Email : sales@laboratoryinstrumentindia.com

Product Name :	**Product Code :**
Free Vibrations Of A Cantilever	LBNY-0005-1400008

Description :

The vibrating cantilever examines what happen the spring element is not light. Additionally, it examines a beam as a complete self-contained system, forming the mass and the spring. Free Vibrations Of A Cantilever fits to the sturdy Test Frame for study or demonstration. However, in mass spring system, we normally assume a light spring compared to the mass. The vibrating cantilever forms a simple and highly visual example of oscillations that may occur in real structures such as aircraft wings. A beam with the mass at the end works in a similar way to a mass spring system - the stiffness of the beam simply replaces the stiffness of the spring.
Free Vibrations Of A Cantilever is part of a range that explores free vibrations in simple one degree of freedom systems.
It introduces students to key scientific terms such as:
Phase difference between displacement and its derivatives
Beam stiffness
Second moment of area
Simple harmonic motion and frequency of oscillation.

Technical Specification :

Experiments:
Phase difference between displacement and its derivatives.
Horizontal cantilever length and frequency of oscillation.
Predicting oscillation frequency using Rayleighs method and the simplified method assuming that the beam is light.
Comparison of vertical and horizontal cantilevers.

Specifications:
Nett dimensions and weight: (Mounted horizontally) 280 mm high x 670 mm wide x 130 mm front to back and 7.5 kg
Packed volume and weight: 0.07 m3 and 10 kg.