



## 1. Current Sensors

There are 3 current sensors with different ranges that measure both AC and DC.

With differential inputs these sensors can be used anywhere within a circuit and in conjunction with a voltage sensor.

Applications include:

- Series and parallel circuits
- Ohm's law – resistance in a circuit
- Electrical induction
- Battery life
- Capacitor discharge and recharge
- Current surge
- Electrical component characteristics
- Voltage and current relationships
- Electrolysis

Code	Description	Pack	Price
LOG3222	Current sensor $\pm 100\text{mA}$	Each	£65.00
LOG3075	Current sensor $\pm 1\text{A}$	Each	£65.00
LOG3225	Current sensor $\pm 10\text{A}$	Each	£65.00

## 2. Light Gate

The SmartQ Light Gate is a digital switch-type sensor that has two states, ON and OFF. The light gate has an infrared transmitter and receiver that detects objects passing through the 'gate'. Light gates can be used singly or in pairs for time, speed, velocity and acceleration measurements.

Make the most of light gates by using them with the dynamics system and the Interrupt card set.

Applications include:

- Dynamics experiments that involve calculating time, speed, velocity, acceleration using an inclined plane or air track
- Acceleration due to gravity
- Pendulum investigations
- Measuring the time period of an oscillating body
- Impulse and change in momentum
- Centripetal force in a pendulum

Code	Pack	Price
LOG3117	Each	£59.00

## 3. Interrupt Card Set

The Interrupt card set consists of 3 cards for use with light gates.

- A single interrupt card – 100 x 100mm black plastic square
- A double interrupt card – 180 x 80mm made from clear polycarbonate, printed with two black stripes
- A multi-segmented interrupt card (also known as a picket fence) – 500 x 55mm made of clear polycarbonate, printed with twelve black stripes

Applications include:

- Picket fence for investigating gravity
- Other interrupt cards for time, velocity and acceleration

Code	Pack	Price
LOG3531	Each	£23.00