

Monochromatic Illuminator System

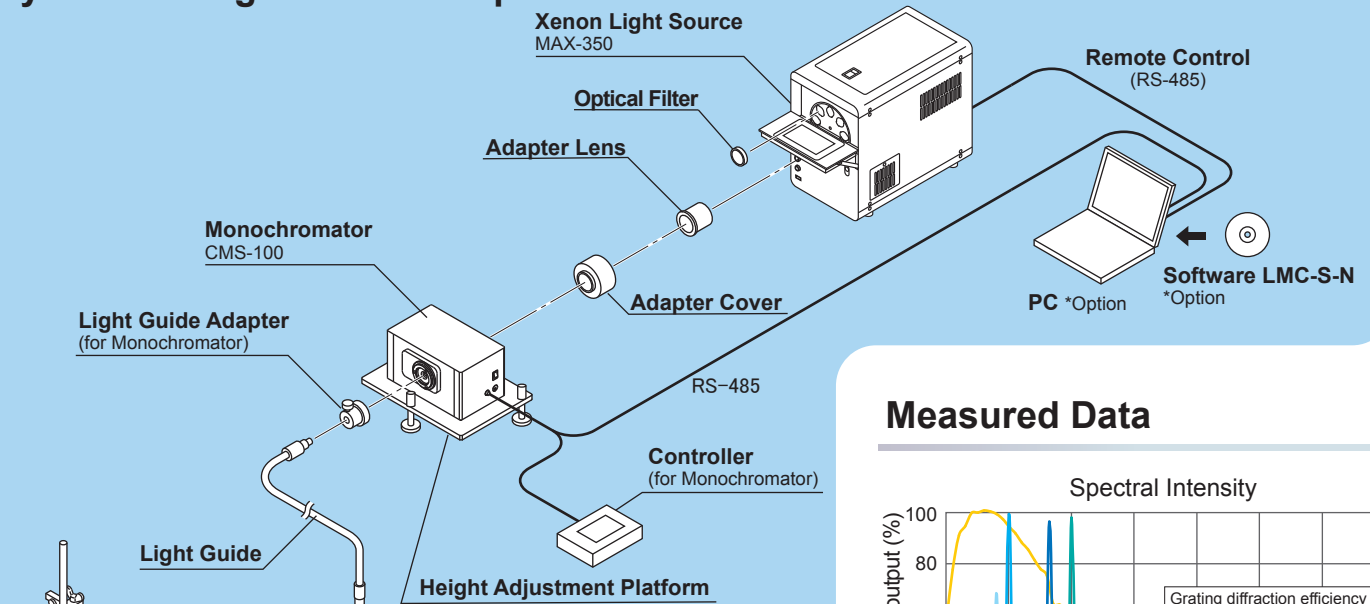
Tuning wavelength from UV to IR with xenon light source and monochromator

Features

- Monochromatic illumination by 0.1nm interval from 250nm to 900nm. *Depends on configurations
- Resolution: 2.6nm~
- Adjustable light intensity
- Uniform illumination by collimator lens
- Remote control software *Option



System Configuration Example

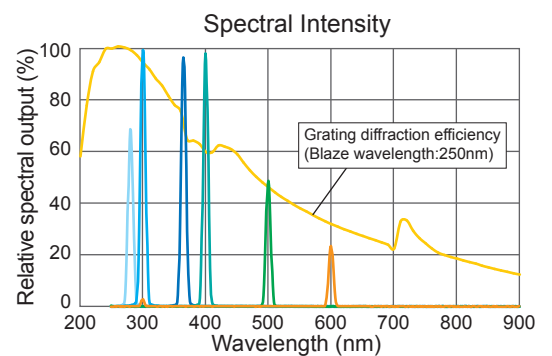


Light Intensity (Reference value)

Wavelength (nm)	Light intensity ($\mu\text{W}/\text{cm}^2$)	Mirror module
320	221	UV
380	265	
400	287	VIS
550	158	
700	57	
800	39	IR
900	80	

[Measurement condition]
 Illuminated area: 20×20mm
 Resolution: 8.6nm
 Grating: 400nm 1200g/mm

Measured Data



Applications

- CCD characterization
- Photoisomerization
- Photocatalytic reaction

Stand for Collimator Lens
*Option

System Components

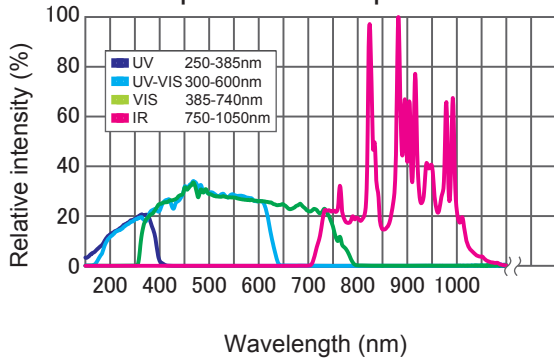
Xenon Light Source / MAX-350



Xenon light source 300W
Xenon spectrum is specified by a mirror module.

