## PhysGate

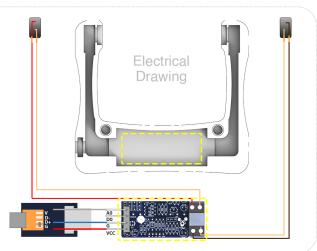
## Measure interruptions

d how an object appears and

(IR)-based photogate that

PhysGate is the ultimate tool to record how an object appears and disappears with time. It is an infrared (IR)-based photogate that directly interfaces with PhysLogger to detect and plot any beam obstruction. With a response time as fast as 1  $\mu$ s, it finds its application in reading optical encoders as well. This means that one can hook up PhysGate with a rotating optical encoder and using an interactive software wizard, start measuring the rotational speed in just a few, simple clicks. A lego exterior provides robust mounting of the PhysGate to fit a range of user-defined orientations and applications. Works like a charm!





## Features

- IR-based obstruction sensor
- High sensitivity to even semi-transparent medium
- Compact and adaptable to various installments
- Photogate width: 4.5 cm
- Less than 1  $\mu$ s response time
- Hot pluggable
- Lego casing and bracket
- PhysInstrument class: Analog
- Connects with PhysLogger

## **Typical Applications**

- Learn about pendulums and oscillators
- Calculate gravity by accurately timing a free fall
- Investigate collisions and the laws of motion on an air track
- Determine how fast your motor rotates; use it as an optical tachometer
- Explore a wide variety of principles in rotational mechanics

