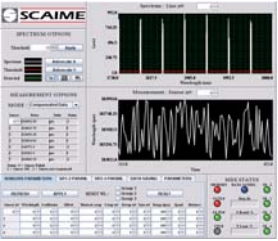


Softwares



All our MDX acquisition units integrate an extremely intuitive and user-friendly web interface that allows the setup of the entire system and sensors without having to install specific software on a PC.

The MDX can be used fully autonomously: at power on, the unit will automatically start measurements and either store them on its internal memory or send them through TCP-IP or CANopen® connection.



Fiber Optics Measurement

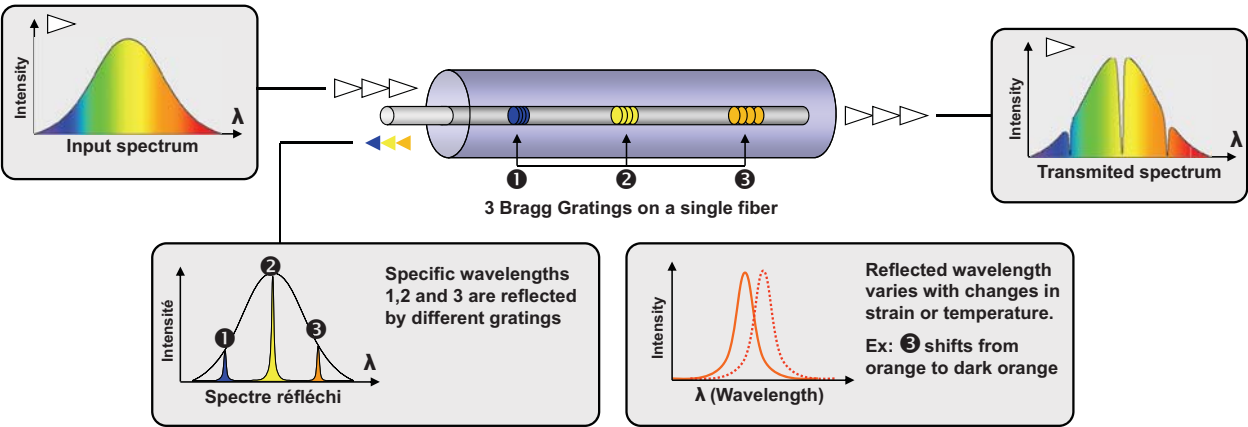
Sensors, Electronics

ACQUISITION UNITS



Model	MDX-80	MDX-400	MDX-8000
Number of optical lines	4 or 8	4	4 or 8
Frequency	10 or 20 Hz	100 Hz	1 000 ou 2 000 Hz
Resolution	0.5 µm/m - 0.02 °C	0.5 µm/m - 0.02 °C	2 µm/m - ±0.05 °C
Repeatability	2 µm/m - 0.1 °C	2 µm/m - 0.1 °C	4 µm/m - 0.1 °C
Digital I/O	2 O	1 I / 4 O	1 I / 4 O
GPS antenna connectivity	-	✓	✓
Communication	Ethernet	Ethernet / CANopen®	Ethernet
Storage capacity	80 MB	up to 32 GB	up to 32 GB
Housing	Rackmount 19"	Rackmount 19" or waterproof housing IP66	Rackmount 19"

Bragg grating technology...



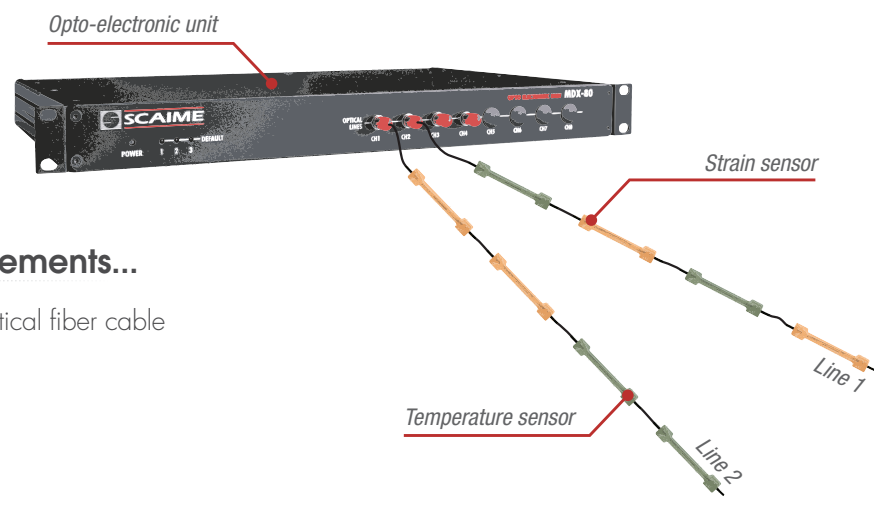
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# Overcome the sensing frontiers...

SCAIME has developed a measurement system based on Optical Fiber Bragg Grating. We offer technologically advanced technological solutions while ensuring innovation, quality and reliability.



## New horizons for your measurements...

- > Easy and reliable handling of the optical fiber cable
- > High resistance to cyclic fatigue
- > Perfect load transfert
- > No sensitivity to EMI
- > No corrosion
- > No drift
- > Sensors in series
- > Measurement on long distances
- > Intrinsically none explosive

## For all your applications...

SCAIME offers integrated fiber optics monitoring systems for the control of complex structures exposed to mechanical and thermal stresses. We provide:

- Optical fiber sensors for strain and temperature measurement
- Modular Opto-electronic acquisition units suited to their working environment
- Expertise in monitoring system design
- On-site installation and training, data acquisition as well as analysis with dedicated softwares

## Civil engineering

Monitoring of civil engineering installations with temperature sensors, strain sensors and extensometers ready to be embedded or implemented directly on the structure.

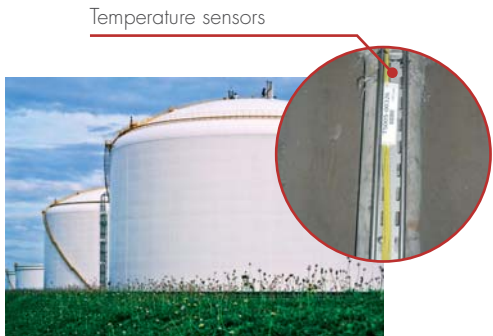


▲ civil works monitoring

▲ railway tracks monitoring

## Petrochemical industry

Thanks to its intrinsically none explosive specification, optical measurement system is the best choice for gas leak detection and temperature or strain monitoring in explosive areas.



▲ Leak detection on LNG tanks

## Wind energy

- > Real time monitoring of loads in the blades
- > Ice detection
- > Condition based maintenance
- > Optimization of energy production
- > Estimation of remaining lifetime



▼ Watercraft hull monitoring

## Marine applications

With hull monitoring, strain measurement allows to select the best route preventing the risk of mechanical failure in operation.



Strain sensors