Type of mirror modules: UV / UV-VIS / VIS / IR

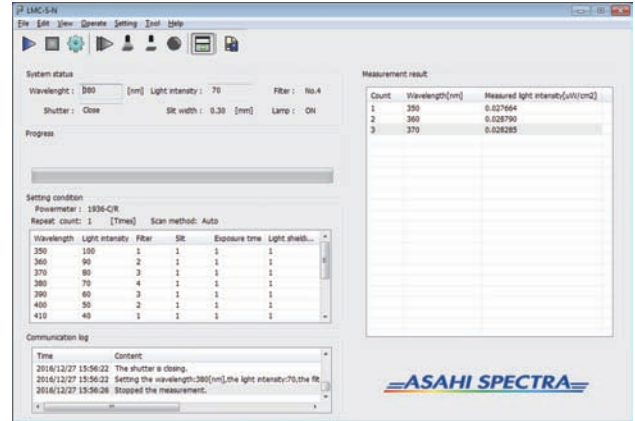
Spectrum Comparison



Software / LMC-S-N

LMC-S-N enables to control both of a light source and a monochromator at the same time.

Other options are individual control and creating the same level of light intensity in a certain wavelength range.



Operating condition
Windows7(32bit/64bit)/Windows8.1(32bit/64bit)/Windows10(64bit)

Monochromator / CMS-100



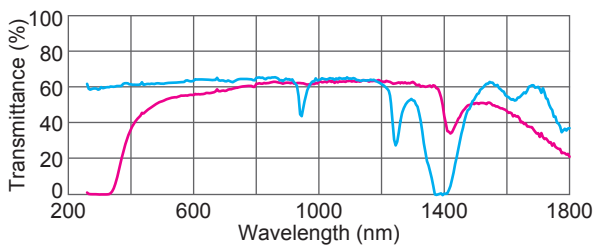
F-number	F/2.8
Reciprocal linear dispersion	8.3nm/mm (at 550nm)
Resolution	1) 2.6nm 2) 4.3nm 3) 8.6nm *It depends on the slit width. (Calculated value at 546.1nm)
Slit	W x H 1) 0.3 x 3.0mm 2) 0.5 x 3.0mm 3) 1.0 x 3.0mm *It can be selected automatically by controller.

Light Guide



The output light from the MAX-350 is delivered to a desired direction by the light guide.

Spectral Performance



- Quartz Light Guide
 - Length(L): 1m, 2m
 - Fiber bundle: 5mm dia.
 - Core: 200µm dia.
 - Numerical aperture: 0.22
- Hybrid Light Guide
 - Length(L): 1m, 2m
 - Fiber bundle: 5mm dia.
 - Core: 50µm dia.
 - Numerical aperture: 0.57

Collimator Lens



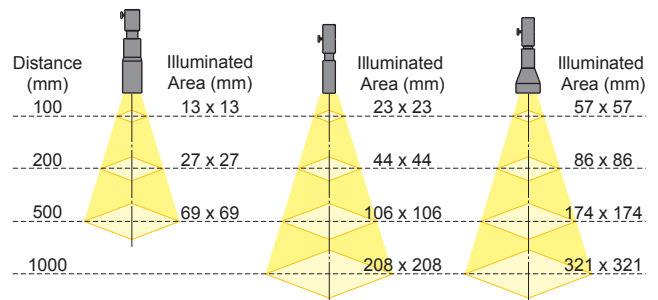
Each collimator lens is designed to provide the uniform illumination by using with the light guide.

x0.5 Type
RLQL80-05

x1.0 (STD) Type
RLQL80-1

x2.0 Type
RLQL80-2

Size: 43mm dia. x 245mm 28mm dia. x 192mm 55mm dia. x 217mm
Material: Quartz Quartz Quartz



*Product specifications are subject to change without notice.

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