# Gratings & OEM Division

## **OEM Compact Monochromator MF-34**

The new OEM compact monochromator MF34 has been designed around an aberration–corrected, type IV concave holographic grating.

The diffraction grating plays a triple role:

- □ Collimator
- Dispersing
- □ Focusing

With a 100 mm focal length and a F/2.6 aperture, the new MF34 is equipped with a rapid scanning direct drive system; the wavelength drive is directly coupled to a stepper motor.



4 models are available, from the UV range to the IR range.

The MF34 is made specifically for volume orders. We can offer custom modifications to volume customers.



- ☐ Focal length: 100 mm.
- □ Deviation : 34.7°.□ Aperture : F/#:2.6.

Concave grating.

☐ Dispersion : 7 nm/mm (with 1200 g/mm).

34.7°

Different models of slits are proposed depending on the resolution requested by the customer. The basic model is supplied with a pair of slits of 0.5 or 1 mm width.

Different models of stepper motors are proposed depending on the resolution requested by the customer.

In the basic model, the MF61 is equipped with a 4 phases stepper motor with 12000 step/360°. The spectral range can be scanned in less than 1 sec.

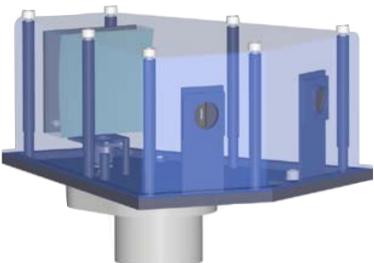
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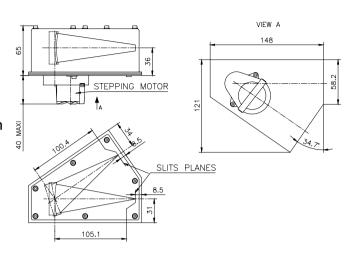
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#### Performances:

- □ Resolution: <1 nm FWHM (with 100 µm\*4 mm slits)
- $\square$  Wavelength accuracy:  $\pm 1.5$  nm with a fitting
- ☐ Step repeatability: ± 0.2 nm (with 1200 g/mm)

  More sophisticated motors can yield better wavelength accuracy and reproducibility.





532 00 530

## 

wavelength (nm)

#### **Options:**

- ☐ SMA connectors (instead of the pair of slits)
- 2 phases stepper motor
- ☐ Other on request

### Applications:

Spectral efficiency curve of the UV model

- unpol

	UV	UV-VIS	VIS-NIR	NIR
Spectral Range (nm)	190 - 800	250 - 850	350 - 950	1100 - 2400
Ref.	MF34-UV	MF34-UVIS	MF34-VNIR	MF34-NIR

The main applications are fluorescence, medical diagnostics, spectrophotometry, environment, clinical chemistry, semiconductor characterization..

We are pleased to work with you to find a suitable solution to your requirements.

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