
POWER METER OF OPTICAL PULSES OF LASER EMITTERS «ERBY-7150»

The device is intended to measure the peak power of optical radiating pulses of laser emitters. It measures the amplitude of the optical pulses and their duration and frequency in a wide range of values and displays them on the integrated LCD display.

The device has four modes of measurement, making it a universal tool for measuring:

- Measurement of power and time parameters of pulsed illumination;
- Search for a pulse with maximal amplitude;
- Capture and measurement of a single optical pulse;
- Measuring the power of constant light (instantaneous and maximum).

The characteristics of the device:

- The illumination power (pulse amplitude) is from 1 mW to 1000 mW.
- Three measuring ranges: 1–10, 10–100, 100–1000 mW.
- The maximal allowed average illumination power is 40 mW (the restriction of internal measuring sensor).
- The measuring pulse width is from 5 μ s to 6 ms and more.
- The pulse repeat period is from 25 μ s to 1 sec and more.
- The minimal interval between pulses is 20 μ s.
- The resolution of the measurement of pulse duration and pulse repeat period is 100 ns (provided if pulse rise/fall time is not more than 50 ns).
- Accuracy of timing is 0,01%.
- Sensitivity range of the sensor is 470–1100 nm.
- Power supply: 220 V, 50 Hz (external supply).
- Operating temperature is from 0 °C to +40 °C.

The measuring head is placed in a single package with the device, which has a small weight and size and provides easy measurement. The bright LCD display makes it convenient for the measurement of any background illumination.

In the modes of pulsed or constant illumination the device has the function of retaining the values displayed by pressing the «Hold» button. In the mode of search for maximum amplitude of the pulse and in the mode of single pulse capture parameters are automatically found on the display until you press the «Reset» button.

Measurement parameters are stored in nonvolatile memory of the device and restored at next power up.

The device has an indicator exceeded the maximum allowed illumination power, power connector «SR50» for connecting an oscilloscope (to monitor the pulse shape) and audible indication of operating modes.

On request the device can be equipped with the connector for PC connection to monitor the pulse parameters on the computer screen and its recording and printing.

More information, photos, description: <http://erbysar.com/7150.htm>

MANUFACTURER: «ERBY» LLC

Address for mail: p.o. box 3300, Saratov, Russia, 410054

Tel. +7 (8452) 58-41-64; +79616477258

Site: <http://erbysar.com/>

E-mail: info@erbysar.com



The winner of the VI Saratov Salon of inventions, innovations and investments, 2011 (the medal of the III degree)