

[UK1401M Surfer]

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ULTRASONIC TESTER FOR CONCRETE INSPECTION

UK1401 ultrasonic tester is suitable for measuring time and velocity of ultrasonic waves in hard materials at surface sounding at a fixed base. The measurements are carried out to indicate the strength and integrity of materials and constructions.

The device is monoblock and has ergonomical body from light shockproof plastic.

Two dry point contact transducers are built-in in the body. It allows to test materials without any contact liquid. The transducers are wear-resistant and are not influenced by condition of surface allowing not to prepare the surface for inspection.



AREAS OF APPLICATION

- Evaluation of concrete strength on basis of correlation between velocity of ultrasonic waves in concrete and its mechanical parameters and physical condition
- Search of close-to-surface flaws in concrete objects by speed decreasing or increasing in the flaw spot
- Evaluation of the degree of anisotropy in composite materials
- Evaluation of the degree of concrete aging while building on the site
- Evaluation of the bearing ability of concrete supports and posts
- Evaluation of crack depth
- Evaluation of the age of material if its physical qualities change with time
- Evaluation of porosity and fissuring of the material.

FEATURES

- Built-in automatic gain control system (AGC)
- Sound indication of signal receiving
- Ability to save the results of measurements into memory: the device is equipped with nonvolatile memory for 4000 measurements with the ability to sort results in groups
- Infrared connection to PC
- User-friendly 5 button keyboard

DELIVERY KIT

- UK1401M – Ultrasonic tester
- Calibration sample
- Batteries AA Alkaline LR6, 2,8 Ah (3 pcs.)
- External IrDA adapter for connection to PC
- Bag



SPECIFICATION

Scanning base	150 mm
Time measurement range	15 - 100 μ s
Velocity measurement range	1500 – 9990 m/s
Crack deepness measurement range	10 - 50 mm
Measuring error, not more than	± 1 %
Working frequency	50 kHz
Zonding frequency	5 - 20 kHz
Quantity of objects in memory	4000
Operating temperature range	from -20 to +45 °C
Power	AA Alkaline batteries (3 pcs.)
Operation time	100 h
Size	200 x 120 x 35 mm
Weight of electronic unit	350 g