

Xenon Light Source 300W Monochromatic Light with Filters

MAX-350

Heatless illumination with desired wavelengths for photochemical research

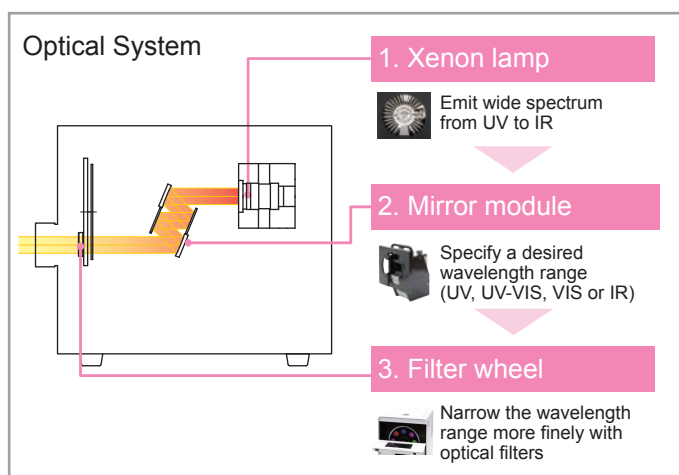
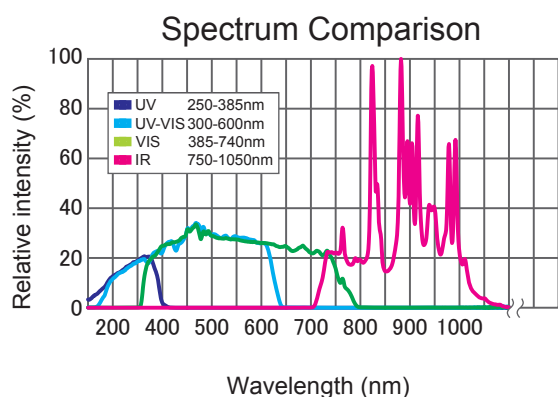


Features

- High power monochromatic light
- IR heat blocking
- Built-in filter wheel
- Adjustable light intensity
- Flexible illumination by light guide
- No need of optical axis alignment
- Touch panel operation
- RS-485 remote control

Applications

- Photocatalyst
- Photochromism
- Artificial photosynthesis
- Chemical analysis



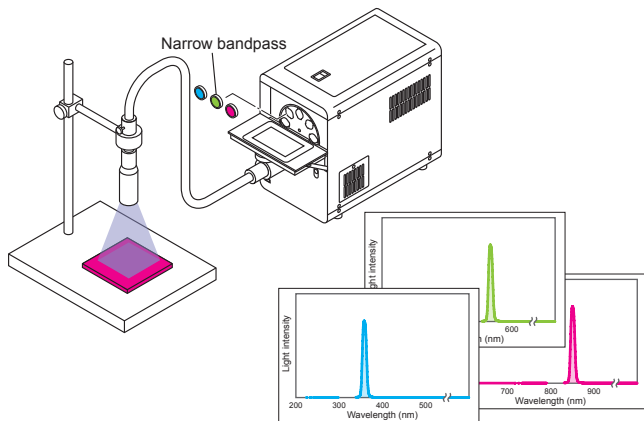
Extremely bright and heatless light source which can emit desired wavelengths

The MAX-350, 300W xenon light source, is the high-power illuminator with heat blocking design by the proprietary optical component, mirror module. The MAX-350 has various useful functions such as mirror module, filter wheel, ND variable control, timer, shutter and remote control.



Applications

Monochromatic Light with Optical Filters



- Bright monochromatic light compared to monochromator
- Alternative to using several wavelength lasers
- Selectable various wavelength by optical filters
- Less IR heat and stray light by mirror module

■ Narrow bandpass filter *Option

A wide variety of narrow bandpass filters from UV to IR are available. Each bandpass filter has 10-12nm bandwidth.

