

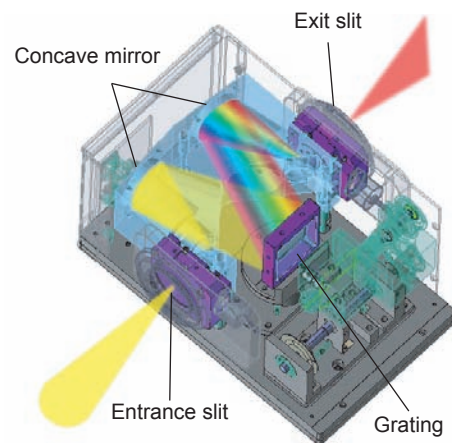
# Single Monochromator CMS-100

**Fast single monochromator with Czerny-Turner design**



## Features

- Tuning wavelength from 250nm to 900nm with our light source
- Monochromatic light (Resolution: 2.6nm~)
- Fast monochromator (F/2.8)
- Adjustable slit width
- Selectable blaze wavelength
- External touch panel controller



Czerny-Turner design

# Scope of Delivery

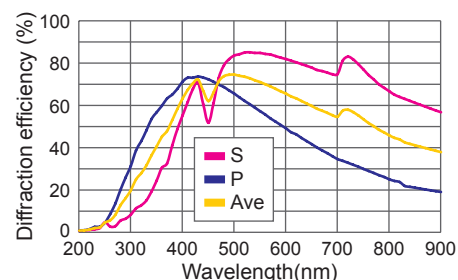
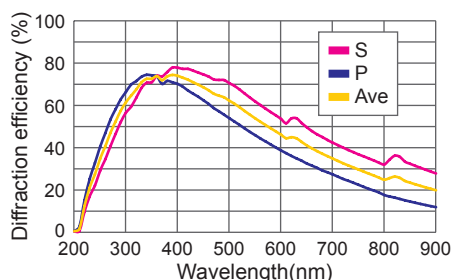
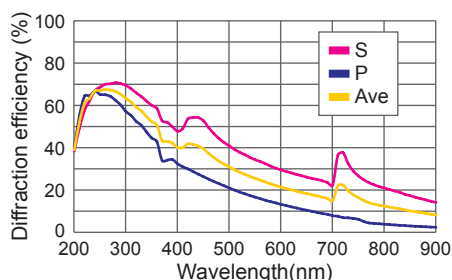
- CMS-100 main unit
- Controller
- Controller cable (1.8m)
- AC adapter
- Instruction manual

## Blaze Wavelength and Diffraction Efficiency (Groove density 1200g/mm)

1: Blaze wavelength: 250nm

2: Blaze wavelength: 400nm

3: Blaze wavelength: 500nm



\*Groove density 600g/mm is also available.

## Options

- Program control library (API) \*Downloadable from the website  
Library for program control of the CMS-100
- RS485 cable
- Adapter cable



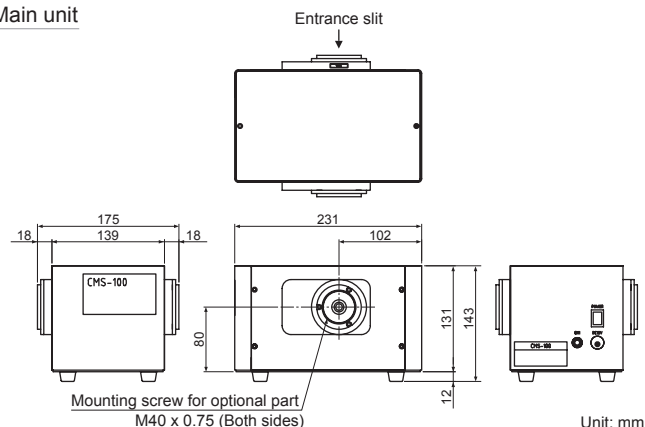
- Collimator lens unit  
Lens unit for emitting the parallel light

## General Specifications

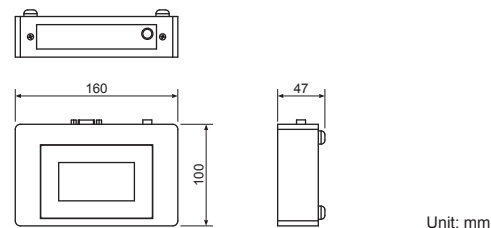
- Model: CMS-100
- Optical configuration: Czerny-Turner
- Focal length: 100mm
- F-number: F/2.8
- Wavelength range: 220 - 900nm (Effective range)  
\*It depends on the grating.  
0 - 900nm (Settable range)
- Reciprocal linear dispersion: 8.3nm/mm (at 550nm)
- Resolution: 1) 2.6nm 2) 4.3nm 3) 8.6nm  
\*It depends on the slit width. (Calculated value at 546.1nm)
- Wavelength accuracy:  $\pm 1.0\text{nm}$  \*1
- Wavelength reproducibility:  $\pm 0.2\text{nm}$  \*1
- Minimum step: 0.1nm (Pulse motor drive)
- Grating: Size 40 x 40mm  
Clear aperture 36 x 36mm  
Groove density 1200g/mm  
Blaze wavelength 250nm, 400nm, 500nm \*Select 1 type.
- Slit: W x H / 1) 0.3 x 3.0mm 2) 0.5 x 3.0mm 3) 1.0 x 3.0mm  
\*It can be selected automatically by controller.
- Scanning method: Sine-bar
- Driving method: Pulsed motor drive
- Input voltage: DC12V
- AC adapter input range AC100 - 240V 50/60Hz
- Apparent power: Less than 15VA (AC100V/50Hz)  
Less than 15VA (AC240V/50Hz)
- Remote control: RS-485 and adapter cable
- Recommended environment: Temperature 10 - 35 deg C  
Humidity less than 70% \*Avoid condensation
- Dimensions: Main unit 231(W) x 175(D) x 143(H)mm  
Controller 160(W) x 100(D) x 47(H)mm
- Weight: Main unit 5.6kg  
Controller 0.7kg (Not including cable)
- \*1 Room temperature: 25 deg C

## Dimensions

Main unit



Controller



\*Product specifications are subject to change without notice.

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