PYROELECTRIC USB METER OF LASER PULSE ENERGY

Areas of Application

The device is to be used for measuring energy and time parameters of laser radiation in R&D centers, industry, and medicine

Specification

Two types of laser energy meters are proposed: the energy meter with a thin sensitive element of absorptive type (VEP-1) and the energy meter with a transparent sensitive element for high energies measurements (VEP-9P); the measurements are made without interruption of process operations



T Meter		E 8 🗙
Device an Measurement Parameters Output volts	ige graph Energy graph Calibration	Pa da Ta- Periodic
115.6	619.5	5.4
Energy (mJ) Measurements are taken	Average power (mW)	Frequency (Hz)

Data display on a PC monitor

	VEP-1	VEP-9P
Wavelength range, µm	0.2-12.0	0.35-4.5
Energy range, J	1 · 10 ⁻⁶ — 2.5 · 10 ⁻³	2.5 · 10 ⁻³ – 5 · 10 ⁻¹
Energy resolution, J	10-7	10-4
Max energy density, J/cm ²	1.5 · 10-2	2.5
Max pulse duration, ns	0.1 - 100	

Основні параметри вимірювачів

Advantages

The compact pyroelectric meter of laser pulse energy and average power does not yield to the world leading counterparts. Its software enables data registration on PC via USB interface, without adapters

Stage of Development. Suggestions for Commercialization

IRL3, TRL4

Manufacture and warranty service, upon request; investors and corporations for commercial production are invited

IPR Protection

IPR3, IPR4

Contact Information

Petro P. Pogoretskyi, Institute of Physics of the NAS of Ukraine; +38 044 525 98 41, e-mail: p.pogorets@gmail.com