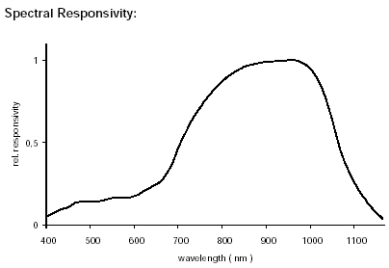
Product Information
Laser Power Meter — IPM-100H B/N

Laser power measuring device with additional measurement of scattered light/power density

Properties / Characteristics

- ➔ easy to handle with separate detector
- ➔ measuring range up to max. 100 mW@633nm
- ➔ detector area with a diameter of 7 mm for measurement of scattered light
- ➔ excellently suitable for laser classification acc. to EN 60825 and IEC 60825
- ➔ wave length range from 400 to 1100 nm
- ➔ easy adjustment of wave length
- ➔ measuring function for maximum values = peak hold function
- ➔ offset comparison
- ➔ good price-performance ratio
- ➔ battery power for 100 hours
- ➔ also suitable with mains cable (optional)
- ➔ RS232 interface
- ➔ incl. hard top suit-case

IPM-100H B/N



Description of IPM-100H B/N

The IPM-100H is a measuring device easy to handle to be used for measuring the visual power of laser sources (e.g. semiconductor laser, solid laser, gas laser) within a wave length of 400 to 1100 nm. Before starting the measurement following points have to be determined: press “detector” and then adjust the correct wave length. The adjustment is carried out in 10 nm intervals. The indication in power (mW) or power density (mW/cm²) has to be chosen additionally and will be shown on the LC-display

Measurement of collimated jets < Ø 7 mm

Parallel bundles of rays with a diameter of < 7 mm can clearly be measured. Following two modes are suitable:

1. CW – running power measurement
2. Peak – determination of maximum value

Measurement of collimated jets < Ø 7 mm and measurement of scattered light – power density

Bundles of rays with a diameter of > 7 mm can be measured by adjusting mW/cm². The total power of laser jet can be estimated depending on the intensity of the total jet profile.

The risks and methods of laser classification and limit test are described in laser protection directive EN 60825 and IEC 50825. Especially scattered light of lasers of classification 3b and 4 may harm human skin and eyes. Therefore it is necessary to have an aperture of 7 mm. The indication is carried out in mW/cm². You can choose between CW and peak measurement.

Technical Data

Wave length range	From 400 to 1100 nm, resolution in 10 nm intervals
Power measuring range	From 1µW to 100 mW@633nm with a resolution of 0,00002 mW @ 633 nm*
Power density measuring range	From 2,5 µWcm² to 250 mW/cm² with a resolution of 0,5 µW/cm² @ 633 nm*
Dimension of detector	Ø 7 mm
Calibration	By means of calibrated light source, sizing data filed in meter, incl. sizing certificate by producing company
Indication of measuring value	LC-display (six-figure number), letter height 9 mm, additional indication of operation mode, battery low, CW, peak, stop
Operation	Foil keyboard, 3 function keys
Current supply	IPM-100HB: 9V block battery, operating time about 100 hours; IPM-100HN: supply by mains cable 230V/50Hz
Interface	RS232 9 pin Sub-D, by means of interface cable (optional)
Dimensions	Indication device: 120 x 65 x 22 mm, 159 gr. Detector: Ø 37 mm, height 8 mm, cable length about 2 m
Operating temperature area	From 5 to 40 degr. C, 75 % of rel. humidity, no condensation
Store temperature area	From 0 to 50 degr. C

*depending on measuring range

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