

Student set Optics / Atomic physics, TESS advanced Physics

Article no: 15350-88



Function and Applications

Equipment set allowing the performance of 16 experiments about the following topics:

- Spectroscopic analysis (2 Experiments)
- Diffraction on a grating (1 Experiment)
- Diffraction on everyday life's objects (2 Experiments)
- Absorption and fluorescence (3 Experiments)
- h -Determination with light emitting diodes (1 Experiment)
- Bandgap of semiconductors (1 Experiment)
- Investigation of solar cells and photodiodes (2 Experiments)
- Electric and optical properties of LED (2 Experiments)
- Polarisation of light (2 Experiments)

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
- Through the use of a stable optical bench made of metal safe and exact experimental setups
- Simple teaching and efficient learning thanks to the digital experiment descriptions included as a QR code

Equipment and Technical Data

- The equipment set consists of all necessary components for the Experiments
- Robust, stackable storage box with a foam insert fitting to the contained equipment

Scope of delivery

Optical profile-bench for student experiments, l = 600 mm	08376-00	1
Slide mount without angle scale	09851-02	2
Mount with scale on slide mount	09823-00	2
Diaphragm holder, attachable	11604-09	4
Lens on slide mount, f=+50mm	09820-01	1
Lens on slide mount, f=+100mm	09820-02	1
Screen, semitransparent, 150x150mm ²	09851-03	1

Cuvette, plastic, W x D x H: 99 x 59 x 42 mm	09851-05	1
Universal bench	09840-10	1
Cuvette holder for universal bench	09840-11	1
Ruler, l = 30 cm	09851-40	1
Foil filter grey 50% in slide frame glassless	09851-11	5
Illumination slit, 0.5 mm, hardpaper	09851-12	1
Lambda/4 film, in slide frame, glassless	09851-13	1
Polarisation filter, in slide frame, glassless	09851-14	2
Diffraction objects acc.Koppelman, in slide frame, glasses	09851-15	1
Grating, 500 lines/mm, in slide frame, glassless	09851-16	1
Plate, fluorescent, red	09851-19	1
Plate, fluorescent, yellow	09851-20	1
Plate, fluorescent, green	09851-21	1
Plate, fluorescent, blue	09851-22	1
Solar cell 3.3 x 6.5 cm, with plugs, 0.5 V, 330 mA	06752-09	1
Halogen lamp, 12 V/10 W, mounted with 4 mm plugs	09852-00	1
LED - IR, with series resistor and 4 mm plugs	09852-10	1
LED - red, with series resistor and 4 mm plugs	09852-20	1
LED - green, with series resistor and 4 mm plugs	09852-30	1
LED - blue, with series resistor and 4 mm plugs	09852-40	1
LED - UV, with series resistor and 4 mm plugs	09852-50	1
LED - white, with series resistor and 4 mm plugs	09852-60	1
Light sensor with amplifier, adjustable	09852-70	1
Power supply, 5 V DC	09852-99	1
Stray light tube	09852-71	1
Stray light tube for LED, Di = 8 mm, l = 40 mm	09852-01	1
Angular scale, laminated	09851-01	1
Measuring tape, l = 2 m	09936-00	1
Lid for TESS box, plastic	15205-01	1
TESS box, plastics, high, 305 x 425 x 150 mm	15200-01	1

Necessary accessories

TESS advanced Optics / Atomphysics necessary accessories for 1 group 13466-88

Recommended accessories

Carrying system for student experiment boxes 25200-00

Handbuch Schülerversuche Optik/Atomphysik, Sekundarstufe II, TESS advanced Physik, (in german) 13286-01