

## DEMO advanced Applied Sciences Renewable Energy supplementary set Solar cells, Wind energy, Hydropower

Article no: 15581-88



### Function and Applications

Supplementary equipment set for the DEMO Basic Set Renewable Energy Basics and Thermal Energy (15510-88). In combination with the set Basics and Thermal Energy another 17 demonstration experiments can be performed:

- Electrical Energy from Solar Energy (7 experiments)
- Wind Energy (5 experiments)
- Hydro power (3 experiments)
- Parabolic trough - Power station (2 experiments)

### Benefits

- Demonstrative devices for experiments to photovoltaic, conversion of wind energy and hydropower into electrical energy
- Treatment of major interdisciplinary and key technologies
- Wiring diagram of the experiments can be completely illustrated
- Realistic design of the components
- Corresponding students kits available (TESS advanced Renewable Energies): for flexible and competence-oriented science classes
- Complete equipment set in addition to DEMO Basic Set Renewable Energy
- The equipment is stored in a robust aluminum case with removable lid
- Foam insert for a quick control of completeness and secure transport of the set
- Easy teaching and efficient learning through the digital experiment descriptions enclosed as QR codes
- Matched with international Curriculum: all topics are covered

### Equipment and Technical Data

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

## Scope of delivery

Connector, straight, module DB	09401-01	1
Connector interrupted, module DB	09401-04	1
Light emitt. diode,red,module DB	09454-00	1
Solar cell (2.5x5)cm,module DB	09470-00	2
Solar battery, with cable, connectorsand magnet pads	06752-23	1
Battery holder module (AA type), SB	05606-00	1
Blower, 12V	05750-00	2
Generator with metrical thread axis and nut	05751-01	2
Rotor, 2 pieces	05752-01	2
Clamping holder with 2 clamping possibilit, 0-13 mm,fixing magnet	02151-08	1
Sliding mount for optical bench	02151-09	1
Stand rods, stainless steel, various sizes	02032-00	2
Ni-MH accus, size AA, 1.3 Ah / 1.2V, 1 pair	07922-03	1
Filament lamps 4V/0.04A, E10, 10	06154-03	1
Filament lamps 3.5V/0.2A,E10, 10	06152-03	1
Resistance decade, module DB	09420-00	1
Capacitor (gold cap), 1F, DB	09450-10	1
Double sockets,1 pair,red a.black	07264-00	1
Boss head	02043-00	1
Concentrated solar power unit, 180 mm	02168-00	1
clamp, d = 16 mm, with mounting rod	05764-00	2
Water pump/ water turbine/ generator	05753-00	1
Dish, plastic, 150x150x65 mm	33928-00	1
Pelton wheel, model	02521-00	1
Driving belt	03981-00	1
Rubber hose, various diameters	39283-00	2
Hose clamp for 8-12 mm diameter	41000-00	1
Connecting cable, 32 A, red, various lengths	07362-01	1

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Connecting cable, 32 A, blue, various lengths	07362-04	1
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### Necessary accessories

DEMO advanced Applied Sciences Basic Set Renewable Energy, basics and thermal energy	15580-88
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DEMO advanced Renewable Energy Basic Set , necessary accessories	15580-01
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PHYWE Demo Physics board with stand	02150-00
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### Recommended accessories

Moveable experimental table 90 x 75 cm, 30 mm table top with PP edge, with shelf for 3 boxes and socket board	15500-00
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Handbuch Lehrerversuche Erneuerbare Energie auf der Tafel, inkl. CD ROM, DEMO advanced Physik (ENT), (in german)	01157-01
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curricuLAB, single licence	14578-62
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DEMO advanced Applied Sciences Renewable Energy supplementary set Fuel Cells	15582-88
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