

# OEM Imaging Scanning MONOCHROMATOR

The H1034B is an all-new Imaging Scanning Monochromator with exceptional straylight rejection.

Spanning the ultraviolet to near infrared, the Model H1034B is just the kind of fast, reliable and reproducible component desired by manufacturers of analytical and diagnostic equipment:

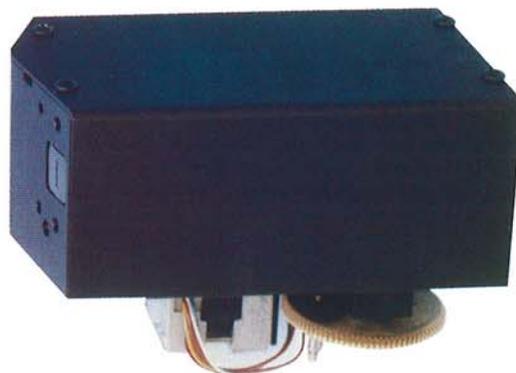
HPLC	Chemical Analysis
End-point Determination	Environmental
Life Sciences	Agricultural/Food
Color Measurement	...and

Drop the H1034B into your product and take data immediately. Each unit is pre-aligned at the factory and tested in accordance with your requirements, ensuring consistently high performance. We work with volume customers on custom modifications.

Advanced holographic grating designs pioneered by ISA deliver performance not possible with other small designs. High efficiency results from the ion-etched, blazed profile. The aberration-corrected concave grating permits a simplified design with excellent imaging properties.

The whole spectrum can be scanned accurately in less than two seconds because of the custom stepper motor/worm gear drive.

## Model H1034B



### Check out these features -

- 185 to 1000 nm
- F/#2.8 - High throughput
- Resolution less than 1 nm
- Factory tested and aligned
- Multi-input imaging

### Grating choices for Model H1034B

Blaze Wavelength	Wavelength Range (nm)	Grating Efficiency
250 nm	185 - 1000	>60% at 250 nm
350 nm	185 - 1000	>60% at 350 nm
500 nm	300 - 1000	>60% at 500 nm

Be sure to ask for the OEM Group

#### In the USA:

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**ISO 9001  
Certified**

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**ISO 9003  
Certified**

**HORIBA**  
Scientific

# Model H1034B Imaging Scanning Monochromator

## Specifications

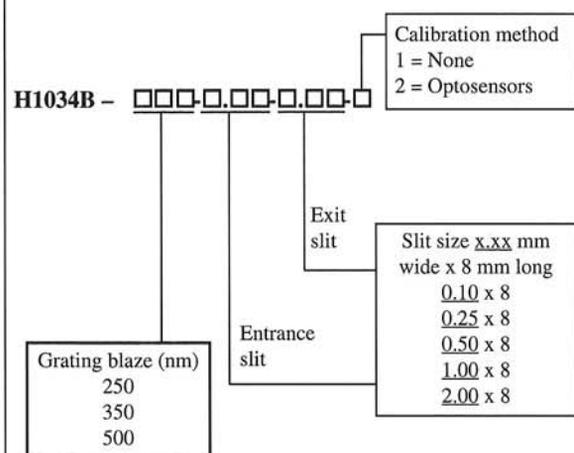
### OPTICAL PERFORMANCE

- **Wavelength range** 185 to 1000 nm
- **Resolution** 1 nm FWHM with 100  $\mu$ m x 4 mm slits
- **F/#** 2.8
- **Grating clear aperture** 34 mm x 34 mm
- **Normalized dispersion** 7.80 nm/mm at 200 nm  
7.92 nm/mm at 500 nm  
7.72 nm/mm at 800 nm
- **Wavelength accuracy**  $\pm$  1 nm with linear fit

### GRATING LAYOUT

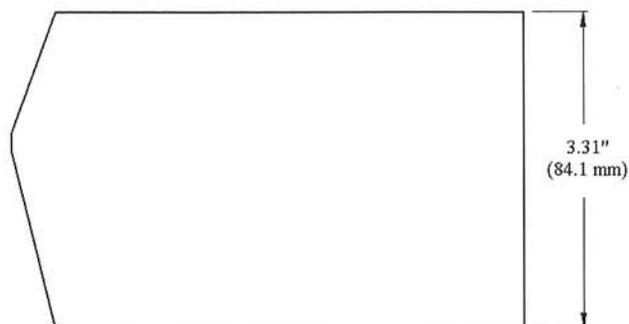
- **Input arm length  $L_A$**  105.1 mm
- **Output arm length  $L_B$**  100.8 mm
- **Deviation angle  $D_V$**  34.7°
- **Groove density** 1200 grooves/mm

### OPTIONS (to be specified at the time of order)

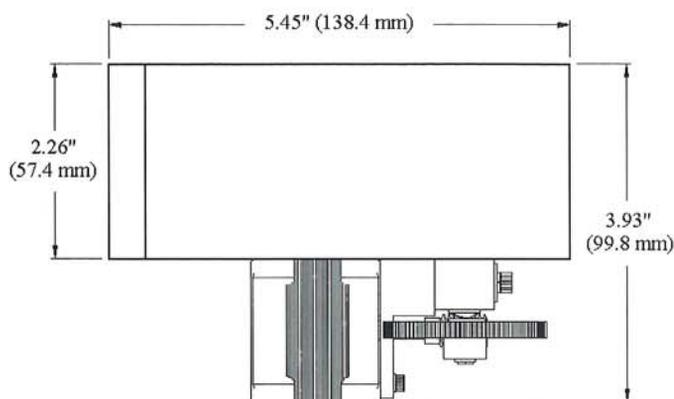


### MOTOR DRIVE

- **Step size** 0.27 nm/step at 200 nm  
0.26 nm/step at 500 nm  
0.24 nm/step at 800 nm
- **Step repeatability**  $\pm$  0.1 nm
- **Motor type** 1.8° stepper operating in half-step mode, 0.01° grating rotation per step, 4 Volt, 0.95 A, 2-phase
- **Grating rotation** 360°



Top view



Side view



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Specifications subject to change without notice.