

Series PEM USB

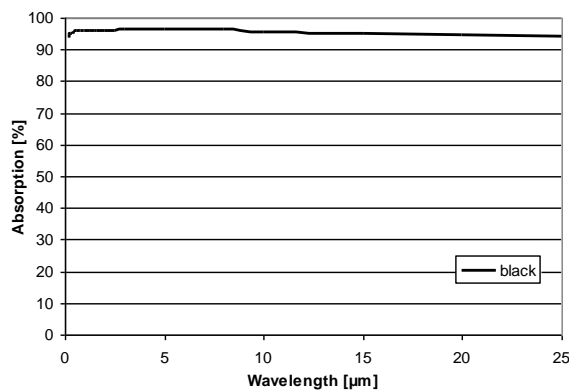
This pyroelectric detectors PEM45KUSB respectively PEM45USB are a combination of a robust pyroelectric sensor with a read out electronic with USB-port. It can be connected to an oscilloscope using the BNC-connector or to a PC using the USB port. In USB mode the BNC connector is an external trigger input.

The output signal is transferred to a connected PC via USB. The device is powered from the USB-port. To display the measured values an user friendly software is available.

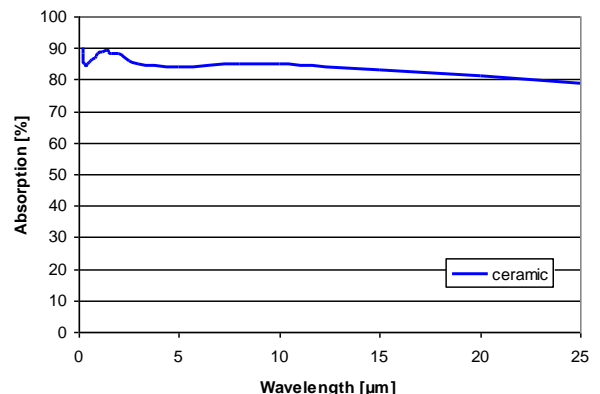
The PEM 20 USB is the result of the combination of a very sensitive and low noise sensor with a high quality preamplifier for lowest laser energies. In comparison to other products in this class of sensitivity our detector features a large aperture and a windowless design.

A comfortable user interface allows a comfortable operation with a lot of display and analysis possibilities. For initial operation no driver installation is necessary. For own applications a DLL and a Labview library is available.

