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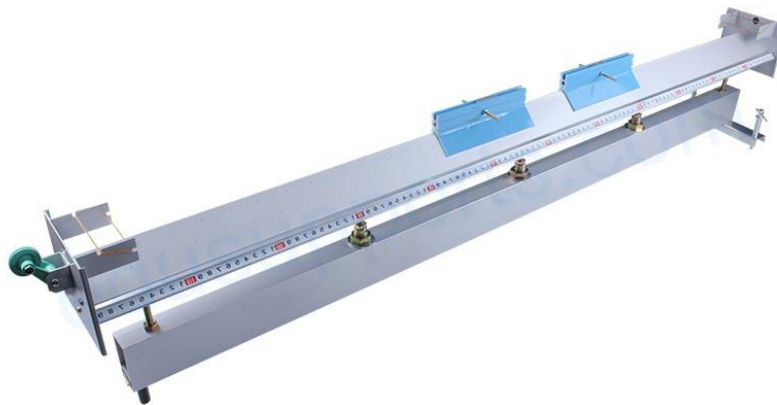
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## [Linear Air Track with Accessories](#)

### [Precision](#)

[0201010060-0201010090](#)



[Linear Air Track with Accessories Precision](#) provides a cost-effective system for exploring all aspects of dynamics involving linear motion in a virtually friction-free environment. It is an ideal teaching aid for physics. This [Linear Air Track](#) can be used to experimentally study in kinematics covering velocity, force and acceleration, momentum, potential energy, collisions ( elastic /inelastic ), conservation of energy, kinetic energy, simple harmonic motion, motion on level and inclined planes. It is particularly effective in the field of collisions where conservation of momentum is dramatically demonstrated. The [Linear Air Track](#) with a perforated rail has a smooth surface and high

linearity and is made from strong extruded aluminium, lightweight yet durable. The rail has one row or two rows of fine holes on each side all along the length of the track. An inlet cover is given at one of the ends, which is connected to hose of an air blower. Compressed air is sprayed from the holes and forms an air cushion on the surface of the track. This air cushion fills the space between the [air track](#) and the inner surface of a glider. As a result, the gliders move on (float to and fro on) an air cushion can be regarded as almost friction-free. The [Linear Air Track](#) also has a scale graduated in millimeters for measuring distances and recording positions. Wireless light gates with built-in-timer provide accurate measurement of various kinematic parameters. It is supplied with a comprehensive accessories. An air source and a measurement are required to build a [Linear Air Track](#) System, which can be provided by our [Air Blower](#) and [digital timer](#).

### **[Linear Air Track](#) with Accessories Precision Experiments**

1. To study the linear motion under virtually friction-free environment.
2. To study the concept of velocity.
3. To study the concept of accelerations
4. To study the acceleration of gravity
5. To study the elastic and inelastic collision.
6. To study the conservation of momentum and energy.
7. To study the dependency of mass ratio to kinetic energy.
8. To study the simple harmonic motion

### **[Linear Air Track](#) with Accessories Precision Keywords**

Linear motion.

Force and acceleration.

Newton law of motion.

Simple harmonic motion

Elastic collision.

Inelastic collision.

Potential energy

Kinetic energy

Conservation of momentum.

Conservation of energy.

Mass ratio.

## Linear Air Track with Accessories Precision

### **Main Technical Parameters**

<u>Linear Air Track with Accessories Precision</u>	Specification
SKU	<u>0201010060-0201010090</u>
Track Length	1200m,1500m,1800m,2000m
Cross Section	90°apex isosceles triangle with stiffening bar underneath
Roughness of the rail	Ra3.2
Air holes	1row or 2 rows on each side, 0.9 mm dia.
Straightness	≤0.10mm in full length
Support	Crossfoot and adjustable foot
End Stops	Launcher and end pulley
Gas source	≥5.8kPa

\*Products and configuration list described herein are subject to changes without notice.