Lineup is from 254nm to 900nm

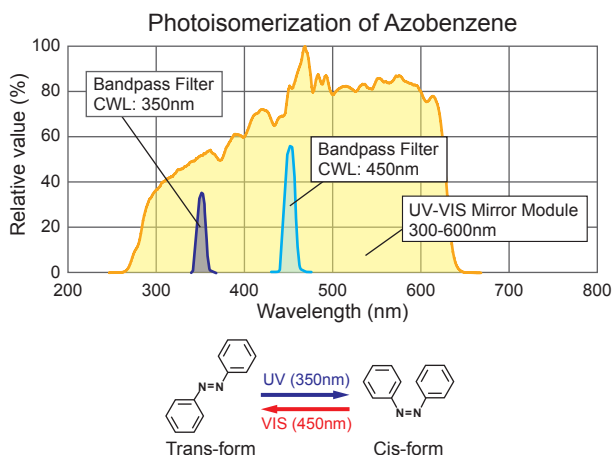
254nm, 260nm, 270nm,, 880nm, 890nm, 900nm



Photochemistry

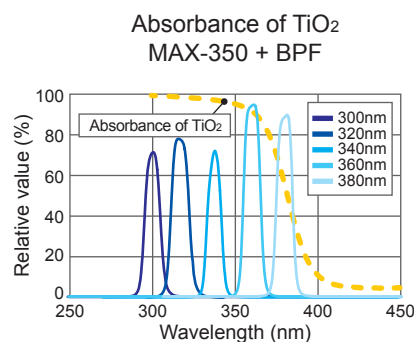
Photochromic Materials Research

- Suitable for research of photochromic behavior
- Easy to switch wavelengths by filter wheel



Photocatalytic Study

- Suitable for evaluation of wavelength response
- Easy to switch wavelengths by filter wheel



Applications

- Photocatalyst
- Chemical analysis
- Inspection lighting

- Photochromism
- Spectroscopy
- UV light disinfection

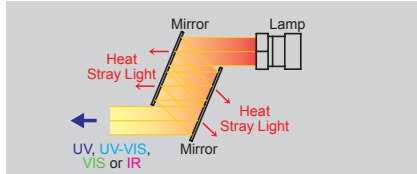
- Artificial photosynthesis
- Fluorescent observation
- Photodynamic therapy

...and for other Research & Development

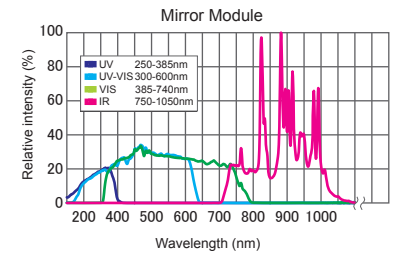
Features

Mirror Module

The mirror module consists of several cold mirrors to block unwanted energy from xenon lamp, and only desired wavelength range is emitted. The MAX-350 offers 4 types of mirror modules, UV, UV-VIS, VIS and IR types. The mirror modules are also replaceable while turning on the lamp.

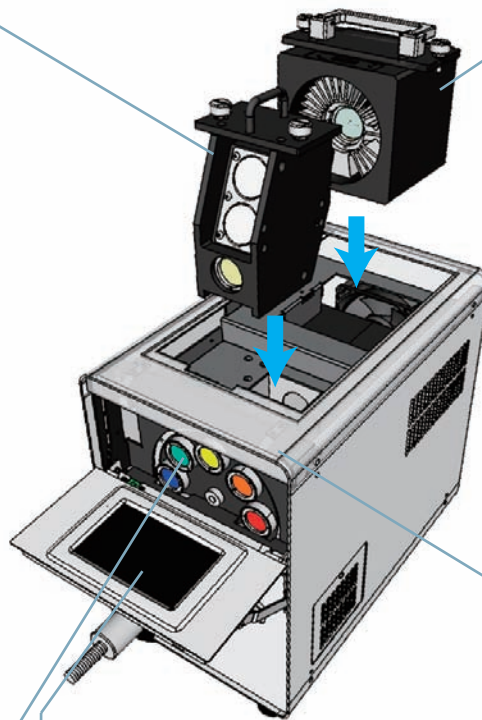
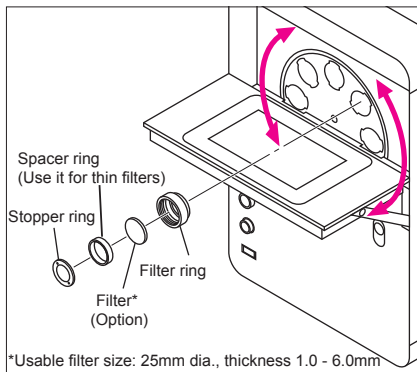


