

# Xenon Light Source 300W Monochromatic Light with Filters MAX-350

**Heatless illumination with desired wavelengths for photochemical research**

CE marked



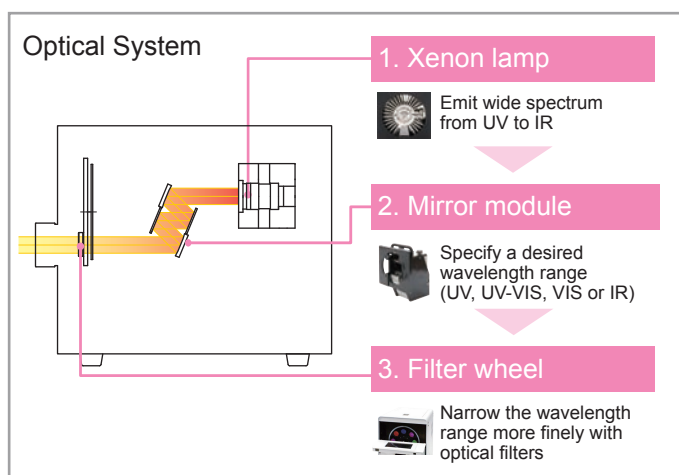
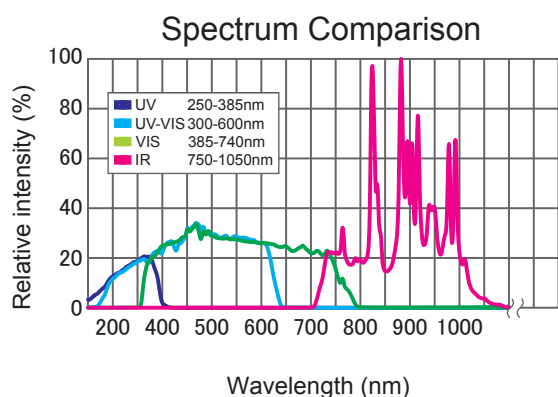
## Features

- 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

YouTube



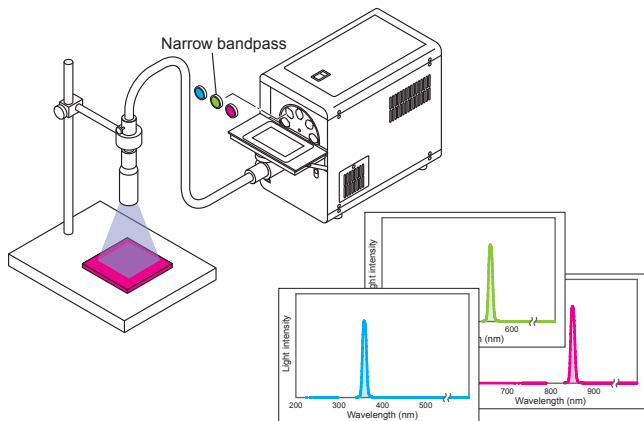
# Extremely bright and heatless light source which can emit desired wavelengths

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

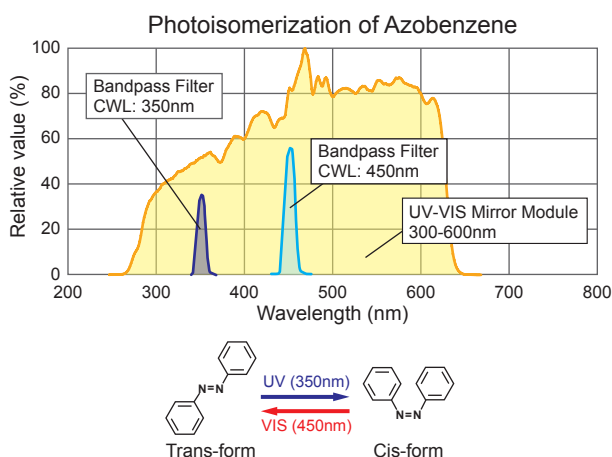
254nm, 260nm, 270nm, ....., 880nm, 890nm, 900nm



