



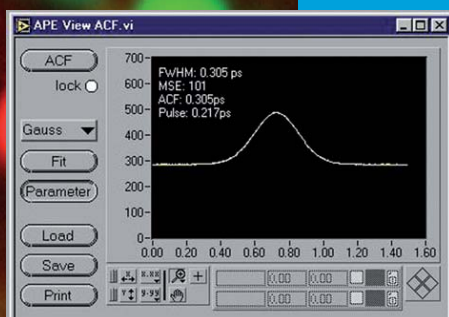
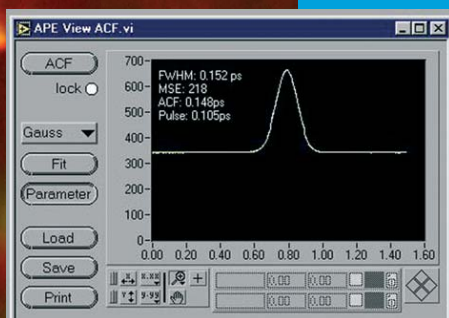
Carpe

The Carpe is the first commercial autocorrelator to measure the pulse width of fs lasers at the output of laser microscopes. The power of the laser at the position of the sample can be measured as well with the power detector in the detector head.

The Carpe can measure the pulse width at both the sample position and the microscope input port. This enables to examine the influence of the microscope optics on ultrafast pulses and to optimize the pulses at the relevant position. The Carpe works with high NA objectives and immersion objectives. Due to the thickness of the detector cover, the minimum distance required between the focal point of the objective and the housing of the objective (working distance) is 0.5 mm. To use objectives with a working distance below 0.5 mm, a short working distance option, operating with a different detector principle, is available.

The compact instrument is simply inserted into the beam between laser and microscope. It does not require any changes in the setup and it does not interfere with the measuring beam.

- Power detector at sample position
- Easy alignment
- Femtosecond resolution
- Wavelength measurement (optional)
- Windows-based Control Software included
- RS-232 or USB interface
- Pulse width measurement before microscope and at sample position



Scan ranges	150 fs ... 15 ps
Measurable pulse width	50 fs ... 3.5 ps
Scan rate	approx. 10 Hz
Wavelength range	700 ... 1100 nm 700 ... 1000 nm (High Power Version)
Laser repetition rate	> 500 kHz
Sensitivity	1 W ²
Power detector measurement range	0 ... 30 mW 0 ... 300 mW
Working distance (standard)	> 0.5 mm (shorter optional)
Input polarization	linear / horizontal

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

External photodetector for pulse width measurement (the photodiode for power measurement is on the reverse site).



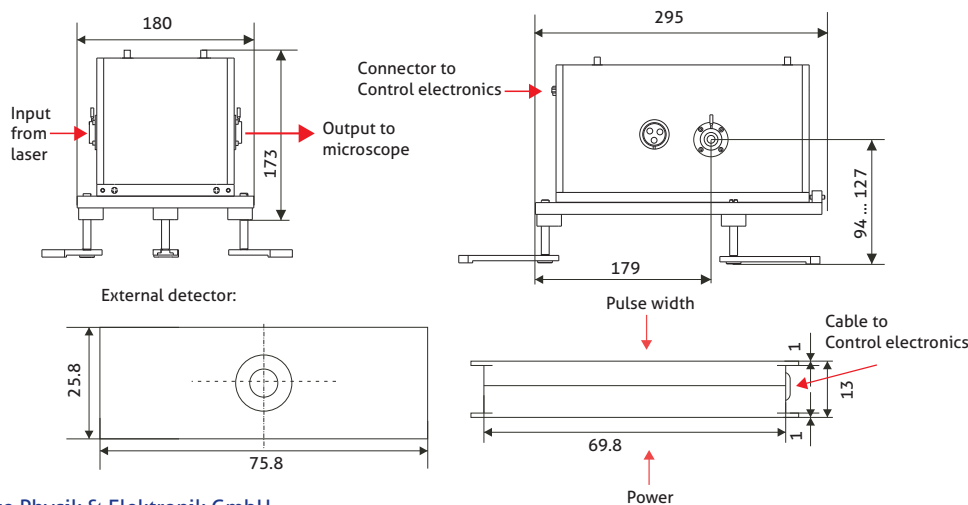
Microscope slide for comparison

Options

- ShortPulse Option available for 30 fs - please ask
- Short working distance option
- Wavelength measurement
- Dispersion management in combination with A.P.E pulse compressor *femtoControl*
- High Power Sensor (700 ... 1000 nm)

Dimensions (in mm)

Control electronics: 267 x 180 x 312 (W x H x D)
Optical head: see below



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Therefore, specifications are subject to change without notice.
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