



Diagnostics

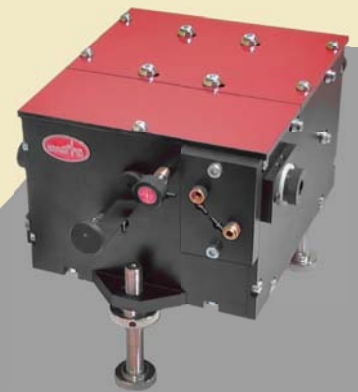


AA-10DD Scanning Autocorrelator

- 10-6000 fs pulse duration range
- Scanning rate: 0.1-20 Hz
- Linear distortion: <1%
- USB connection and software
- All-reflective optics
- Position measurement
- Fringe-resolved autocorrelation function
- Frictionless movement
- Optional fiber input



AA-10DD



AA-10DDM

Product overview

The AA-10DD real-time autocorrelator offers smooth and fast measurement of femtosecond and picosecond pulse duration. Different models of the autocorrelator cover several wavelength ranges, with the AA-10DDM model combining the ranges by using 3 interchangeable photodetectors and optics. Two separate ranges can also be covered upon request. Input pulse duration ranges from 10 fs to 30 ps for easy monitoring of different laser systems, especially femtosecond and picosecond oscillators (for amplifier monitoring please see our ASF-20 single-shot autocorrelator).

The device features USB interface and can be easily hooked up to a PC with Windows OS. The software is supplied with the device and comprises several useful tools. The acquired pulse duration data can be visualized, stored or exported to a .txt or .dat file. Autocorrelation function and final FWHM pulse duration in femtoseconds are calculated and displayed in real-time. Moreover, Gaussian or sech² fitting options are enabled, intensity function may also be observed. The statistical viewer feature allows the comparison of data acquired from several separate pulse measurements.

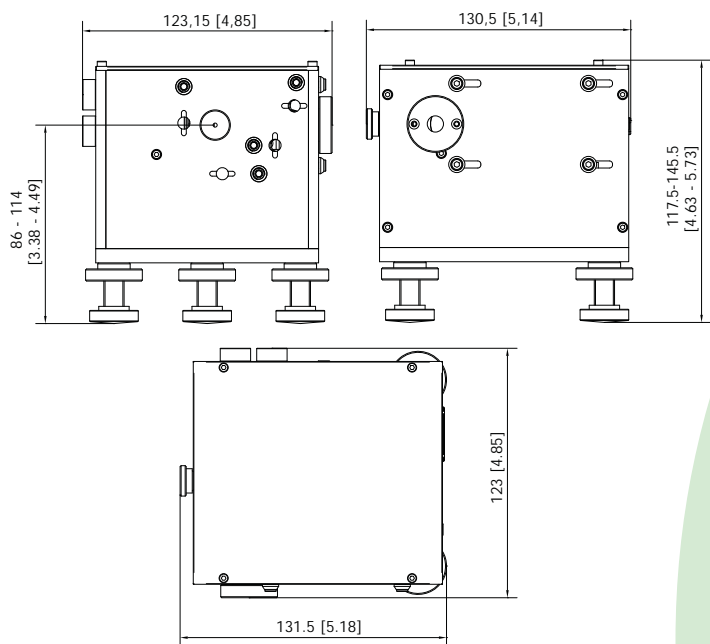
The tiny body of the AA-10DD (132x123x118 mm) flawlessly fits any experimental setup with strict space requirements.

We also offer an optional fiber input for fast and reliable pulse duration measurement in various optical fibers. Moreover, the autocorrelator in this case still maintains the free-space measurement capability.