### Photochemistry

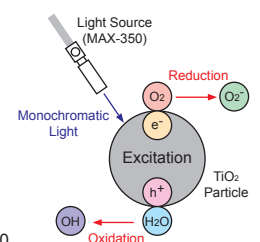
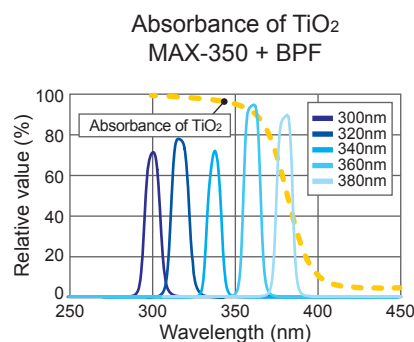
#### Photochromic Materials Research

- 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

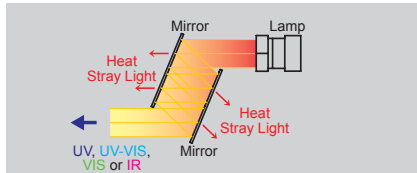
- Artificial photosynthesis
- Fluorescent observation
- Photodynamic therapy

...and for other Research & Development

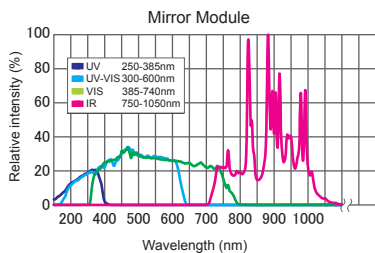
# Features

## 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.

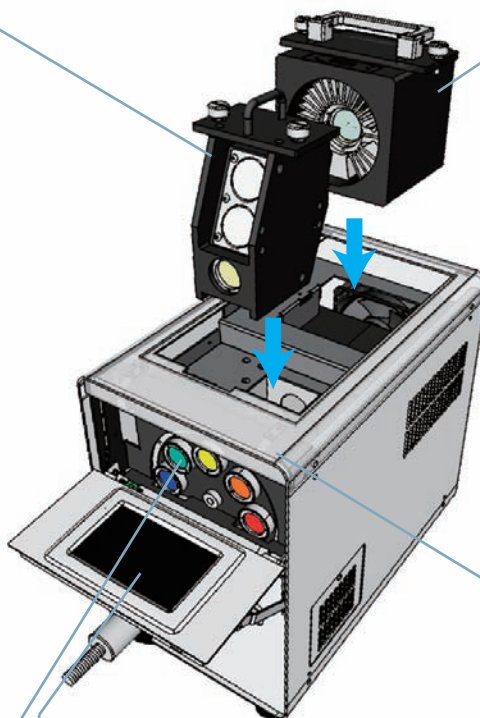
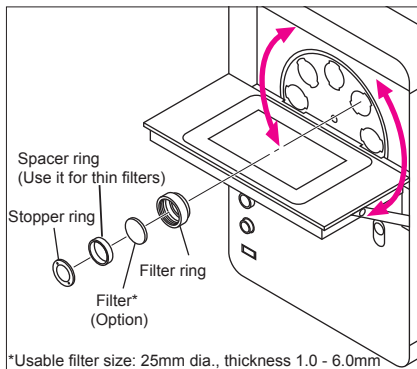


- UV 250 - 385nm
- UV-VIS 300 - 600nm
- VIS 385 - 740nm
- IR 750 - 1050nm



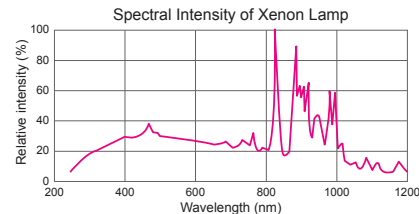
## Filter Wheel

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.



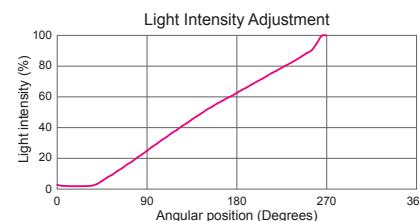
## Lamp Cartridge

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.

