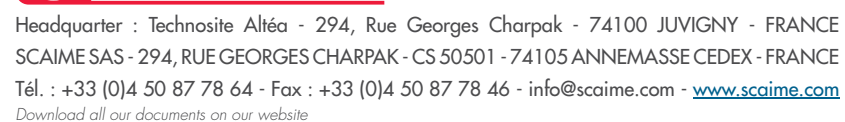


SENSORS

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Optimizing Assets with Optical Sensors

SCAIME designs solutions offering accuracy, robustness and reliability for the structural health monitoring of civil engineering structures. The sensors and acquisition units offered by SCAIME measure the mechanical behavior of the structure with high accuracy.

SCAIME industrial solutions:

Based on Bragg grating technology, our fiber optics sensors present a set of characteristics opening new horizons for measurement:

- Insensitive to electromagnetic interferences, resistant to water and corrosion and intrinsically non explosive, they allow totally secured measurements in harsh environments.
- Highly resistant to fatigue, they can provide measurements on permanently stressed structures for more than 20 years.
- Sensors can be spread in series over several kilometers, thus measurement can be done over very long distances.



ACQUISITION:

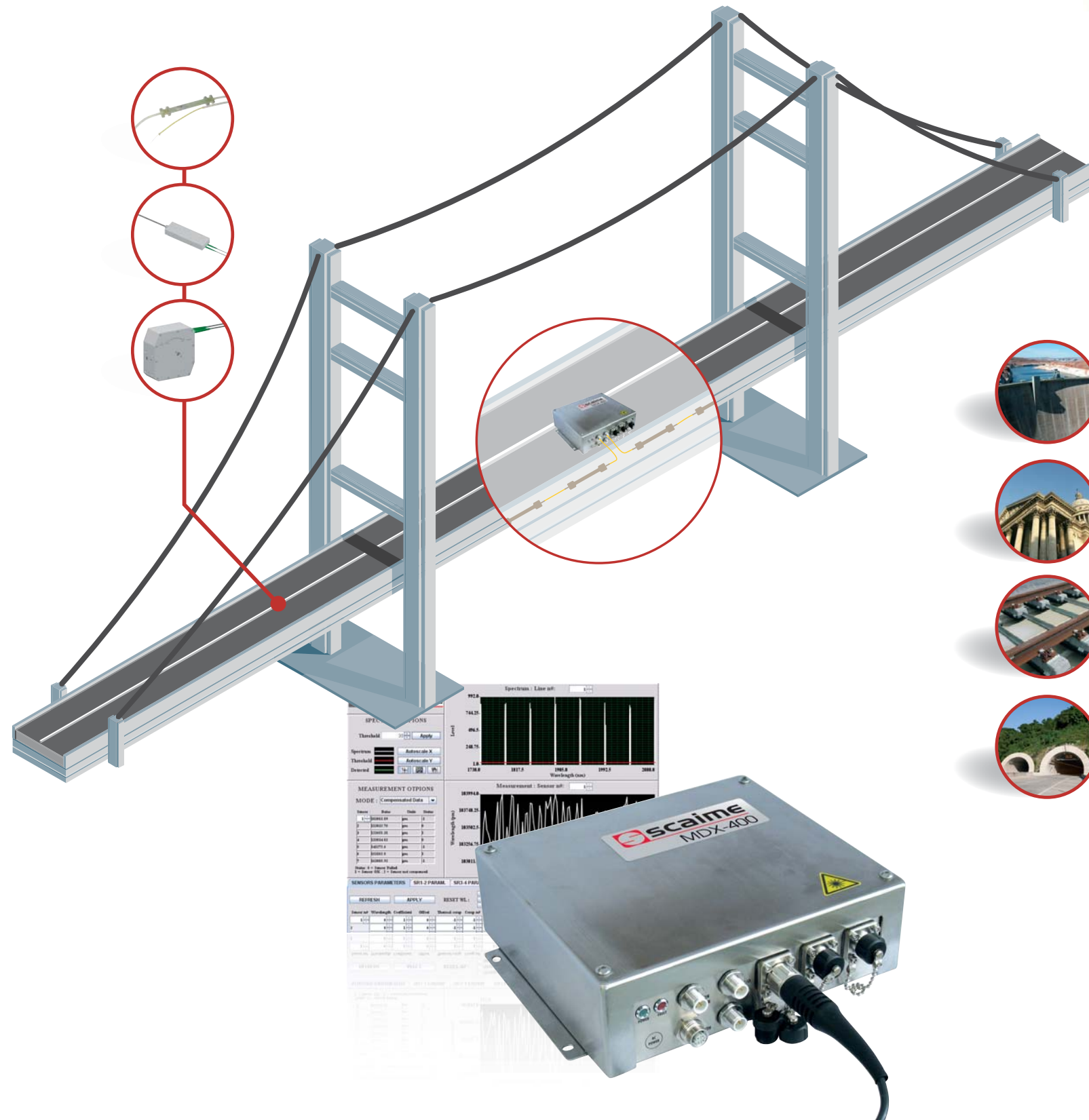
MDX range

Performance, reliability, connectivity and ease of use are the main focuses when designing the MDX range of acquisition units.

It is housed in a rugged stainless steel IP66 enclosure particularly well suited for harsh and salty environments.

MDX-400 successfully passed IEC-70721-3-5 class 5M2 high levels of vibrations tests, certifying long term reliability when transported from sites to sites.

Beyond the robustness, the MDXs features advanced connectivity with an integrated web server for remote system and sensors setup (possible also through 3G router).



Key benefits

- Ensure structure safety
- Improve knowledge and understanding of a structure
- Optimize operations and maintenance costs
- Safely extend the lifetime of ageing structures

Strain:

Scaime proposes a broad range of strain sensors:

- Strain sensors to be bonded, bolted or welded on various structure materials (iron, fiber reinforced plastics, concrete...)
- Long base extensometers, either bolted or embedded for averaging of non uniformity in concrete structures
- High temperature embedded sensors that can resist tar compaction at 180°C

Tilt:

Scaime range of tilt meters can detect very small angle variations of:

- Buildings
- Historical monuments
- Bridge piles

Acceleration:

Scaime accelerometers are particularly well suited to measure:

- oscillations of bridge stays and roadways,
- structures Eigen frequencies measurement

Displacement:

Our displacement sensors accuracy and reliability allow:

- Monitoring of cracks
- Measurement of expansion joints

Temperature:

Scaime proposes a wide range of temperature sensors that can be bonded or embedded into concrete or tar.