

Remote measurement system for harsh environment

Extreme conditions (high temperatures, radio-activity...) or harsh environments can disturb contactless measurement systems and involve measurement errors.

COMPETITIVE ADVANTAGES

- Measurement accuracy
- Robustness
- Stability of the system
- Easy to implement
- Remote measurement

DESCRIPTION*

- Fiber laser system based on Fabry-Perot interferometry
- The system is based on dual modulation:
 - An optical fiber combined with a collimator forming the detection module
 - An electronic part forming the treatment module
- This system architecture enables to:
 - Identify target movements' direction
 - Detect very slight movements
- Due to the use of optic fiber:
 - Disturbance tolerance of the system
 - No embedded electronics within the measurement zone

APPLICATIONS

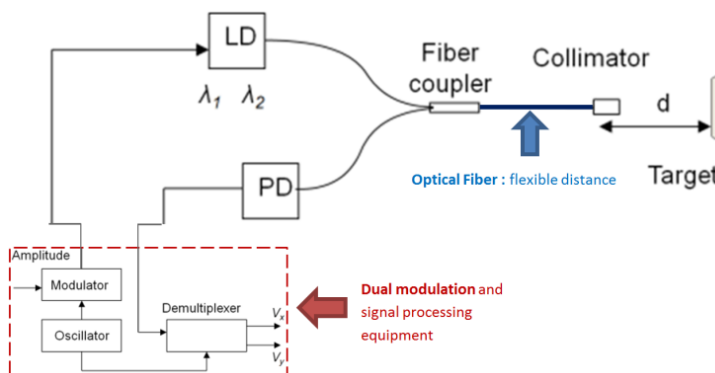
- Applicable in harsh & hard to access environments
- Monitoring:
 - Structure
 - Seismic
 - Geophysics
- Multi-points measurement

INTELLECTUAL PROPERTY

- Patent pending

DEVELOPMENT STAGE

- Technology validated in relevant environment



TECHNICAL SPECIFICATIONS

Target Contact	No
Bandwidth	10 ⁻³ Hz to 5 KHz
Response Time	Real Time
Minimum Detectable Move	2 Nanometers
Measurement Accuracy	1 Nanometer
Distance to the target	Kilometers

LABORATORY

- OSE team



CONTACT

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