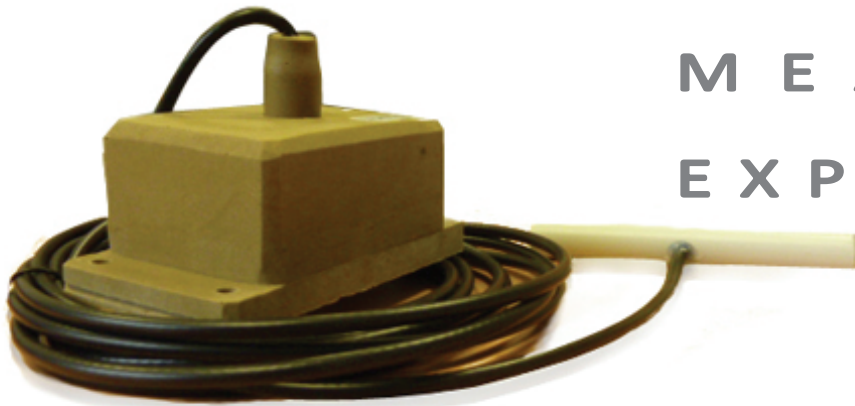


# newsteobuilder



INSTRUMENT  
MEASURE  
EXPERTISE



The concrete quality depends on the respect of the setting and curing . Newsteo has developed the Newsteo Builder, in partnership with Lafarge, the Newsteo Builder, which allows measuring and recording of the temperatures and the shrinkage, at the first hours of the setting and during the following years.

The Newsteo Builder integrates 2 sensors:

- Temperature, in its body
- Deformation gauge, on a probe to position

## 2 references

- BLR36 with temperature sensor
- BLR37 with temperature sensor and deformation gauge

## Fonctionning

The Newsteo Builder is directly buried (antenna included) into the concrete and it records the corresponding measurements in its embedded non volatile memory. The user can remotely download all the measurements thanks to the special long range antenna, even with Builder into the concrete.



As all the measurements are dated, the user gets the complete history of the supervised concrete.

## APPLICATIONS

- Concrete tests and qualification in laboratories
- Instrumentation of structures (bridges, roads, large building, concrete foundations ...)



# ASSETS

- 5 meters antenna cable, compliant with installation in deep foundations. The antenna remains close to the surface to ensure the radio transmission.
- Sensors calibrated at the factory for the life of the product
- A large battery for long life duration (up to 10 years)
- A software with database to store and sort the measurements

# TECHNICAL CHARACTERISTICS

|                                     | BLR36  | BLR37  |
|-------------------------------------|--|--|
| <b>Sensors</b>                      | Temperature  | Temperature<br>Deformation gauge                           |
| <b>Operating temperature</b>        | -20°C ... +80°C  | -20°C ... +80°C  |
| <b>T° range of measure</b>          | -20°C ... +80°C  | -20°C ... +80°C  |
| <b>Temperature accuracy</b>         | ± 0.3 °C   | ± 0.3 °C   |
| <b>Deformation range of measure</b> | NA   | -1850 ppm to +1850 ppm for a bridge excitation of 2.7 Volt |
| <b>Deformation Accuracy</b>         | NA   | +/- 0.56 ppm in voltage                                    |
| <b>Weight with battery</b>          | 300g   |  |
| <b>Dimensions</b>                   | Casing: 132 x 75 x 70 mm, Antenna cable : 5 meters   |  |
| <b>Casing</b>                       | Made of tear-proof, crushing proof and unbreakable   |  |
| <b>Battery</b>                      | Size D Lithium Thionyle included   |  |
| <b>Autonomy</b>                     | Up to 10 years (depending on measure frequency and operating temperature)  |  |
| <b>IP level</b>                     | IP 68<br>Resistant to dust, to liquid concrete, suitable for continuous immersion in water under static pressure of 6 bar. |  |
| <b>Measurement Frequency</b>        | Can be set from 10 minutes to 4 hours  |  |
| <b>Memory Capacity</b>              | 32 256 measures with date and time   |  |

## Product references for orders

- PFPN-BLR36-001 : Builder with temperature sensor
- PFPN- BLR37-001 : Builder with temperature sensor and deformation gauge

## Evaluation Kit

This kit enables you to estimate the Newsteo Builder.

The kit is made of:

- A Newsteo Builder with shrinkage sensor (BLR37)
- A RF-to-USB Key medium-range (¼ wavelength antenna integrated)
- A CD-ROM containing the installation of the RF Monitor software with USB drivers, the application software of the Logger which enables the restoration of the recorded measures, and the documentation.

