

# Student set Renewable energy 1, Basics and thermal energy, TESS advanced Applied Sciences

Article no: 25287-88



#### **Function and Applications**

Basic set allowing the performance of 17 experiments about the following topics:

- Energy conversion (5 Experiments)
- Heat energy from solar energy (7 Experiments)
- Ambient Heat (5 Experiments)

Among other, everyday relevant topics such as global warming and thermal insulation are raised.

#### **Benefits**

- Complete equipment set for 17 experiments
- Covers energy conversion, heat energy from solar energy, ambient heat
- The equipment is stored in a rugged, stackable and compact box, allowing quick controlif set content is complete
- Matched with international curriculum: all topics are covered
- Covers major interdisciplinary and key technologies
- Easy teaching and efficient learning through the digital experiment descriptions enclosed as QR codes
- Together with the two supplementary sets, more than 30 additional experiments can be carried out covering solar, wind, water energy and fuel cell technology

## **Equipment and Technical Data**

• The equipment set consists of all necessary components for the experiments







## Scope of delivery

Support base, variable	02001-00	1
Fishing line, l. 5m	02089-01	1
Felt sheet, 100 x 100 mm	04404-20	1
Angled connector module, SB	05601-02	4
Interrupted connector module with sockets, SB	05601-04	1
Junction module, SB	05601-10	4
Socket module for incandescent lamp E10, SB	05604-00	1
Motor with indicating disc, SB	05660-00	1
Generator with metrical thread axis and nut	05751-01	1
Solar collector for student experiments	05760-00	1
Thermal generator for student experiments	05770-00	1
Halogen lamp with reflector, 12V / 20W	05780-00	1
Mount for halogen lamp with reflector	05781-00	1
Beaker, aluminum, polished	05903-01	1
Beaker, black	05904-01	1
Filament lamps 1.5V/0.15A,E10,10 pieces	06150-03	1
Lamp 4 V/0,04 A,E 10 socket	06154-00	1
Solar cell 3.3 x 6.5 cm, with plugs, 0.5 V, 330 mA	06752-09	1
Holder for solar cell 3.3 x 6.5 cm, with plugs	06752-08	1
Double sockets,1 pair,red a.black	07264-00	1
Connecting cable, 32 A, red, various lengths	07360-01	2
Connecting cable, 32 A, blue, various lengths	07360-04	2
Connecting cable, 32 A, red, various lengths	07361-01	2
Connecting cable, 32 A, blue, various lengths	07361-04	1
Slide mount for optical bench	09822-00	1
Measuring tape, l = 2 m	09936-00	1
Digital stopwatch, 24 h, 1/100 s and 1 s	24025-00	1
Filament lamp 6 V/3 W, E10, 10 pcs.	35673-03	1
-		







Beaker, 100 ml, plastic (PP)	36011-01	1
Beakers, Boro, low form, various sizes	46055-00	1
Lab thermometer,-10+110 °C	38056-00	2
Silicone tubing, various diameters	39296-00	1
Flow indicator for liquids	46434-00	1
Funnels, plastic, various sizes	46895-00	1
TESS box, plastics, high, 305 x 425 x 150 mm	15200-00	1
Lid for TESS box, plastic	15205-00	1
Support rod 300 mm with thread M6	331590	2

## **Necessary accessories**

Student set Renewable energy 1, necessary accessories for 1 group, TESS advanced Applied 13480-88 Sciences

### **Recommended accessories**

25200-00 Carrying system for student experiment boxes



