

## Halogen Light Source 100W FHL-102

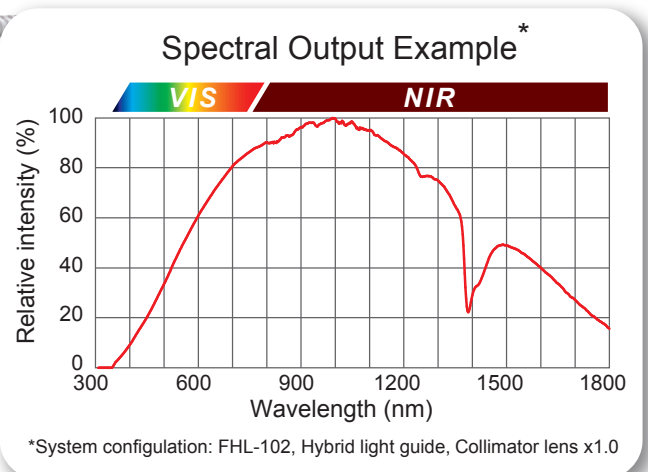
### High Stability Halogen Illuminator

#### Features

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

#### Applications

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



# Features

## Shutter Function

## Light Control Function

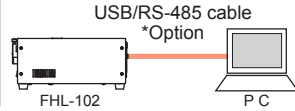
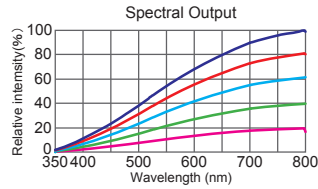
The light intensity is mechanically controlled by the variable slit. There is no change in color temperature.

## RS-485 Remote Control

The FHL-102 can be controlled remotely by using an optional cable. You can control several units by daisy chain connection.

### Remote Control Example

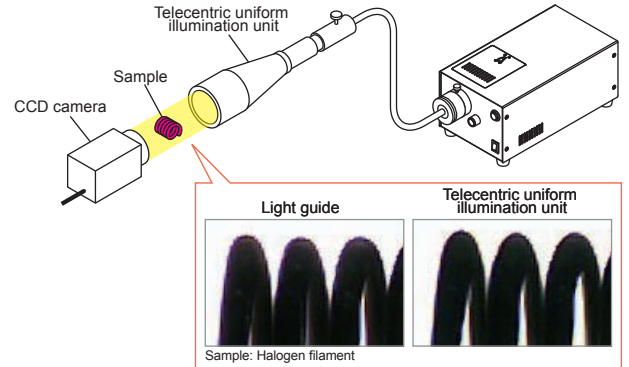
- Lamp ON/OFF
- Shutter function Open/Close
- Lamp status monitor



# 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



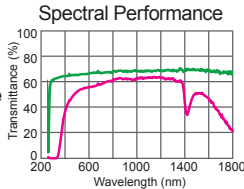
The output light from the FHL-102 is delivered to a desired direction by the light guide. We also offer a multi-branch light guide for custom.

### Hybrid Light Guide

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

### Low OH Light Guide

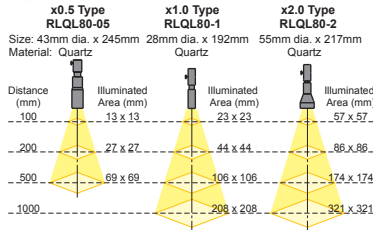
Length(L):1m, 2m  
Fiber bundle: 5mm dia.  
Numerical aperture: 0.22



## Collimator Lens



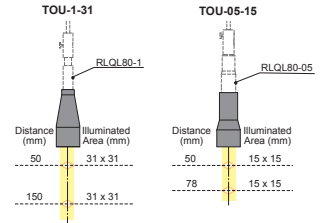
Each collimator lens is designed to provide the uniform illumination by using the light guide.



## Telecentric Uniform Illumination Unit



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



## Line Light Guide



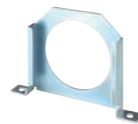
The line light guide delivers light with the line shape.

## 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



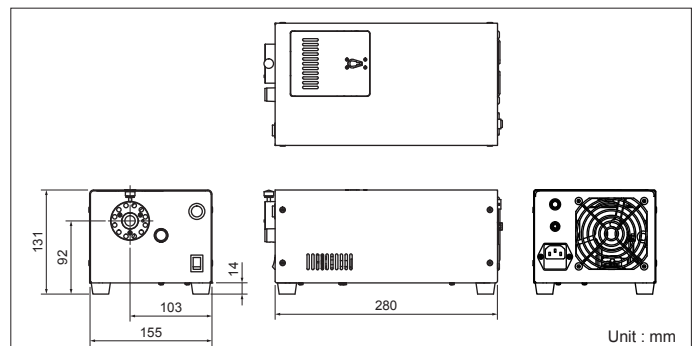
Warning

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

# Package Contents

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

# Dimensions



\*Product specifications are subject to change without notice.

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