



# PM 200

## Laser Energy Meter With High Dynamic Range

- High sensitivity
- Analogue and digital display
- low noise
- Computer interface and software available
- Incl. pyroelectric detector with meter ranges from 3  $\mu$ J to 200 mJ



In the past laser energy meters often required a whole selection of pyroelectric detectors for measuring different energies. From this point of view the PM 200 is a very modest instrument. A single detector enables monitoring of energies from the detection limit at 3  $\mu$ J up to highest energies of 200 mJ. The active sensor area with an aperture diameter of 34 mm ensures simple and reliable alignment for the detection of large beam profiles. Various others, as well as detectors for higher energies, are available on request.

For fast and comfortable tuning alignments the pulse energies are displayed by an analogue meter. Simultaneously, a 3.5 digit LCD display gives the precise value of single shot energies for accurate fine adjustments. Additionally, the

common practice of continuously switching meter ranges is essentially made obsolete by the digital readout.

A further interesting feature of the PM 200 is the effective suppression of noise by the signal preamplifier that is directly build into the sensor head.

The 'Sync Out' output supplies TTL pulses for synchronisation. In addition the detector signal can be observed (e.g. by an oscilloscope) using the BNC socket. The 'Out 0.5 V' BNC socket delivers a DC voltage proportional to the measured pulse energy e.g. for connecting a chart recorder.

Optionally, the PM 200 comes equipped with an intelligent RS 232 interface for remote control and data acquisition via computer.

	<i>Standard</i>	<i>High Sensitivity</i>	<i>High Damage</i>
Ranges	3 $\mu$ J – 200 mJ	0,5 $\mu$ J – 20 mJ	50 $\mu$ J – 20 J
energy density	150 mJ/cm <sup>2</sup>	150 mJ/cm <sup>2</sup>	1 J/cm <sup>2</sup> (308 nm)
power density	8 MW/cm <sup>2</sup> (10 ns Pulse)	8 MW/cm <sup>2</sup> (10 ns Pulse)	50 MW / cm <sup>2</sup> (308 nm)
average power	400 mW	400 mW	10 W
active area	Ø 34 mm	Ø 34 mm	Ø 45 mm