

## 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 determines crack depth by the ultrasonic pulse velocity test method (similar to INAM 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
- **Measure cracks depth in the tested materials**
- Determine density and elastic modulus of fiberglass
- Determine sound dumping index of construction ceramics and abrasives
- Estimate porosity and anisotropy of the material
- Assess degree of the concrete aging
- **Visualize the presence of a signal (A-scan)**
- **Test concrete and other construction materials for internal defects and discontinuities**

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

- Determination of the strength, density and elastic modulus using pre-installed calibration
- Calculation of the sound dumping index for abrasive products
- Large internal memory
- External communication using PC
- Further post processing of the results using specialized computer program
- Improved results using force transducers
- Ability to work on large databases
- Improved signal-to-noise ratio
- Universal converters for emission and reception
- Increased excitation of voltage probe pulses



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

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

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

The range of measurements of the propagation of ultrasonic vibrations, $\mu\text{s}$	10 ... 9999
The measurement resolution of the propagation time of ultrasonic vibration, $\mu\text{s}$	0.1
The operating frequency of the ultrasonic oscillations, kHz	50-100
The base surface of measurement 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

### Available configurations

- **IMSP-U** - capability to measure the *strength of materials*
- **IMSP-U+T** - additionally allows to control of homogeneity, measure the *depth of cracks*
- **IMSP-U+T+D** - the most versatile configuration with *flaw detection mode* (A-scan)

### Available options

- Surface probe
- Transducers (probes)
- Standards
- Batteries
- Charger

### Strength Meter NOVOTEST IPSM-U+T+D basic set includes

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

