

Fix and Go

Structural
health monitoring
solutions

Preventing or controlling structural subsidence

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solutions

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All of us want to live in a **healthy and safe environment**, and the best way to achieve that is to monitor the buildings and infrastructures.

Structural health monitoring is one of the most important activities performed to check and **assess the structural health** of buildings.

Through **structural health monitoring** it is possible to measure the current state of the building and **identify potential risks**.

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Monitoring structures is not straightforward

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Monitoring and evaluation of the state of structures is done in different ways and in varying contexts.

Surveys can last a few days or a few hours (e.g. dynamic structural monitoring) or they can last many days or months (e.g. static structural health monitoring or environmental monitoring).

There is a wide variety of **equipment** used for surveys and they can often **be complex to install and/or operate.**



Simplifying the monitoring systems

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Advanced monitoring systems - static structural or environmental - are usually composed of a network of wired sensors; one or more units of data acquisition and recording; a data collection/transmission subsystem to the processing unit and software for the analysis and interpretation of data.

Instead, an **optimal monitoring system** should focus only on the essentials: **smart sensors** and an **intuitive application** accessible remotely via PC, Tablet or Smartphone.

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“Fix and Go”: the ideal monitoring system

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“Fix and Go” is our proposal for a **modern and versatile** static structural and environmental monitoring system.

In the “Fix and Go” system the **sensors** are connected directly to the Internet.

The **data acquired** is processed in real time into information that is easy to analyse and reuse and is **available immediately** on the web page of your application. The information is accessible through any PC, Tablet or Smartphone connected to the Internet.

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As the name suggests, the system consists of a range of sensors:

DISPLACEMENT

INCLINATION

TEMPERATURE

HUMIDITY

which must be fixed at appropriate locations on the structure to be monitored.

After the sensors have been installed on-site presence is no longer required.

Monitoring - remotely - is already underway.



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“Fix and Go”: features & benefits

SYSTEM'S FEATURES

- ▶ **User-friendly** web interface
- ▶ **Long range** and very **low power** wireless communication
- ▶ **Long battery life**

BENEFITS

- ▶ **Easy to install**
- ▶ **Immediately** available
- ▶ **Convenient** compared to existing systems

A success story

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Deterioration of the parapet of the Arno in Florence

“Cracks of 200 meters on the Lungarno in Florence: the parapet that runs along the river has moved about a meter and keeps everyone in suspense”

On the river side of the chasm it was difficult to obtain a source of electricity and we had **to act fast.** By using “Fix and Go” we were able to **rapidly provide** more data - conveniently **accessible online** - than was achievable via mechanical crackmeters.

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Products and solutions by TERTIUM Technology

PRODUCTS LINES



Passive RFID Readers
(since 2009)



Wireless Sensors and Dataloggers
(since 2011)



IOT SOLUTIONS



Structural Health Monitoring of buildings and infrastructures



Monitoring of Goods and People during transport (Services that enhance Fleet Management)



Environmental Monitoring

Technology

state-of-the-art and made natural

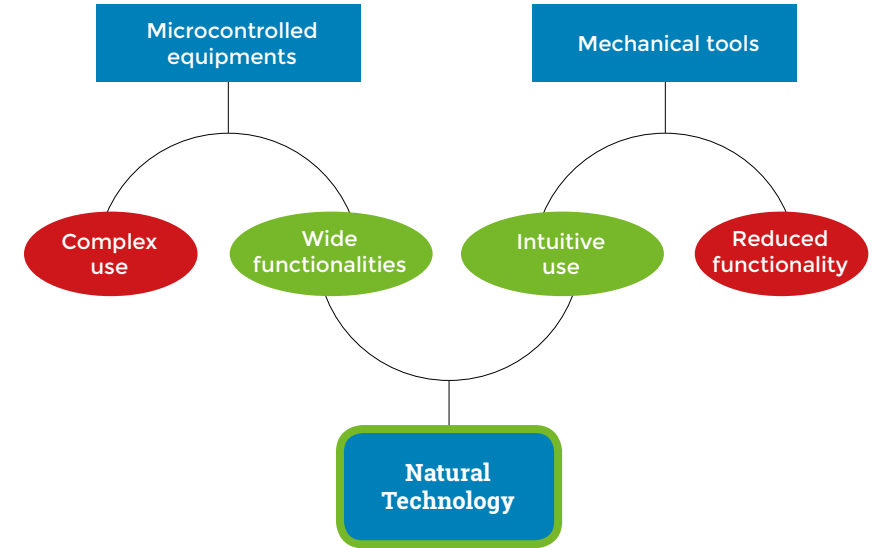
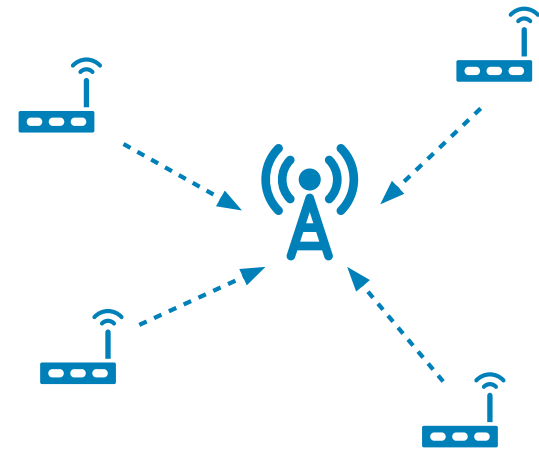
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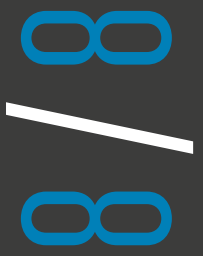
We specialize in ultra-low power radio technology (Passive RFID HF and UHF, active 2.4 GHz RFID, Bluetooth, BLE, LPWAN), and particularly their application in the Internet of Things.

Our goal is to build hardware solutions that embed seamlessly within our client's - cognitive - environment in conjunction with software that make the technology intuitive and easy to use.

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For "Fix and Go" we use
SIGFOX's LPWAN network.



Thank you for your attention

We are available to answer
any questions you may have.

For further information, please contact:

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