■ Specification

NIJI-2-1404N003-E

Model	NIJI-2　Variable wavelength light source
Light source	Xenon lamp 150W
Irradiation range	300～1150nm
Wavelength purity	5 or 10 or 20nm (selectable when purchasing)
Irradiation intensity	More than1mW(more than 40μmol/m^2/s)$_{*1}$
Irradiation area	More than Φ3mm $_{*2}$
Wavelength check	Indicator
Shutter	Manual
Optical fiber	Φ3mm bundle optical fiber, Length 1M

＊1　when it is measured around 480nm
＊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^2) at each wavelength.

●Optical fiber stand

This is a magnetic stand which hold the optical fiber.

Manufacturer

■ Dimensions (unit: mm)

Approx. W11(216)× D295(347.3)× H301(315.2） mm
*The dimensions in () is the ones including the protrusions

● 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.

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NIJI-2　Variable Wavelength Light Source

- **Irradiation in the wide range from ultraviolet , visible , to Infrared light (300~1150nm) can be covered.**
- **Stand-alone and compact design require only a modest requirement of bench space for installation**
- **The built-in wavelength indicator make the operation easy and comfortable.**

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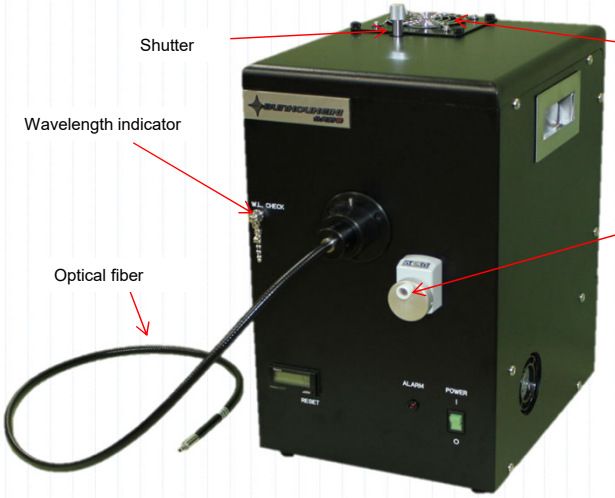
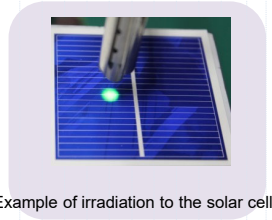
NIJI-2　Variable wavelength light source





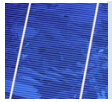
Example of irradiation to the solar cell

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 Model NIJI 2 Variable Wavelength Light Source is capable to perform irradiation at any wavelength in the range of 300~1150nm using the monochromator instead of the band pass filter.
In the past, the light source with the monochromator had a disadvantage over that with band pass filter since it reduce intensity of the light. Development of our new optical system in the monochromator for the model NIJI 2 has overcome such technical problem and has been successful in generated monochromatic light with high output of intensity such as more than 1mW (at 480nm).

Major application

Photocatalysis
Photochemical reaction

As a strong light source for photocatalyst and photochromic compound, any wavelength in the range of 300~1150nm can be selected and its monochromatic light can be irradiated.

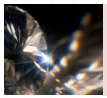


Evaluation of spectral characteristic of the solar cells
Evaluation of spectral characteristic the CCD and photo sensors

As a light source for a photoelectric conversion device, any wavelength in the range of 300~1150nm can be selected and its monochromatic light can be irradiated.

Photo simulation
Photosynthetic reaction

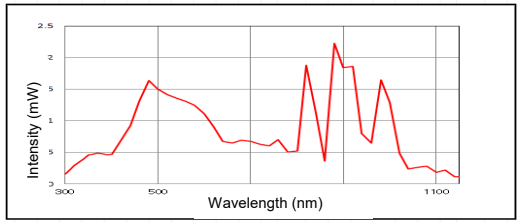
Cell activation by light illumination can be analyzed and also effective wavelength for photosynthetic reaction can be selected and irradiated.



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 as a light source is very effective.

High output monochromatic light irradiation with more than 1mW

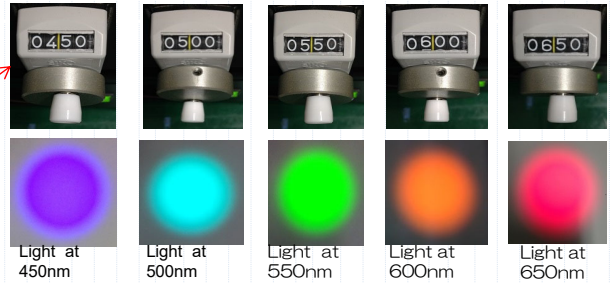


When wavelength purity was selected at 20nm with Φ3mm bundle fiber and total luminous flux entered.

Monochromatic light in the range of ultraviolet , visible , and Infrared (300~1150nm) can be irradiated with high output intensity. Using a bundle fiber on the outlet of the system, irradiation area can be adjusted for 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.



Light at 450nm　Light at 500nm　Light at 550nm　Light at 600nm　Light at 650nm

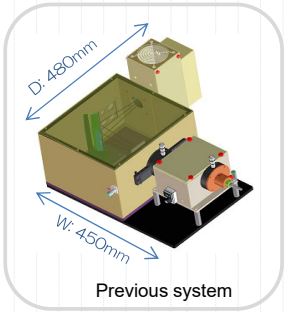
Wavelength indicator makes the operation easy and comfortable

Wavelength indicator ON

Wavelength indicator OFF

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



Previous system

Reduction of 40% installation space

NIJI-2

Conventional system consists of a xenon lamp, optical system and monochoromator separately. The NIJI-2 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.