

LEMI-40 Apparatus of Magnetic Damping & Kinetic Friction Coefficient

- *Reliable and easy-to-use*
- *Consistent and accurate*
- *Affordable*



Magnetic damping is an important concept in electromagnetism. The mechanical effect of magnetic damping has very important applications. This experimental apparatus is designed to measure the uniform sliding speed of a magnetic slide on a non-ferromagnetic conductor inclined rail. Through data processing, magnetic damping coefficient and sliding friction coefficient are acquired. This experimental apparatus is related to physics concepts such as mechanics and electromagnetism.

Using this unit, the following experiments can be conducted:

1. Observe magnetic damping phenomenon & understand its concept & applications.
2. Observe sliding friction phenomena & understand the application of friction coefficient in industry.
3. Learn how to process data to transfer a nonlinear equation into a linear equation.
4. Acquire magnetic damping coefficient and kinetic friction coefficient.

Parts and Specifications

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| Inclined rail | Range of adjustable angle: $0^{\circ} \sim 90^{\circ}$ |
| | Length: 1.1 m |
| | Length at junction: 0.44 m |
| Adjusting support | Length: 0.63 m |
| Counting timer | Counting: 10 times (storage) |
| | Timing range: 0.000-9.999 s; resolution: 0.001 s |
| Magnetic slide | Dimension: diameter=18 mm; thickness= 6 mm |
| | Mass: 11.07 g |

Note: above product information is subject to change without notice.