Optical Fiber Sensors and Sensing-Patch

Optical Fiber Sensors
- Application: structural monitoring of large civil structures, aircraft and space structures.
- Small size, lightweight, non-conductivity, resistance to corrosion, immunity to electromagnetic noise interference
- The most effective strain sensors in terms of resolution.
- Easily install-ability onto/into host structures.

Sensing-Patch
- Consists of an EFPI sensor and directional information detector.
- Utilizes advantages of their components and supplement disadvantages.
- A simple and practical logic is applied for the real-time phase tracking.
- Experimental results show that the proposed sensing-patch does not have non-linear behavior of conventional EFPI and hysteresis of piezoelectric material.

Experimental result of phase tracking with Sensing-Patch