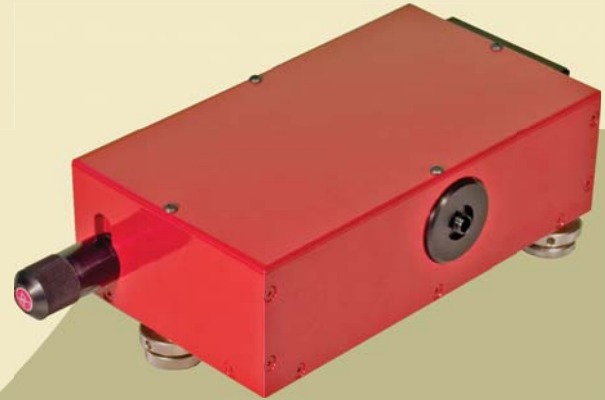




Spectrometer ASP-150C (ASP-150T)

- Tunable
- Compact
- High resolution up to 0.017 nm
- USB interface
- No power supply unit
- Synchronization input/output



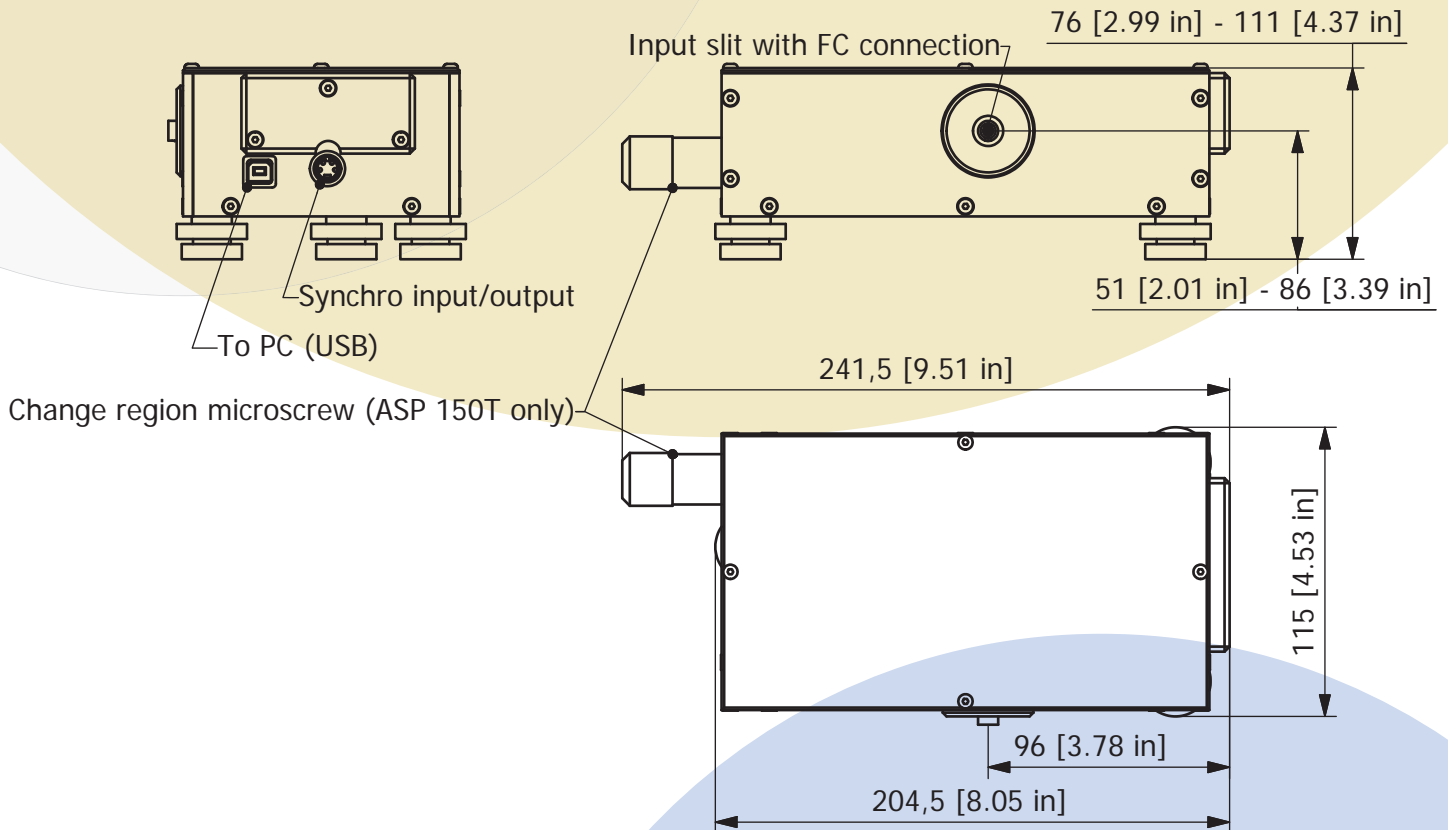
Spectrometer ASP-150T

Product overview

The ASP-150C spectrometer is an ideal choice for a wide variety of different optical applications with its flexible tuning and high resolution.

The ASP-150T model is able to carry out measurements in a wider spectral range without any losses in resolution, owing to a special rotating mechanism.

There is always a place for the ASP-150C on the optical table due to its small size, functionality and friendly interface. Models ASP-150CF and ASP-150TF have the special fiber input with a spectral slit, the size of which is conditioned with the detector. It allows measurement of either free-space or fiber signals without any realignment. However, it is not recommended to use fiber to measure spectrum of a femtosecond laser due to signal modulation and subsequent spectrum distortion.



Optical scheme	ASP-150C(ASP-150T)							
	Cherny-Turner							
Spectral range for choosing the registration domain, nm	190-1100	190-1100	190-1100	190-1100	190-1100	190-800	190-450	190-300
Grating, grooves/mm	200	300	400	600	1200	1800	1800 II order	1800 III order
Registered spectrum region width, nm*	950	640	480	315	145	90	40	25
Spectral resolution, nm	0.6	0.42	0.3	0.2	0.09	0.06	0.025	0.017
Dispersion, nm/mm	33.2	22.4	16.8	11.0	5.1	3.1	1.4	0.9
Input slit, μm	15							
Focal length, mm	150							
Focal length of the camera objective, mm	150							
Relative aperture	1:13							
Array	Toshiba 1205D		Toshiba 1304AP			Hamamatsu S8378-1024Q		
Number of cells	2048		3648			1024		
Cell width, μm	14		8			24		
Cell height, μm	200		200			500		
Minimum exposure time, ms	7		7			2,1		
Maximum exposure time, s	4		0,5			5		
Sensitivity, V/lx*s	80		160			22(4,4)**		
Antiblooming***	yes		no			yes		
Meansquare noise of reading, counts of ADC	5,4		3,5			16(4,4)**		
ADC	12 bit, 4096 counts		12 bit, 4096 counts			14 bit, 16384 counts		
Dynamic range	1000:1		1000:1			1000:1 (4000:1)**		
Fiber input****	FC, 400 μm UV fiber cable included (1 m.)							
Synchronization	external/internal							
PC connection	USB							
Dimensions, mm	76x115x241.5 (ASP-150T); 76x115x204.5 (ASP-150C)							
Weight, kg	1.6							

* - The necessary width and center of the registered range should be specified when placing an order. The ASP-150T has an operational range adjustment function.

** - The HAMAMATSU arrays provide for sensitivity control via special driving signal, that can set either low () or high sensitivity mode.

*** - Antiblooming - the property of the CCD to prevent the charge flow from the neighboring overexposed pixels.

**** - For models ASP-150CF and ASP-150TF.