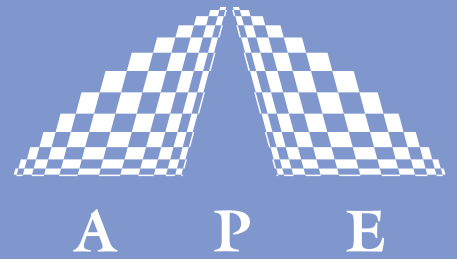
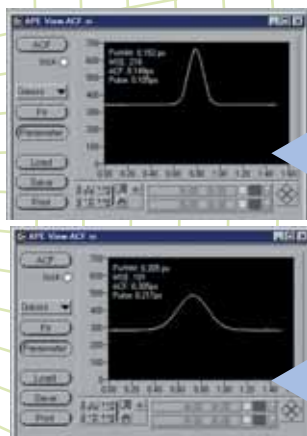


CARPE



AUTOCORRELATOR FOR MICROSCOPY



ESSENTIAL MEASUREMENT TOOL FOR ULTRAFAST LASER MICROSCOPY

CARPE is an autocorrelator specifically designed for applications of ultrafast laser pulses in microscopy: It provides information about the laser pulse before and after it has travelled through the microscope. The instrument is simply inserted in the laser beam between the laser and the microscope. It doesn't interfere with the original beam path. Additionally, **CARPE** features power and, optionally, laser wavelength measurement.

OPTIMIZATION OF MEASUREMENT CONDITIONS

The separate external detector of the same size as a microscope slide measures the pulse where it matters: at the position of the sample. This way, one can clearly observe the effect of the microscope optics on the ultrafast laser pulse.

DISPERSION MANAGEMENT

The Combination with the APE pulse compressor **FemtoControl** offers a remote controlled optimization of pulse duration.

Pulsewidth measurement at sample position

Easy alignment

Femtosecond resolution

Wavelength and power measurement

Pulsewidth
before the microscope
at the position of the sample

Ultrafast Pulse Diagnostics

Spectral Analysis

Acoustooptics

Pulse Management

Wavelength Conversion

Your Partner in Ultrafast

SPECIFICATIONS

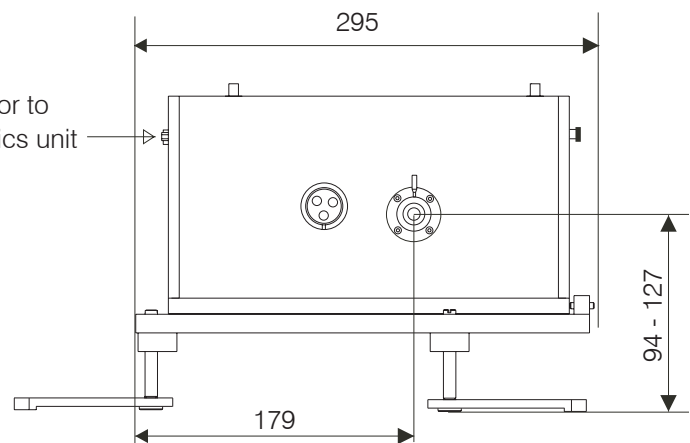
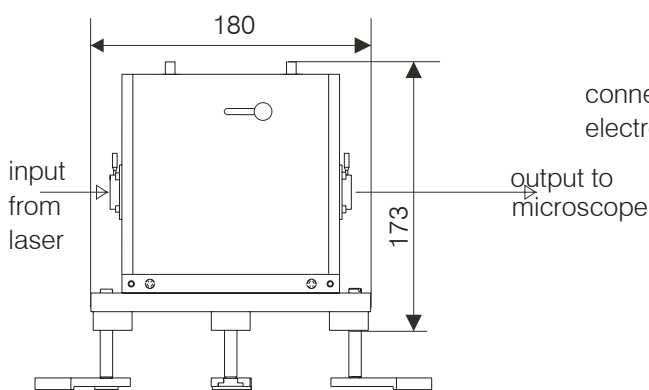
| | |
|-----------------------------------|---|
| Scan ranges | 150 fs ... 15 ps |
| Maximum measurable pulsewidth | 3.5 ps |
| Minimum measurable pulsewidth | 50 fs |
| Scan rate appr. | 10 Hz |
| Wavelength range | 700 ... 1100 nm |
| Power detector measurement ranges | 0 ... 30 mW; 300 mW |
| Input polarization | Any |
| Minimum laser repetition rate | 50 kHz |
| Power supply | 95 ... 240 V, 50 ... 60 Hz |
| Readout | Colour-LCD 320 * 240 pixel |
| Outputs | Delay, AC-Intensity (analog 0 ... 10 V) Power Monitor (analog 0 ... 5 V) |
| Interface | RS232 |

OPTIONS

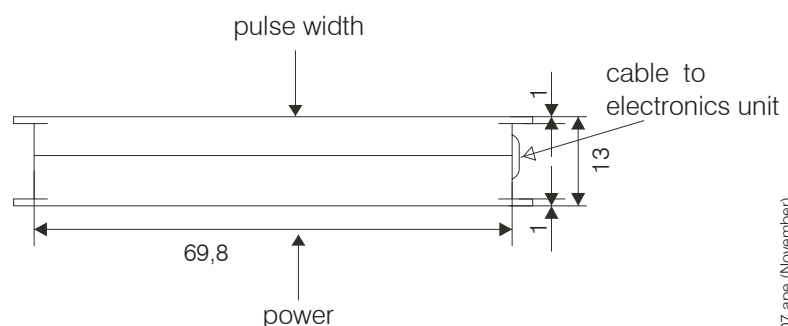
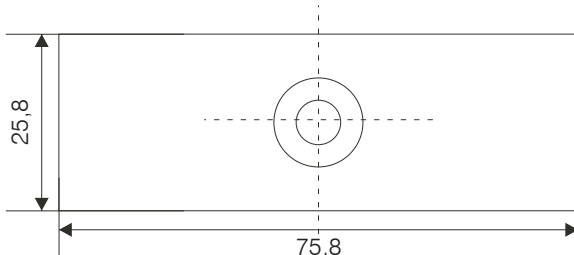
Wavelength measurement
 USB and IEEE interfaces
 Windows control software
 LabView driver
 Dispersion management in combination with
 APE pulse compressor **FemtoControl**

DIMENSIONS

Control Electronics (w*I*h in mm³) 275*279*240
 Optics Unit:



External detector:



Distributoren:
 see APE website