

MSA-130 - Double Additive/Subtractive Monochromator



just turn the knob to switch between two operation modes !

- **Double monochromator for Excellent Stray Light Rejection**
- **Subtraction & Addition Modes**
- **Compact & Economical**
- **High Throughput**

Main feature of the MSA-130 is its capability to operate in the modes of both addition and subtraction of dispersions. It is <two in one>, the only instrument in the world capable to provide both modes without any additional alignment and calibration. Addition and Subtraction modes are exchanged by manual switching of a selector knob from the position "Addition" to "Subtraction" and vice versa.

In the Dispersion Addition Mode MSA-130 has effective focal length of 260 nm and extremely low stray light caused by an intermediate slit and carefully calculated optical design.

In the Dispersion Subtraction Mode MSA-130 serves as a tunable low-stray-light-filter with pass band variable from 0.2nm to 80 nm. Zero-dispersion spectral range separated by the MSA-130 is determined by the intermediate slit. Central wavelength is set from a computer by synchronous turning of two identical diffraction gratings.

Input, intermediate and exit slits have manual control and smooth micrometrical adjustment of the opening width.

The MSA-130 software allows calculating the FWHM in the both operating modes depending on the set widths of input, intermediate and exit slits.

Both input and output ports of the MSA-130 can be equipped with **AFA Aperture Matching System** ensuring input and output to be made using optical fibers.



Aperture Matching Adapter AFA.

Designed to match apertures of an optical fiber and monochromators M266/M833/MSA-130 in order to minimize radiation losses and light scattered in the system.

Contains two achromatic objectives, SMA-905 connector.

Possibility of axial alignment of the fiber end and of the distance between objectives will ensure effective use of the adapter with a monochromator you already have in your laboratory (F# from 1: 3.5 to 1: 8).