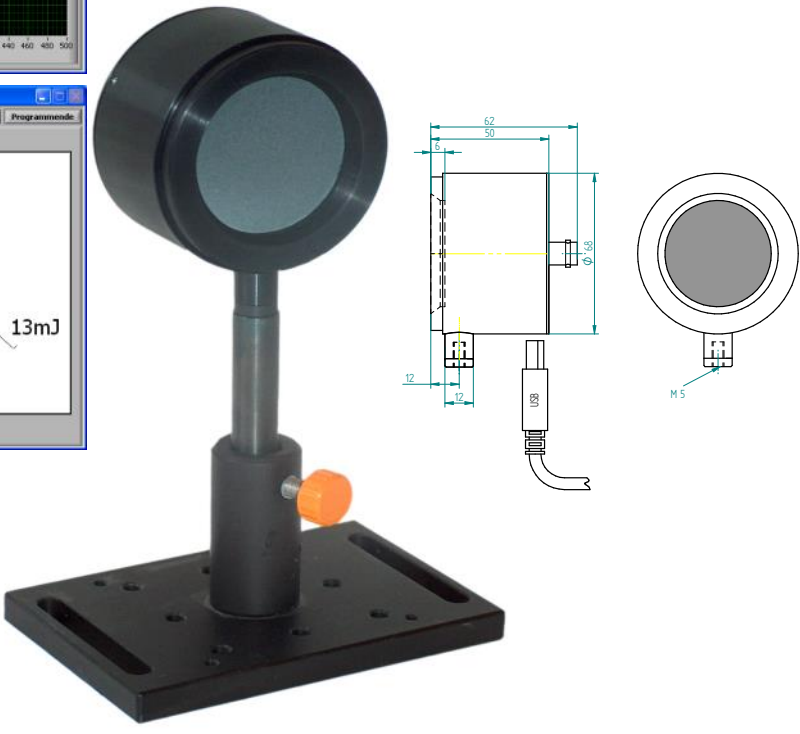
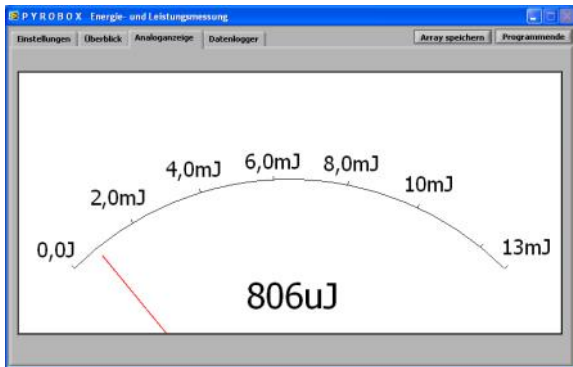
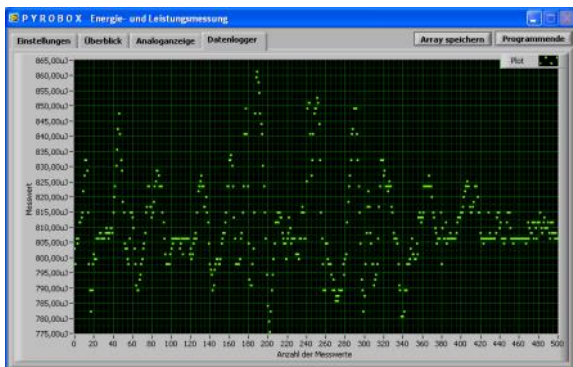
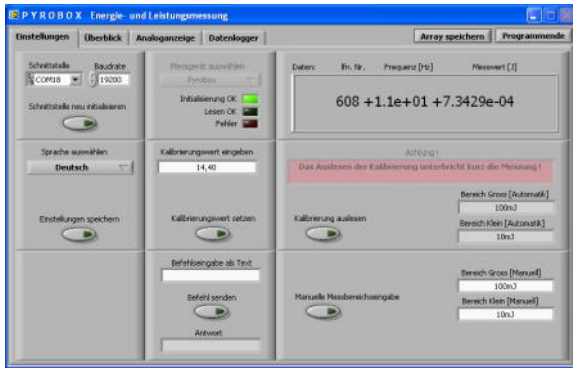
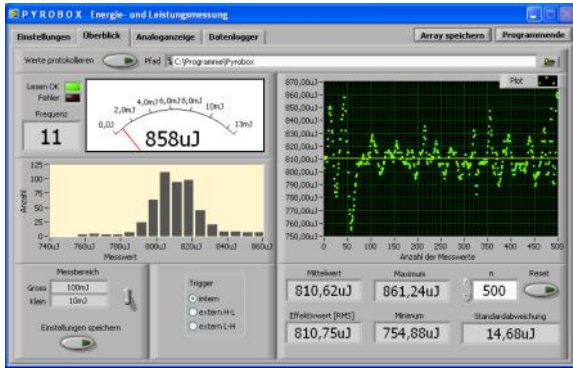
| | PEM 20 USB | PEM 45 USB | PEM 45 K USB |
|-------------------------------|------------------------------|------------------------------|------------------------|
| active diameter | 20 mm | 45 mm | 45 mm |
| sensitivity with oscilloscope | — | 8 .. 15 V/J | 1,5 .. 3,5 V/J |
| working range with USB | 250 nJ - 2.5 mJ | 100µJ – 200 mJ | 1 mJ – 1 J |
| repetition rate | 80 Hz | 30 Hz | 30 Hz |
| max. average power | | 5 W | 5 W |
| max. energy density | 80 mJ/cm ² | 80 mJ/cm ² | 1 J/cm ² |
| max. pulse density | 8 MW/cm ² | 8 MW/cm ² | 120 MW/cm ² |
| accuracy | ±3 % | ±3 % | ±3 % |
| connector | USB | BNC, USB | BNC, USB |
| dimension | 70 x 42 x 18 mm ³ | diameter 68 mm, length 53 mm | |



Absorption PEM 45 USB, PEM 20 USB



Absorption PEM 45 K USB



Basics

Calibration

Displays

Energy Detectors

Power Detectors

THz Detectors

OEM

Amplifiers