



photometry



DL722-2L Luxmeter "inno"

Demonstration instrument for measuring light intensity within a wide range; very easy to transport and magnetically mountable; the 26-mm LED display showing the measured value allows precise readings to be taken even at a great distance

Technical data:

Display: 4 1/2-digit LED display; digit height 26 mm

Measurements taken by an external sensor connected by cable to the device

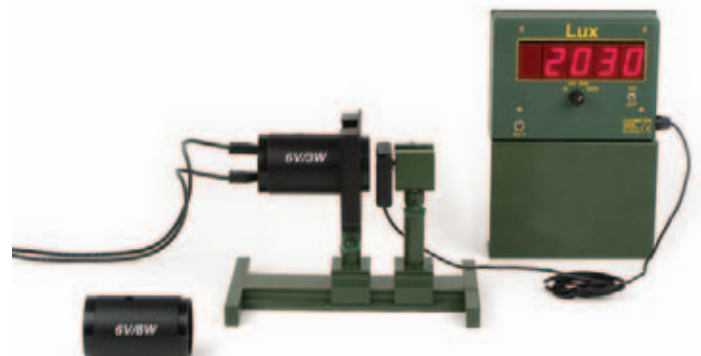
Measuring ranges: 20/200/2000/20000 Lux

Values expressed in candela according to the spectral sensitivity of the human eye

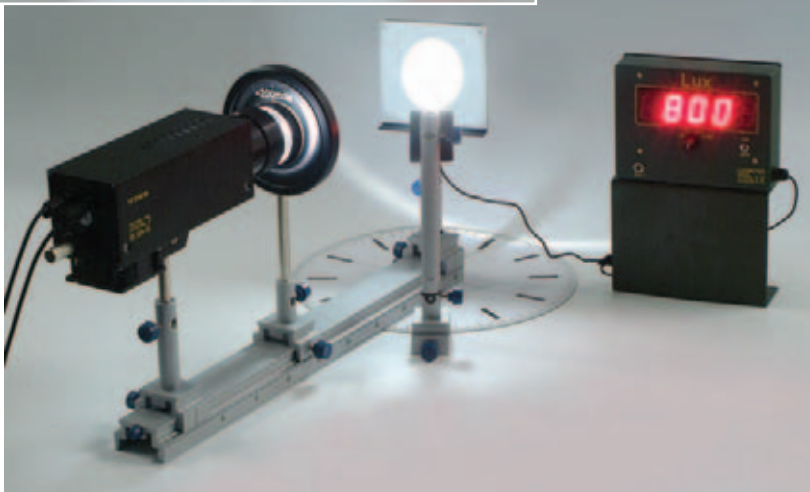
Power supply: 4 x 1.5 V mignon cells (included) or 5.5-mm hollow DC jack for 6 V/500 mA external power supply P3120-6N

Case: green ABS plastic with yellow labelling

Dimensions: approx. 160x120x45 mm; weight: approx. 400 g



Experiment: Measuring light intensity



Experiment: Lambert 's law



DL727-1L Lux meter "handy"

Handheld digital device for measuring luminescence; very wide range and high resolution; splash-proof front panel; external sensor includes a highly sensitive photodiode and a colour correction filter; LCD display, 52x38 mm, and analogue scale

Measuring ranges:

40,00/400,0/4000/40000/400000 Lux (foot-candles)

Zero-reset button (effective only in the 40-lux range)

Precision: 0.01 ... 100 lux

Accuracy: +/-3 %

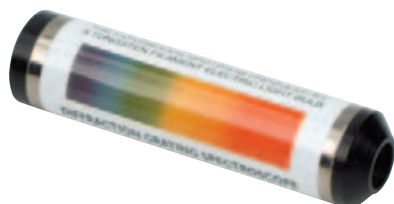
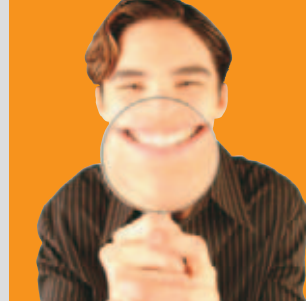
Maximum-minimum storage, data-hold and peak-hold functions, automatic shutdown, RS 232 interface

Power supply: 9 V battery (supplied)

Dimensions: 200x68x30 mm (instrument),

82x55x7 mm (sensor)

Weight: 220 g



DL550-1T Pocket spectroscope

Handheld model for observing spectra in discharge tubes, Fraunhofer lines, flame tests and absorption spectra in liquids; optical system includes a built-in diffraction grating with 600 lines/mm; slit width: 0.2 mm; dimensions: L=115 mm, D=25 mm



DL512-1S Spectrometer and goniometer

For observing and measuring spectra, for measuring the angle of deflection from prisms and gratings and for determining visible dispersion and the index of refraction; rigidly mounted collimator tube ($f = 150$ mm) with an adjustable slit; swivelling platform ($D=170$ mm) with a set screw; equipped with a scale in 1° graduations from $0-360^\circ$; adjacent vernier scale allows readings with a precision of 0.1° to be taken; telescope with set screw and fine adjustment may be swivelled around the platform; prism table with three levelling screws as well as tapped holes for mounting the holder for prisms or gratings (included); supplied in a wooden case

Dimensions: height: 210 mm; length: 530 mm; weight: 4.5 kg

Additionally required:

DL515-2P Prism, flint glass

Average index of refraction: 1.62; average dispersion: 0,017

DL402-3R Slide with line grating, 600 lines/mm, glass

High-quality grating for quantitative experiments in spectrometry
Grating size: 25x25 mm; dimensions: 50x50 mm



DL512-2G Precision spectrometer and goniometer

For observing and measuring spectra, for measuring the angle of deflection from prisms and gratings and for determining visible dispersion and the index of refraction; rigidly mounted collimator tube ($f = 178$ mm) with an adjustable slit; swivelling platform ($D=150$ mm) with a set screw; precision of readings: $1'$; telescope with set screw and fine adjustment may be swivelled around the platform; rotatable prism table with three levelling screws as well as tapped holes for mounting the holder for prisms or gratings (included); supplied in a wooden case



Additionally required:

DL515-2P Prism, flint glass

Average index of refraction: 1.62; average dispersion: 0.017

DL402-3R Slide with line grating, 600 lines/mm, glass

High-quality grating for quantitative experiments in spectrometry
Grating size: 25x25 mm; dimensions: 50x50 mm



Experiment:
Measuring the spectral lines of the mercury vapour lamp