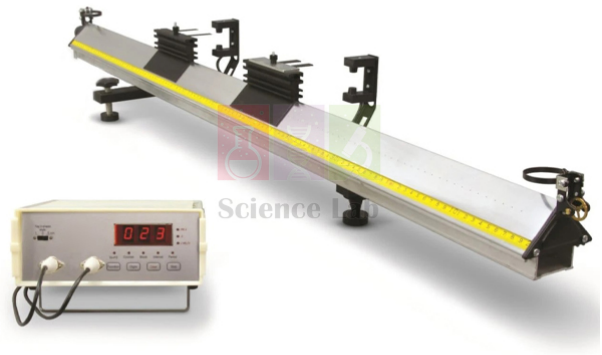
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Product Name :

Apparatus Air Track Light Gate

Product Code :

SLE/PHY/03



Science Lab
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Description :

Apparatus Air Track Light Gate (Product Code: SLE/PHY/03) is an air-cushion linear track with photo light gates and a timer, used to study motion under virtually frictionless conditions in school and college mechanics labs. One to four carts ride on the air supplied by the blower, so teachers can run collision, momentum and acceleration experiments with electronic timing. It is made by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, an OEM manufacturer, at its own factory in Ambala, India.

Key Details

Parameter	Detail
Purpose	Study of linear motion under virtually frictionless conditions
Carts	One to four carts riding on a cushion of air
Timing system	Photo light gate system complete with timer and light gates
Air source	Blower
Accessories	Accessories kit; spring bumpers can be attached to record impact forces; weights can be attached to each cart for momentum and force studies
Pulleys	High-precision pulleys included, to mount on the ends for free-fall and incline experiments
Product code	SLE/PHY/03
Manufacturer	Jain Scientific Equipments Pvt Ltd (ScienceLab) — OEM
Country of origin	India (made in Ambala, Haryana)

What Is the Air Track with Light Gates Used For?

With friction almost removed, the air track lets students test Newton’s laws and conservation principles with results that sit close to theory. Typical sessions include measuring velocity and acceleration as a cart passes the light gates, pulling a cart with a falling mass over an end pulley to relate force and acceleration, setting up incline runs, and colliding two carts to compare momentum before and after impact. That makes it a central item of mechanics lab equipment in India for senior secondary and undergraduate courses.

Level the track carefully before each run, since a slight tilt adds an unwanted acceleration. Switch the blower on before placing carts on the track and lift them off before switching it off, so cart and track surfaces do not rub. Load the attachable weights evenly to keep carts running straight, and fit the spring bumpers when students are studying impact forces at the ends.

What to Specify When Ordering

- The number of complete air track sets required for your laboratory
- How many carts you plan to run together (the apparatus allows one to four)
- [illegible]s

OEM

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