

## Specification

NIJI-2-1404N003-E

Model	NIJI-3 Variable wavelength light source ( High Intensity type in UV range )
Light source	Xenon lamp 150W
Irradiation range	300~1150nm
Wavelength purity	5 or 10 or 20nm ( selectable when purchasing )
Irradiation intensity	More than 1mW* <sub>1</sub>
Irradiation area	More than $\Phi$ 3mm * <sub>2</sub>
Wavelength check	Indicator
Shutter	Manual
Optical fiber	$\Phi$ 3mm bundle optical fiber, Length 1M

\*1 at 320nm with 20nm wavelength purity

\*2 Irradiation area can be changed by changing the distance between the tip of the optical fiber and sample.

## Option

### ● Si photo diode detector

This is a calibrated detector and used to measure/calculate the intensity(mW/cm<sup>2</sup>) at each wavelength.

### ● Optical fiber stand

This is a magnetic stand which hold the optical fiber.

- The dimensions in the above is approximate ones. Depending on the options or etc., appearance and dimensions may be different.
- The appearance of the product and any specifications contained herein are subject to change without notification.

## Dimensions ( unit: mm )



Approx. W211(216) × D295(347.3) × H301(315.2) mm  
\*The dimensions in ( ) is the ones including the protrusions

Manufacturer  
  
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## NIJI-3 Variable Wavelength Light Source (High Intensity in UV range)



- Approx. 2 times Higher intensity light in UV range can be irradiated than that of the conventional model.
- Stand-alone and compact design require only a modest space for installation
- The built-in wavelength indicator make the operation easy and comfortable.

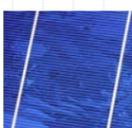
 **BUNKOUKEIKI**  
 分光計器

# NIJI-3 Variable wavelength light source

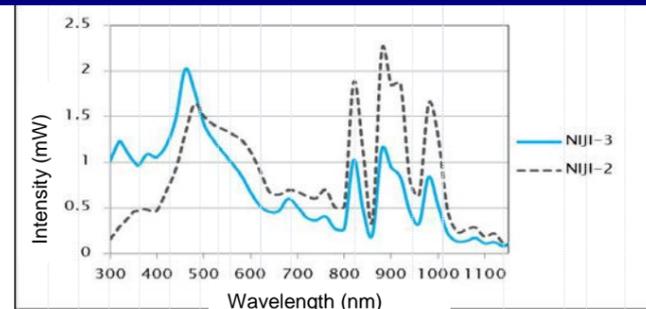


Generally, the irradiation light source configured with a xenon lamp and band pass filter is cheaper while it is not convenient since the irradiation wavelength cannot be selected without any restriction and different filters have to be prepared to use different wavelengths. The NIJI-3 has been developed to irradiate approx. 2 times higher light intensity ( in the wavelength range from 300 to 400nm ) than that of the conventional model, NIJI-2 by optimizing the light source part for high intensity in the UV region and employing high efficiency grating. Selecting the UV range wavelength, the NIJI-2 is ideal for the deterioration test , excitation light source for fluorescence measurement, the UV light reaction and etc..

## Major application

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**Photocatalysis**  
 Photochemical reaction  
 As a strong excitation light source for photocatalyst and photochromic compound, any wavelength in the range can be selected and irradiation can be performed.
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**Evaluation of spectral characteristic of the solar cells**  
 Evaluation of spectral characteristic the CCD and photo sensors  
 As a light source for a photoelectric conversion device, any wavelength in the range can be selected and its monochromatic light can be irradiated.
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**Photo simulation**  
 Photosynthetic reaction  
 Cell activation by light illumination can be analyzed and also effective wavelength for photosynthetic reaction can be selected and irradiation can be performed.
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**Light source for illumination**  
 Light source for a microscope  
 As a light source for monochromatic illumination and fluorescence excitation light source for a microscope, the Model NIJI-3 as a light source is very effective.

