

## Student set Electromagnetism, digital, TESS advanced Physics

Article no: 25269-88



### Function and Applications

Basic set allowing the performance of 9 experiments about the following topics:

- Electromagnetic induction (1 experiment)
- Magnetic field of coils (6 experiments)
- Earth's magnetic field (1 experiment)
- Magnetic permeability (1 experiment)

### Benefits

- Complete equipment set: simple execution of the experiments
- The equipment is stored in a rugged, stackable and compact box, allowing quick control of completeness (foam insert)
- Experimenting literature for pupils and teachers available: minimal preparation time
- Matched with international Curriculum: all topics are covered
- With the included Cobra SMARTsense Magnetic Field in combination with tablets and smartphones it is possible to acquire digital data
- Future-proof: Prepare the transition to the digital school today
- Perfectly matched to digital science lessons with tablets and smartphones
- Faster and higher learning success: The use of digital devices increases the identification and thus increases the motivation of the students
- Easy teaching and efficient learning through the digital experiment descriptions enclosed as QR codes

### Equipment and Technical Data

- The equipment set consists of all necessary components for the experiments
- Cobra SMARTsense - 3-Axis Magnetic field: Measuring range: +/- 130 mT; +/- 5 mT, resolution: 0,1 mT; 0,001 mT, Sampling rate: 1000 Hz

## Scope of delivery

Junction module, SB	05601-10	2
Resistor module 10 Ohm, SB	05612-10	1
Ruler, l = 30 cm	09851-40	1
Magnet, rod-shaped, d = 15 mm, l = 120mm	06319-00	2
Cobra SMARTsense 3-Axis Magnetic field - Sensor for measuring the magnetic field in 3 axes $\pm 130\text{mT}$ / $\pm 5\text{mT}$ (Bluetooth + USB)	12947-00	1
iron core, rod-shaped, d = 16 mm, l = 200 mm	11005-00	1
Induction coil, 100 turns, dia. 40mm	11007-05	2
Induction coil, 75 turns, dia. 25mm	11007-07	1
Induction coil, 300 turns, dia. 25mm	11007-03	1
Induction coil, 300 turns, dia. 40mm	11007-01	1
Connecting cable, 32 A, red, various lengths	07361-01	4
Connecting cable, 32 A, blue, various lengths	07361-04	4
Connecting cable, 32 A, black, various lengths	07361-05	6

## Necessary accessories

TESS advanced Physics Electromagnetism, necessary accessories	25269-01
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## Recommended accessories

USB-C cable for Cobra SMARTsense	07935-00
USB quick charger with 8 USB ports	07934-99
Digitalmultimeter 88C+, 750V AC/DC, 20A AC/DC, 2000M $\Omega$ , 200 $\mu\text{F}$ , 10 MHz, 20H, -20...1000 $^{\circ}\text{C}$	07029-12
Carrying system for student experiment boxes	25200-00