- UV 250 - 385nm
- UV-VIS 300 - 600nm
- VIS 385 - 740nm
- IR 750 - 1050nm



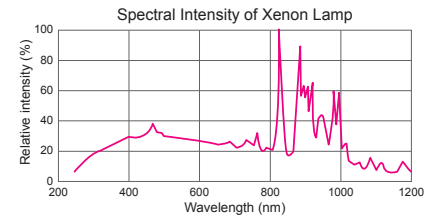
Filter Wheel

Max. 8 filters can be mounted on the filter wheel. It enables you to use a desired wavelength by switching a filter position. Wide varieties of optical filters are available such as shortpass, longpass and bandpass filters.



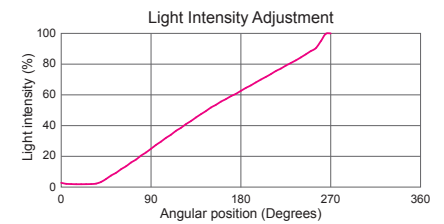
Lamp Cartridge

The 300W xenon lamp is built into the lamp cartridge. The lamp cartridge is easily replaced and optical axis alignment is not required.



Light Intensity Control (ND Filter)

Built-in variable ND filter allows precise control of light intensity in 1 step within the range of 50 to 1000 steps continuously.



Touch Panel

The touch panel displays various operations and settings. You can perform the operation easily with the user-friendly display.

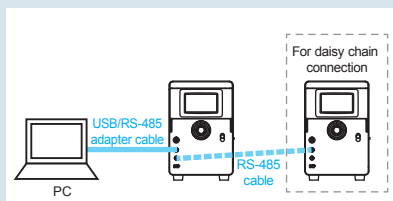


Operation Contents

- Lamp ON/OFF
- Shutter function Open/Close
- Timer function
- Filter position control
- Light intensity adjustment

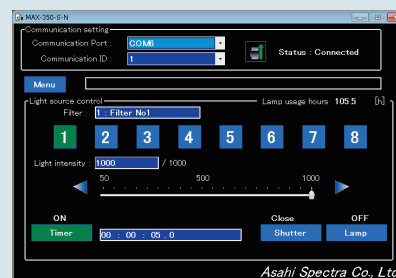
RS-485 Remote Control

The MAX-350 can be controlled remotely by using RS-485 cable. You can control several units by daisy chain connection.



Software

This software provides the same operations on your PC as the touch panel. The USB/RS-485 cable is used for connection. *The cable is optional. You can download the software from our website.



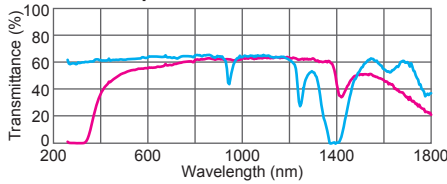
Options

Light Guide

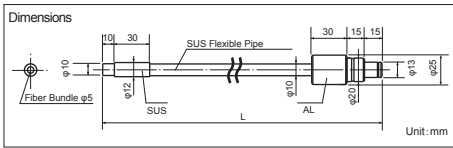


The output light from the MAX-350 is delivered to a desired direction by the light guide. We also offer a multi-branch light guide for custom.

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



Remote Controller

The remote controller provides the same operations as the touch panel remotely.