## Achieve High UV light irradiation with more than 1mW

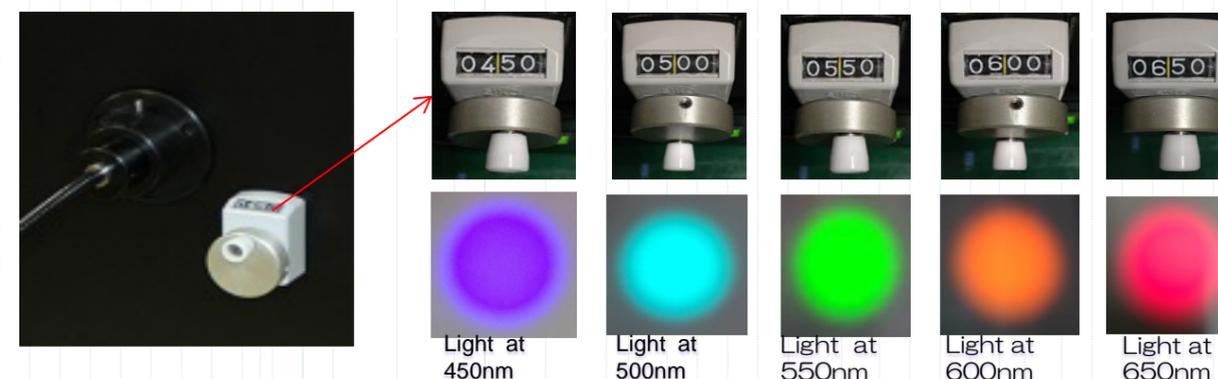


When wavelength purity was selected at 20nm with Φ3mm bundle fiber and total luminous flux entered.

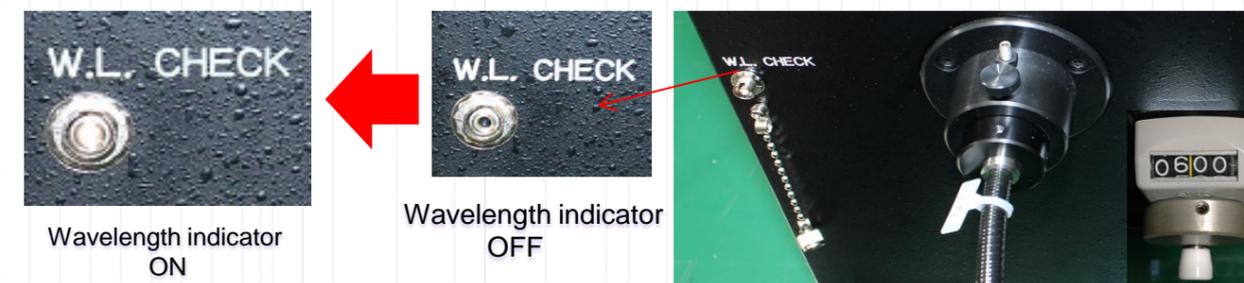
High intensity monochromatic light (300~400nm) can be irradiated. Using a bundle optical fiber for the irradiation head as a outlet of the system, irradiation area (size) can be adjusted to meet various applications.

## Turning the dial, irradiation wavelength can be selected

By turning the dial, you can choose the wavelength with 0.1nm step for irradiation.

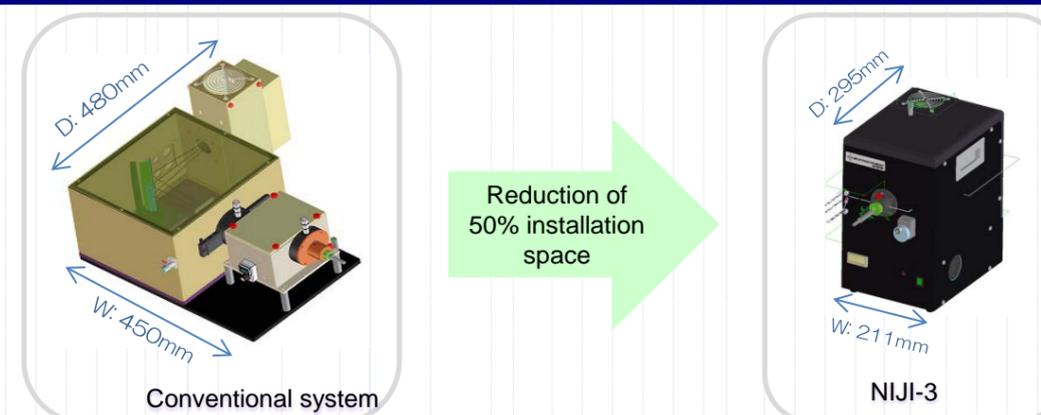


## Wavelength indicator makes the operation easy and comfortable



When selecting the wavelength at 600nm for an example, the wavelength indicator lights if there is any problem on the system.

## Compact system requires minimum installation space



Conventional system consists of a xenon lamp, optical system and monochromator separately. The NIJI-3 is an integrated system which require minimum installation space. The system is stand-alone so that no PC is required. Compact and light weight design allow the customer to transport the system easily with a handle.