



### INFORMATIONS

#### ■ MARKET

- Optical Measurement
- Instrumentation
- Monitoring

#### ■ APPLICATIONS

- Geophysics
- Optical Measurement
- Interferometry
- Metrology

#### ■ INTELLECTUAL PROPERTY

- Software
- Electronic design

#### ■ TRL LEVEL

- Validation of the technology in laboratory environment



#### ■ PARTNERSHIP

Industrial transfer

#### ■ LABO / RESEARCH INSTITUTION

- Montpellier Geosciences
- University of Montpellier

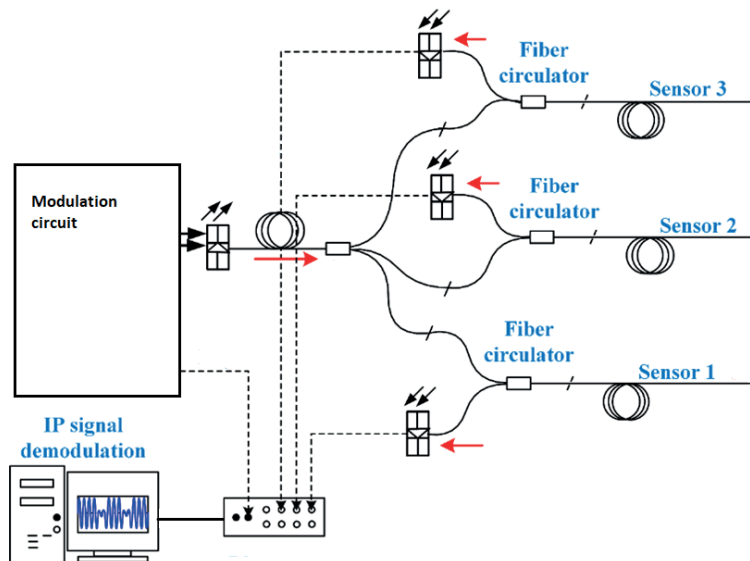
#### ■ REF. 1066-1

### TECHNOLOGY DESCRIPTION

The technology is an 8 channels optical interrogator allowing to interrogate an interferometer at the end of the optical fiber (collimated beam). This interrogator is composed of a card powered in 12V. A current modulated diode allows the measurement of displacements with a resolution of 1nm in a frequency band from 0.1 to 50HZ, with a measurement amplitude of several cm. A demodulation software allowing the interpretation of the signal in real time.

### DEVELOPMENT STAGES

1. To date, the technology is at an advanced stage:
2. First versions of the electronic board have been developed and new prototypes will be produced, installed and tested in real conditions.
3. The software has been implemented and tested on the board's processor, and performance improvements are underway.



### COMPETITIVES ADVANTAGES

- 12V/5W/2kg transportable device with possibility of power supply via solar panels- 8 measurement channels
- High-performance integrated software on a wide spectrum of measurement frequencies (0-1kHz)
- Excellent cost / performance ratio