



# Portal Fiber-Optic Sensing Streaming

## Remote Access and Visualization of Critical Field Data

Permanent monitoring using distributed fiber-optic sensing has wide applications with systems being sensitive to acoustics, strain, seismic and temperature. These broadband “sensors” can be distributed from a few meters to tenths of kilometers, generating large volumes of information continuously. Fiber-optic sensing can generate terrabytes of data that need to be combed through to provide answers to various surveillance needs. Taking this volume of data from location to location can be a challenging enterprise even in the presence of high-speed networks.

### Powerful Computing of Large Datasets

Taking advantage of state-of-the-art data processing and edge computing, these volumes of information can be reduced into actionable pieces that are easy to bring to the cloud or remote servers. The OptaSense Portal™ Fiber-Optic Sensing Streaming solution combines hardware and software, working in tandem, to ensure that every bit of information coming from its sensitive interrogator units can be accessed by users anywhere they may be located. Making use of sophisticated and portable computing, the Portal streaming can reduce large datasets into important actionable ones. More importantly, all of this data is available in real time.

### Multi-source Streaming and Analysis

OptaSense has provided the Portal streaming solution since 2014, bringing distributed sensing data from remote locations to accessible servers or the cloud. The Portal solution provides an efficient tool for transferring and visualization of preprocessed data from the field. Multiple data streams from various fiber-optic sensing

### Permanent Monitoring Remote Data Sharing

- Field-processed fiber-optic data delivery:
  - FBE (Frequency Band Extracted Data)
  - Distributed Strain Data (DSS)
  - Distributed Temperature Data (DTS and RDTS)
  - Low Data Rate Sensor DAS
  - Customizable live algorithm for specific user applications
- Time integration of different data streams
- Data transfers from field IU to a cloud or client central server
- Processed data visualization with minimal IT integration
- Remote control and maintenance
- Web based live results & status monitoring
- Operational updates notification
- Suitable for low bandwidth infrastructure
- Cloud based

tools are available and can be merged in time to create time-stamped information that is used to analyze a variety of events.

OptaSense's Portal streaming solution allows you to get the fiber-optic sensing actionable data that you need when you need it. For more information, please contact your OptaSense representative or visit [optasense.com/oilfield-services](http://optasense.com/oilfield-services).