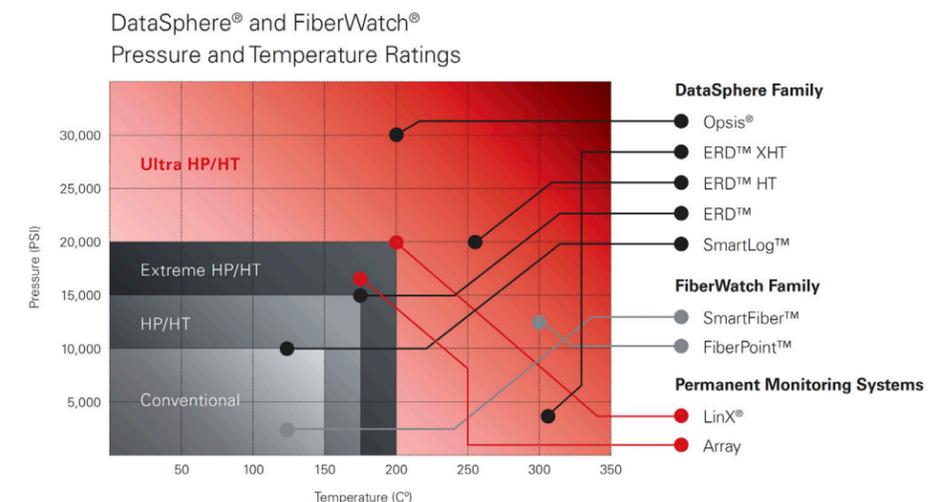
Using piezoresistive technology, the SmartLog gauge is able to sense up to 10,000psi in environments of up to 125°C.



From the leader in advanced completions...

The DataSphere permanent monitoring suite is part of our Advanced Completions platform, a robust combination of the best in sand control, multilateral and intelligent completion technology.

We listen and collaborate with you, then apply our expertise in completions and reservoir management, to help maximize well performance and deliver the minimum cost per BOE.



Your eyes to the Reservoir®



For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com

Sales of Halliburton products and services will be in accord solely with the terms and conditions contained in the contract between Halliburton and the customer that is applicable to the sale.

H012750 01/25 © 2025 Halliburton. All Rights Reserved.

halliburton.com

HALLIBURTON