

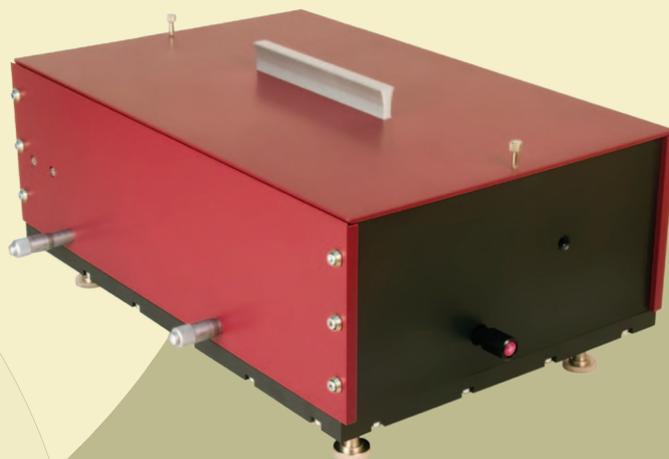


Components



Pulse Compressor APC

- Ideal for multi-photon microscopy
- Simple adjustment and operation
- Bypass function



APC pulse stretcher/compressor

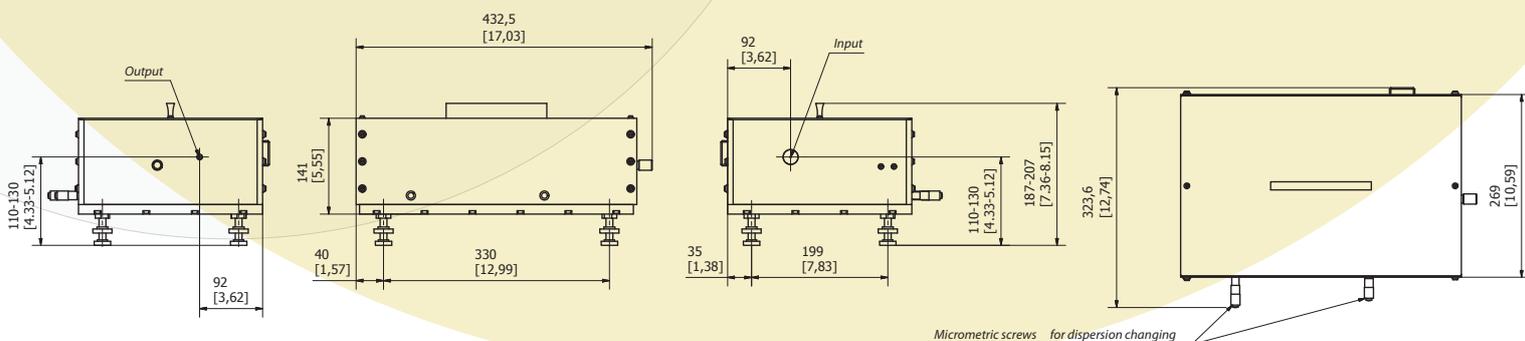
Product overview

Avesta's pulse compressor APC is used for controlling dispersion amount of Ti:Sapphire femtosecond laser radiation (other wavelengths are available upon request). The ability to change GVD (group velocity dispersion) at wide range allows to pre-compress dispersion introduced by additional optics, for example, optical parts of the microscope and obtain minimal pulse duration directly at the irradiated sample. Input and output beams are located at the same height and have the same direction to considerably simplify the alignment of your setup. Scheme of the device supports possibility of direct beam pass-through bypassing the dispersive elements. Two variants of the APC compressor possess different dispersion ranges for various possible setups.

For example, a transform-limited Gaussian-shaped pulse with duration of 100 fs at 800 nm is passing through microscope optics with total positive dispersion of 8000 fs², that corresponds to pulse broadening to 254 fs. Our device helps to add negative dispersion to the fs pulse before injecting the pulse into the microscope. This ensures that you have the same 100 fs transform-limited pulse at the studied sample.

Optimal pulse management can be achieved by the combination of APC pulse compressor and the Avesta's scanning autocorrelator AA-10DD (microscope-adapted version available).

APC technical specifications



	APC	
Wavelength ranges, nm	700-900*	
Dispersion range min-max, fs ²	(+7000) - (-7500)**	(+1000) - (-13000)**
Additional internal beam path, m	2.3	2.8
Max. input beam diameter, mm	4	
Input polarization	horizontal (polarization rotator optional)	
Transmission	>90% @800 nm	
Dimensions, mm	410x324x186	

* - other wavelengths available upon request

** - other dispersion ranges available upon request