



CODE **GT2205**
MODEL **FREQUENCY METER**
OVERALL DIMENSION 800 x 300 x 300 mm
WEIGHT 35 gr

RESONANCE FREQUENCY METER

STANDARDS

ASTM C215, C666 | BS 1881:209 | NF P18-414 | UNI 9771

DESCRIPTION

Instrument for measuring the resonance frequencies of the three different vibration modes: longitudinal, transverse (flexural) and torsional. From these the following characteristics of the material can be calculated, in a non-destructive way:

- Young's modulus of elasticity
- Modulus of rigidity,
- Poisson's ratio.

Large display to view data analysis of time domain and frequency spectrum signals.

The principle used in this meter is based on the determination of the fundamental resonant frequency of vibration of a sample generated by an impact and detected by an accelerometer. The frequency spectrum is calculated and displayed by the instrument. The data can be archived and uploaded to a PC for further analysis and inclusion in the report.

The advantages of resonance methods are:

- The test can be repeated for a very long period on the same sample
- the number of specimens required is therefore very small.
- The results obtained with the resonance method on the same samples are more reproducible

TECHNICAL SPECIFICATIONS

- Frequency range: 10Hz ÷ 20kHz
- Sampling frequency: 20kHz or 40kHz
- Accelerometer sensitivity: 9,60 mV / g (0,979 mV / ms²)
- 12Vdc battery 4 ÷ 10 hours of continuous use
- Display: 320 x 240; backlit for daytime use
- Memory: more than 200 readings
- Software: Windows compatible
- Impactors: set of 6 hardened steel balls.

EQUIPMENT

- Standard bench with its accessories
- Accelerometer with cable
- Set of 6 hardened steel balls
- Electronic main unit