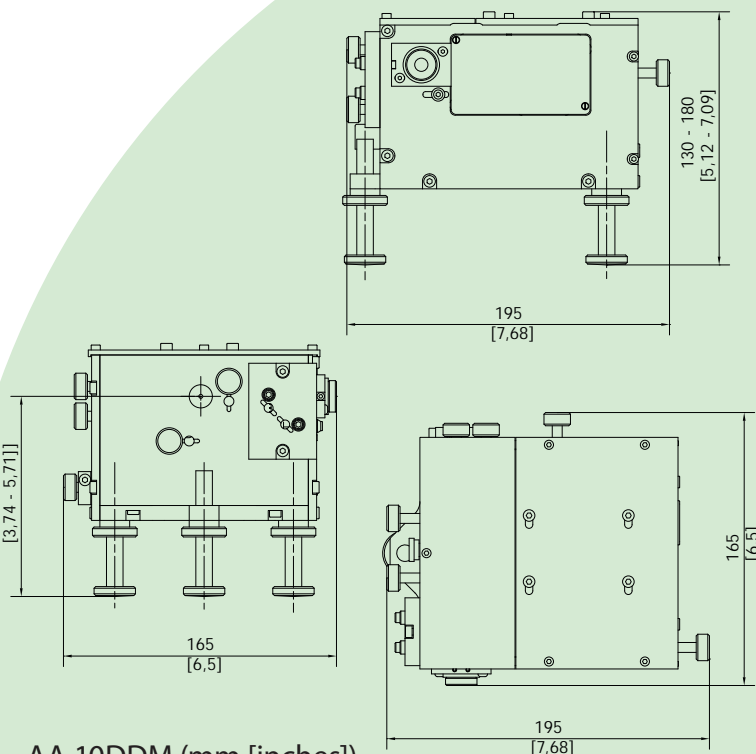
AA-10DD technical specifications

Wavelength range, nm	450-700 (AA-10DDV) 700-1300 (AA-10DD) 1300-2000 (AA-10DDR) 450-2000* (AA-10DDM)
Pulse duration range, fs	10-6000 (default); 10-30000 (-30PS option)
Input repetition rate	>8 kHz (default); >10 Hz (-S option)
Sensitivity	100 mW ²
Input polarization, linear	horizontal (vertical upon request)
Scanning rate, Hz	0.1-20
Linear distortion, %	<1%
Collinear (interferometric and intensity) autocorrelation	yes
PC connection	USB
Necessary equipment	PC with Windows OS or oscilloscope
Fiber input (optional)	FC/PC or FC/APC (other types available upon request)
Signal source and detector	two-photon conductivity in semiconductor
Dimensions, mm	132x123x118 (AA-10DD) 195x166x130 (AA-10DDM) 225x190x45 (electronic unit)

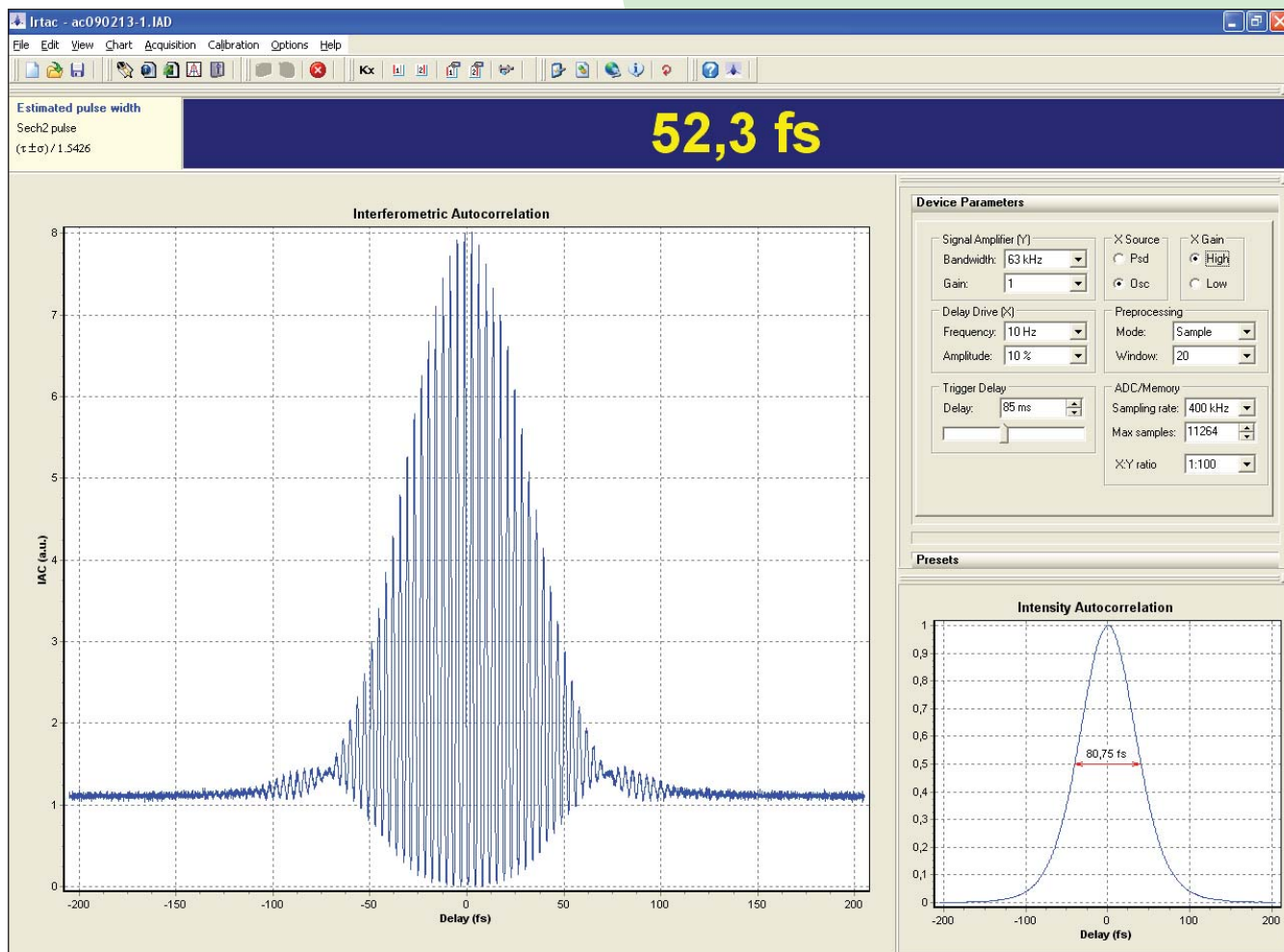
* - model AA-10DDM may cover either all three ranges (450-2000 nm) or two separate ranges (i.e. 450-1300 or 700-2000) with interchangeable optics and photodetectors (3 or 2 sets included).



AA-10DD (mm [inches])



AA-10DDM (mm [inches])



AA-10DD acquisition software Irtac