

SONIC15

Instrument for Ultrasonic Pulse velocity and sonic tests with instrumented hammer

:: METHODOLOGIES ::

Sonic test
Sonreb
Ultrasonic Pulse Velocity
P.I.T. Pile Integrity Test



SONIC15 is a device for non Destructive Tests and surveys which uses ultrasonic pulse velocity and sonic tests on masonry with instrumented hammer. It supports extension, too for surveys on foundation piles with P.I.T. methodology. In spite of compact dimension of the unit, there is a wide monitor of 7" with integrated touch screen which allows to use it in immediate and effective way during construction.

Acquisition and visualization parameters of waves could be easily changed in simple and immediate way through touch screen so that you can do the first exam on construction of recording data. SONIC15 could be used, according to configurations, for surveys both on cement and concrete as diaphragms poles or structural elements than on masonry structures. According to different kind of performed tests, it's enough to connect instrument to necessary accessories as different kind of ultrasonic probes or impulsive instrumented sources or not for impact tests.

SONIC15 instrument together with the new Controls digital sclerometer can be used for Sonreb tests

Available versions:

- Cod. KSONIC15, sonic 14, ultrasonic in contact + sonic test with instrumented hammer
- cod. KSONIC15IT, extension module I.T. TEST

SONIC15

SPECIFICATIONS

Acquisition:

- Signal range: ± 2.5 V
- amplification factors: x1, x2, x4, x5, x8, x10, x16, x32
- generator with two levels of power: normal, high
- band width: 200 kHz
- filter for ultra-sounds: central frequency 50 kHz
- mode: manual (with push-button or hammer control) or automatic (with timing)

Probes:

- Resonant frequency 53 kHz
- Diameter: 48 mm
- Excitation peak voltage: 500V (normal), 2000V (high)
- Maximum frequency for pulse emission: 1 per second

Hammer:

- Trigger: piezoelectric
- Knockers: plastic and metal

Generals:

- CPU Quad Core Cortex-A9, 1.4GHz
- RAM 1G DDR3 32bit bus
- Flash 8GB eMMC
- LCD 7" TFT full color, LED backlight, capacitive touch screen, resolution 800x480
- Normative compliance: ASTM C597-09 e UNI En 12504-4
- Graphic visualization of acquired signal
- Interactive graphics with zoom functions and cursor reading
- Automatic zoom on cursor or on a temporal set up window
- Memorization of each single signal acquired
- Possibility of modifying acquisition parameters while measuring
- Saving measurements campaign in a single file
- USLab software for PC for report processing and generation
- Inner lithium battery of 13Ah
- Rechargeable by micro USB 2.0 type-B connector
- Typical consumption: 500 mA during rest, 1A during measurements
- Box with belt
- Operating temperature: 0-60°
- Sizes and weight: L. 200 x H. 50 x P. 145 mm, 0.90 Kg



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SONIC15

RELATED PRODUCTS



[KEXPSONIC15IT](#)

Module espansione SONIC15 per PIT (Pile Integrity Test)



[MNS1](#)

Mazzuolo in gomma



[SC23](#)

Sonda ultrasuoni frequenza 23 Khz



[MNS2](#)

Martello con testa in nylon



[SC55](#)

Sonda ultrasuoni frequenza 55KHz



[MSU3](#)

Martello trigger per prova sonica



[SC70](#)

Sonda ultrasuoni frequenza 70KHz