

**Product Name :**  
Free Vibrations Of A Cantilever

**Product Code :**  
ALABS-A110-017

ALTEC™

**Description :**

Free Vibrations Of A Cantilever

**Technical Specification :**

- This product is part of a range that explores free vibrations in simple 'one degree of freedom' systems.
- 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.
- The vibrating cantilever examines what happens if the spring element is not light.
- A back panel fixes to the Test Frame.
- Panel holds a sturdy clamp and two runners. Clamp holds the beam.
- Students use the clamp to adjust the oscillating length of the cantilever.
- The runners hold a non-contacting sensor that measures the oscillations at the end of the cantilever.
- The sensor has no physical contact with the beam, for negligible damping.
- The vibrating cantilever forms a simple and highly visual example of oscillations that may occur in real structures such as aircraft wings.
- Simple harmonic motion (SHM) and frequency of oscillation.

- Beam stiffness, Rayleigh's method, Dunkerley's method, Second moment of area.
- Phase difference between displacement and its derivatives.



## Equipments Exporters

**Website:** [www.equipmentsexporters.com](http://www.equipmentsexporters.com), **Email:** [sales@equipmentsexporters.com](mailto:sales@equipmentsexporters.com)

**Address:** 75, Lajpat Nagar-IV, New Delhi-110024 **Phone:** +91-9311469084