### **Product Information Sheet**

## Magnetic Field Sensor





Our range of science experiment kits will equip you with all you need to carry out each of the practical experiments included in your LJ Create science program.

The kits can be used for teacher demonstration, individual student, or group activities.

The Data Logging equipment has been produced for ease of use in a wide range of science and technology applications.

Explore the nature and strengths of magnetic fields of solenoids and permanent magnets with this robust sensor which houses two switchable Hall Effect transducers to measure accurately both Radial and Axial magnetic fields.

The sensor can be used in a range of teaching applications, including:

- Magnetic field in a coil
- Magnetic field in a Slinky Spring
- Magnetic field of magnets
- Magnetic field of a solenoid
- Variation of field vs. current

### **Sensor Specifications:**

Range 1: ± 10mT radial
Range 2: ± 10mT axial
Resolution: 0.01mT

# Examples of some extension and advanced ideas include:

- Mapping a magnetic field
- Exploring electromagnets
- Detecting the earth's magnetic field
- Magnetic flux vs. induced voltage
- Transformers
- Inductance and phase

### **Items Included:**

Magnetic Field Sensor

#### **Other Items Required:**

- Data logger (520-01)
- LJ Create Science Content and Computer

### **General Information:**

Packed Volume: Approx. 0.0001 m<sup>3</sup> Packed Weight: Approx. 0.1 kg

Order Code: 520-06