



Short Description

High speed, high resolution and synchronous interrogation using multiple fibre Bragg grating sensors enables design and delivery of highly accurate shape sensing systems.

Key benefits of the system

- Solid state
- Compact
- Robust (200G impact)
- High sampling rate
- Trigger mode
- Light weight



Crash Tests

In the crash test industry the demand for more and more sensors is a need. This in combination with dummies, that are getting smaller and more elaborate, calls for a new kind of solution.

Technobis Fibre Technologies delivers this solution, using small light weight fibre optic sensors in combination with a compact robust data acquisition system Deminsys. Putting multiple sensors in a fibre as thin as a human hair gives Technobis Fibre Technologies the ability to create a smart sensor network inside a dummy. This network of sensors is able to detect among other things the acceleration, impact force, location and deflection.

The use of miniature connectors at the exit point of the dummy makes it possible to simply connect the umbilical cables allowing the dummy to be moved freely and simplifying test set up and turnaround time.

Deminsys itself is specially designed to meet the harsh environments of the crash test set up. The robust design allows an impact of 200G on the system while measuring 32 sensors at 20 kHz simultaneously.

