

Halogen Light Source 100W FHL-102

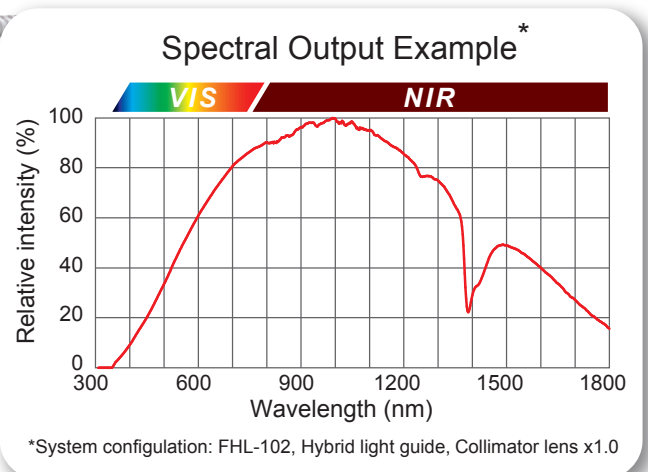
High Stability Halogen Illuminator

Features

- NIR output
- Light control by the variable slit
- Compact design
- High stability
- Flexible illumination by light guide
- RS-485 remote control

Applications

- Inspection illuminator
Semiconductor/Agricultural crops/Foods
- Microscope
- Photoreaction
- Bioscience
- Spectrometry
- Bias light for spectral sensitivity measurement



Features

Shutter Function

Light Control Function

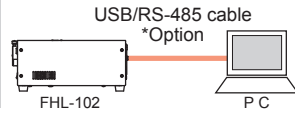
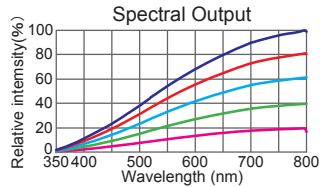
The light intensity is mechanically controlled by the variable slit. There is no change in color temperature.

RS-485 Remote Control

The FHL-102 can be controlled remotely by using USB/RS-485 cable. You can control several units by daisy chain connection.

Remote Control Example

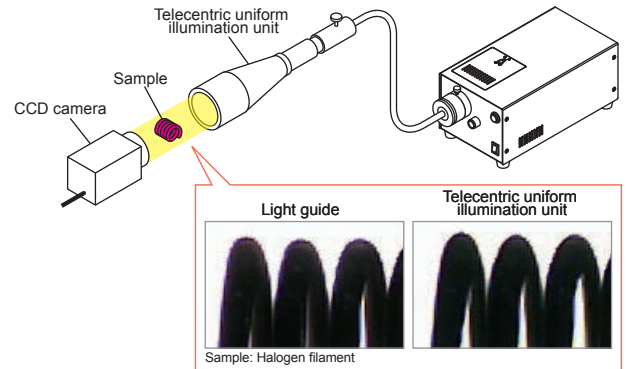
- Lamp ON/OFF
- Shutter function Open/Close
- Lamp status monitor



Usage Example

Telecentric Backlight Illumination

You can reflect the sample silhouette sharply by using the telecentric uniform illumination unit as the backlight illuminator.



Options

Light Guide



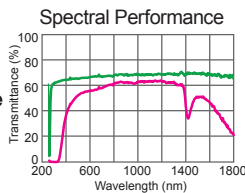
The output light from the FHL-102 is delivered to a desired direction by the light guide. We also offer a multi-branch light guide for custom.

Hybrid Light Guide

Length(L):1m, 2m
Fiber bundle: 5mm dia.
Numerical aperture: 0.57

Low OH Light Guide

Length(L):1m, 2m
Fiber bundle: 5mm dia.
Numerical aperture: 0.22



Collimator Lens



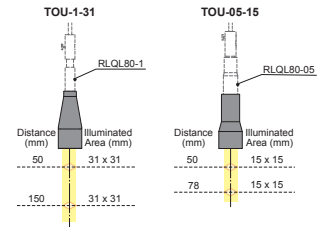
Each collimator lens is designed to provide the uniform illumination by using with the light guide.

x 0.5	x 1.0	x 2.0
Size : 43mm dia. x 245mm Substrate : Fused silica	Size : 28mm dia. x 192mm Substrate : Fused silica	Size : 55mm dia. x 217mm Substrate : Fused silica
Distance (mm) 100 200 500	Distance (mm) 100 200 500 1000	Distance (mm) 100 200 500 1000
Illuminated area(mm) 12x12 26x26 68x68	Illuminated area(mm) 23x23 43x43 105x105 209x209	Illuminated area(mm) 56x56 86x86 175x175 325x325

Telecentric Uniform Illumination Unit



The telecentric uniform illumination unit achieves a parallel illumination by connecting to a collimator lens.



Line Light Guide



The line light guide delivers light with the line shape.

Ring Light Guide



The ring light guide achieves a shadowless uniform illumination by illuminating from all directions.

Filter Holder

An optical filter can be mounted inside the unit with the filter holder.

*Size: 50x50mm / Thickness: less than 6mm

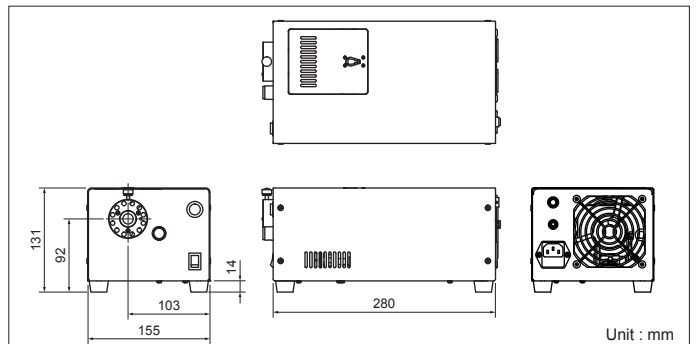
General Specifications

- Model: FHL-102
- Output wavelength: from VIS to NIR
- Input voltage: AC100 - 240V 50/60Hz (Input range: AC90 - 264V)
- Apparent power: Less than 170VA
- Lamp type: Reflector halogen lamp 100W 12V100W (AL)
- Lamp voltage, current: 12V100W(DC) *Representative value
- Lamp life: 1000h (Average) *Not guaranteed
- Cooling method: Forced air cooling
- Functions: Shutter Open/Close: Solenoidal drive
Light intensity control: Variable slit
- Control method: Built-in controller
- Remote control: RS-485
- Safety mechanism: Cooling fan problem, Lamp status monitor (RS-485)
- Recommended environment: Temperature 10 - 35 deg C
Humidity 20 - 80% *Avoid condensation
- Dimensions: 155(W) x 280(D) x 131(H)mm
- Weight: 3.4kg

Package Contents

- FHL-102 main unit
- AC cable (3m)
- Halogen 100W with reflector
- Instruction manual
- Heatsink

Dimensions



*Product specifications are subject to change without notice.

Warning Do not touch the light guide adapter during the operation or immediately after turning off the lamp because it remains hot.

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