

RFT321

Integrated monitor Touch screen display

Integrated battery



Digital instrument for measuring the longitudinal, torsional and flexional resonance frequency

RFT321 instrument calculates frequency of longitudinal, torsional and flexional resonance on concrete or natural stone samples in order to determine Modulus of Elasticity, damping factor and to analyze deterioration caused by the freeze-thaw cycles of material which is investigated. Instrument RFT321 is provided with PC embedded board and colour LCD monitor with integrated 7" touch-screen. SD removable memory on front panel ensures a quick and safe management of data acquired. User is guided through the whole measuring procedure in a simple and intuitive way, due to some explicative illustrations. RFT321 instrument is also provided with RESreader application, which allows to manage and organize measurements and to create test reports.

Methodologies

Measure of Resonance Frequency

General

CPU	ARM Cortex A9
Power supply	Li-ion 10,8V/12,4Ah

General

Acquisition medium power consumption	350 mA
Average autonomy	6 hours
Monitor	TFT-LCD capacitive 7" integrated touch-screen, 1280x800 pixel
Interface	USB
Data storage	Internal memory 5 GB (up to 300.000 acquisitions) / external USB
Data format	.res
Operating temperature	Temperature (°C):-20 a 80; Humidity (RH): 0-90%
Case	Polypropilene, automatic pressure valve, IP67
Dimensions	cm 27,1 x 24,8 x 12,3
Weight	2.6 Kg
Protection degree	IP67
HS code	90248099
Reference regulations	ASTM C666 -BS 1881:209 -NF P18-414 -ASTM C215-08 -UNI EN 14146:2005 - UNI 9771 (1990)

Acquisition

ADC resolution	12 bit
Typology of measure	Resonance frequency
Sensor	Accelerometer
Accelerometer sensitivity	100mV/g
Maximum sampling rate	100KHz (Nyquist frequency: 50KHz)
Measure frequency resolution	min. 12.2Hz (0-50KHz) - max. 0.49Hz (0-2KHz)
Samples per event	Up to 65536 samples (50 Hz)

General

Trigger	Energization balls
Minimum trigger level	19mV

