

- The most important lamp types and circuits on one board
- Comparison of 5 different lamps
- Consumed energy, measured light power
- No special lab table required, a mains socket suffices
- Also available in the handy hps Box
- **SPECIAL LAMP BOARD** can be added for experiments with special lamps



Excerpt from the experiment manual:
„Lighting Engineering“ (Type V 0111)

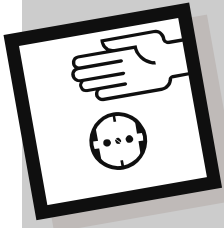
With the ILLUMINATION BOARD

- Filament lamp
- Halogen lamp
- Fluorescent lamp with choke
- Fluorescent lamp with electronic ballast
- Fluorescent lamp with dimmer
- Compact fluorescent lamp (economy lamp)
- Mixed light lamp

With the SPECIAL LAMP BOARD

- High-pressure halogen vapour lamp
- High-pressure sodium vapour lamp
- High-pressure mercury vapour lamp

Front view of the SPECIAL LAMP BOARD
(Type 2103)



ILLUMINATION BOARD, Type 2102

SPECIAL LAMP BOARD, Type 2103

Accessories Recommended

- Set of Accessories (Type 2101.1), consisting of safety leads and plugs (4 mm)
- Set of Accessories for the ILLUMINATION BOARD (Type 2102.2), consisting of: filament, halogen, fluorescent, mixed light and economy lamps as well as bimetallic and electronic starter
- Experiment manual: „Lighting Engineering“ (Type V 0111)
- Multimeter (RMS)
- Phase angle meter
- Lux meter

Subject to technical modifications

Installation Technology / Lighting Engineering

Technical Data

ILLUMINATION BOARD, Type 2102

Mains connection (with PE contact)

- Mains voltage: 220 ... 240 V AC, 50 ... 60 Hz; approx. 15 VA ... 160 VA (depending on the lamp used)

Installed components

- 1 patch panel (safety jacks, 4 mm: L/N/PE)
- 1 E27 socket
- 1 fluorescent lamp socket
- 1 choke
- 1 starter socket
- 2 compensating capacitors
- 1 electronic ballast with dimmer

Dimensions and weights

- ILLUMINATION BOARD (Type 2102): 532 x 297 x 130 mm (w x h x d), weight: approx. 2.8 kg
- Box version, consisting of: ILLUMINATION BOARD (Type 2102) and Box (Type 2102.20): 580 x 450 x 155 mm; total weight: 5.7 kg

SPECIAL LAMP BOARD, Type 2103

Mains connection (with PE contact)

- Mains voltage: 220 ... 240 V AC; 50 ... 60 Hz; approx. 50 VA ... 70 VA (depending on the lamp used)

Installed components

- 1 E27 socket
- 1 socket for halogen and high-pressure lamps
- 1 ballast
- 1 igniter with timer

Accessories included

- 1 high-pressure halogen vapour lamp
- 1 high-pressure sodium vapour lamp
- 1 high-pressure mercury vapour lamp

Dimensions / weight

- 266 x 297 x 110 mm (w x h x d) / 2.3 kg (without lamps)

Common data

Mechanical specifications

The front panel of the boards is made of 5 mm thick laminate, colour matt blue.

The individual components are integrated in the front panel.

Circuit symbols are printed on the front panel in white.

A grey plastic cover protects the back of the unit and is shaped to stand the unit at an ergonomically favourable angle on the desktop.