UV-Monochromator UVM-F/2

High-efficiency fiber-coupled UV monochromator

This motorized monochromator for the wavelength range of $230 \, \text{nm} - 800 \, \text{nm}$ was developed in order to obtain a tunable point light source with a maximum of monochromatic output at a bandwidth of only 5 nm. We especially recommend using our UVM-F/2 monochromator in combination with the EQ-99XFC LDLS Xe plasma lamp from Energetiq. Input and output coupling takes place with solarization-resistant UV-quartz fibers with a cross-section of 200 μm . For achromatic output coupling we offer an optional motorized collimator, which is controlled synchronously to the monochromator. For a beam diameter

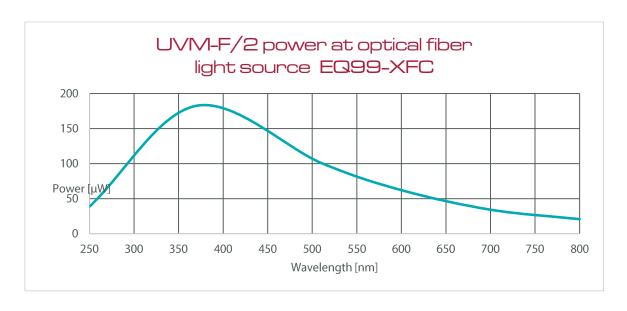


from 4 mm, fiber-coupled reflective collimators are suitable¹. The output performance for a 200 μ m UV-quartz optical fiber with an EQ-99XFC plasma lamp is up to 180 μ W (see diagram below).

In the UVM-F/2 a corrected imaging grating with an F/2 focal ratio produces a spectrum with a length of 25mm, which is directly scanned by the output coupling fiber. Brushless motors allow continuous scanning operation. Control is with LabVIEW ™ Software via a USB interface.

Prices and delivery times on request

Optical fibers	UV-quartz fibers, FC connector, 200 μm core diameter
Wavelength range	230 nm - 800 nm
Aperture	F/ 2
Bandwidth	5nm FWHM
Reproducibility	0.1nm
Scanning speed	>100 nm/s
Control interface	USB, LabVIEW ™ GUI and VIs



¹ Thorlabs RC04FC-F01, RC08FC-F01, RC12FC-F01

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