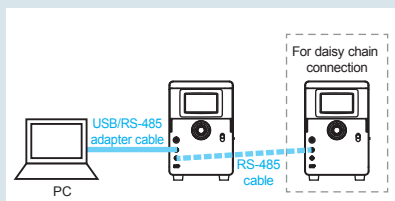


### Operation Contents

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

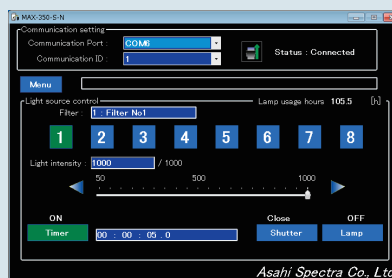
## RS-485 Remote Control

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.



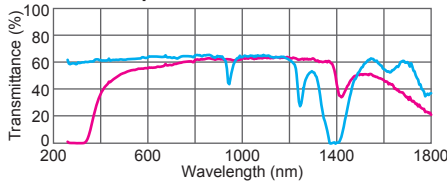
# Options

## Light Guide

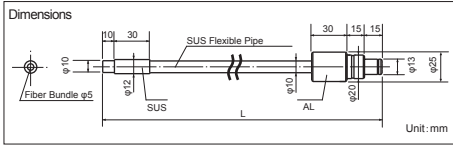


The output light from the MAX-350 is delivered to a desired direction by the light guide. We also offer a multi-branch light guide for custom.

### 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.

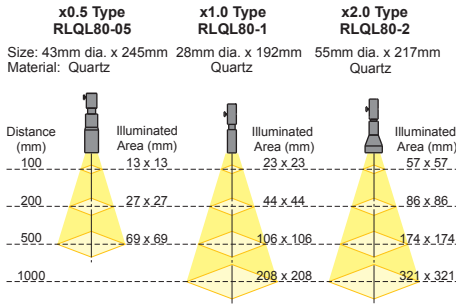


Dimensions:  
144(W) x 16(D) x 100(H)mm

## 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



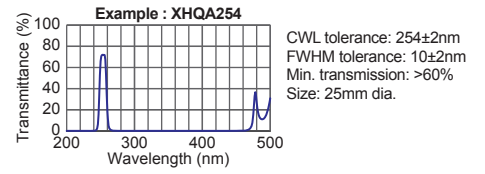
Downward type  
MDRLQ1B



## Narrow Bandpass Filter



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



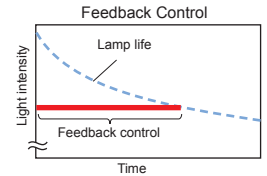
Wavelength (nm)	Mirror Module
254 - 290	UV
300 - 380	
390 - 600	UV-VIS
610 - 740	VIS
750 - 900	
	IR

\*Contact us for details of a filter.

## Feedback Unit FBU-10



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



## Package Contents

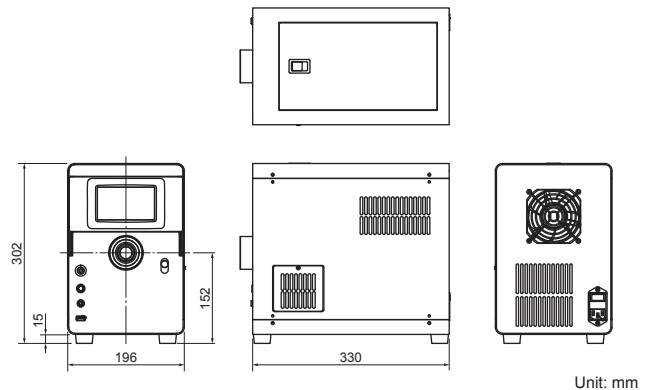
- MAX-350 main unit
- Mirror module \*Choose UV, VIS, UV-VIS or IR
- Filter ring (8 pcs)
- AC cable (3m)
- Instruction manual

- 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



Unit: mm

\*Product specifications are subject to change without notice.

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