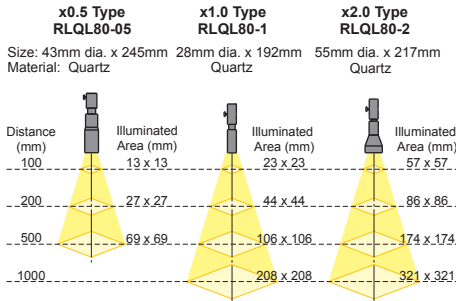


Dimensions:
144(W) x 16(D) x 100(H)mm

Collimator Lens



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



Direct Attachable Collimator Lens

The direct attachable collimator lens achieves a higher light intensity by connecting to a light source directly.

Straight type MDRLQ1S



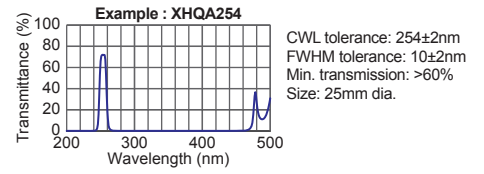
Downward type MDRLQ1B



Narrow Bandpass Filter



We offer a wide variety of narrow bandpass filters for a monochromatic illumination.



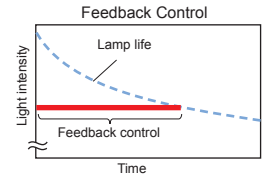
Wavelength (nm)	Mirror Module
254 - 290	UV
300 - 380	
390 - 600	UV-VIS
610 - 740	VIS
750 - 900	
	IR

*Contact us for details of a filter.

Feedback Unit FBU-10



The FBU-10 monitors the lamp intensity and keeps it constant.



Package Contents

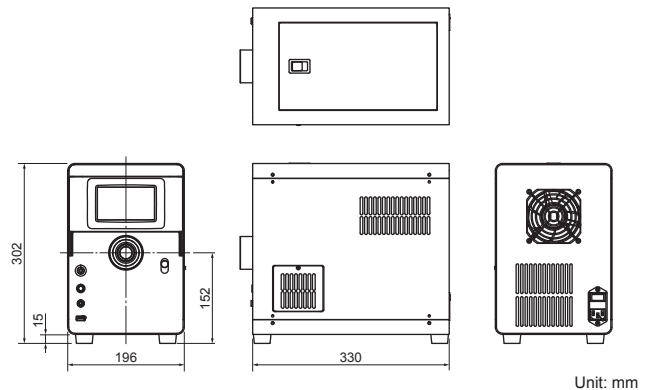
- MAX-350 main unit
- Mirror module *Choose UV, VIS, UV-VIS or IR
- Filter ring (8 pcs)
- AC cable (3m)
- Instruction manual

- Lamp cartridge
- Light guide adapter
- Filter fitting tool
- USB/RS-485 adapter cable (1.8m)

General Specifications

- Model: MAX-350
Output wavelength: 250 - 1050nm
(It depends on the mirror module.)
Input voltage: AC100 - 240V 50/60Hz
(Input range: AC100 - 240V)
Apparent power: Less than 540VA (AC100V/50Hz)
Less than 520VA (AC240V/50Hz)
Lamp type: Cermax xenon lamp 300W
Lamp life: 500h *Under our conditions
*Less than 1 year after delivery
Optical axis alignment: Cartridge type (Alignment-free)
Cooling method: Forced air cooling
Shutter: Pulsed motor drive
Exposure time set: 0.5sec - 24h
Light intensity control: 1000 - 50 (Steps) Continuously variable
Filter wheel: 8 channels *25mm dia/ t<6mm filter is usable
Mirror module: UV type(250-385nm), UV-VIS type(300-600nm),
VIS type(385-740nm), IR type(750-1050nm)
Controller: Built-in
Remote control: RS-485
Safety mechanism: Xenon lamp problem, Cooling fan problem,
Temperature anomaly
Recommended environment: Temperature 10 - 35 deg C
Humidity 20 - 80% *Avoid condensation
Dimensions: 196(W) x 330(D) x 302(H)mm
Weight: 12.2kg

Dimensions



*Product specifications are subject to change without notice.

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