

Strength Meter NOVOTEST IPSM-U+T+D



Description of Strength Meter NOVOTEST IPSM-U+T+D

Device measures strength and uniformity of concrete, brick and other materials by ultrasonic method. Meter is designed to be used at construction sites, inspection of buildings and structures. Meter also has the function of determining crack depth by the ultrasonic pulse velocity test method (similar to metal flaw detectors).

NOVOTEST IPSM-U+T+D is designed to:

- Detect voids, cracks and defects encountered in the production and operation of structures (for process control and inspection of facilities)
- Control uniformity of concrete strength, brick, construction and composite materials, structures, bridges and waterworks
- **Measurement of cracks depth in the tested materials**
- Determination of the density and elastic modulus of fiberglass and so on
- Determination of sound index of construction ceramics and abrasives
- Estimate porosity, fracturing and anisotropy of the material
- Assess degree of maturity of the concrete in a monolithic concreting
- **Visualize the presence of a signal (A-scan)**
- **Test concrete (and other) constructions for internal defects, discontinuities**

Improved the accuracy of time intervals measurement is manual selection of the moment trip meter

The advantages of Strength Meter NOVOTEST IPSM-U+T+D

- Calculating the strength, density and elastic modulus of the pre-installed calibration graph
- Calculation of the sound of the index of abrasive products
- Ability to save the results
- Communication with PC;
- Further processing of the results using a specialized computer program
- Best results with the force transducers
- Ability to work on large sounding databases
- Improved "signal-to-noise" ratio
- Universal converters for emission and reception
- The increased excitation voltage probe pulses

The increased power of the excitation probe pulses, high-quality amplification path can significantly increase the base of sounding and work on materials with high damping.

The sensor surface sounding has a base of 120 mm, suitable for sounding concrete cubes samples.

Specifications of Strength Meter NOVOTEST IPSM-U+T+D

The range of measurements of the propagation of ultrasonic vibrations, μs	10 ... 9999
The measurement resolution of the propagation time of ultrasonic vibration, μs	0.1
The operating frequency of the ultrasonic oscillations, kHz	50-100
The base surface sounding measurements in mm	120
The output voltage, V	up to 600
Overall dimensions of el. unit, mm	122x65x23
Operating temperature, $^{\circ}\text{C}$	-20...+40 $^{\circ}\text{C}$
Power	2 AA batteries
Time of continuous work hours, not less	10

Modifications of Ultrasonic Tester of building materials strength:

- **IMSP-U** - the most simple modification to measure the *strength of materials*
- **IMSP-U+T** - additionally allows control of homogeneity, measure the *depth of cracks*
- **IMSP-U+T+D** - the most versatile modification, in which implemented all the functions of previous modifications, and also available *flaw detection mode* (A-scan)

Available options for ordering

- Surface sounding probe
- Transducers (probes) for through sounding
- Standard sample
- Batteries
- Charger

Standard set of Strength Meter NOVOTEST IPSM-U+T+D

- Electronic unit
- Surface sounding probe with cables
- Standard sample
- 2 AA batteries
- Charger
- Operating manual
- Packing container

