Caution
Do not look at the light directly

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

Spectral Output Example*

*System configuration: FHL-102, Hybrid light guide, Collimator lens x1.0
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](image)

**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 uniform illumination by using the light guide.

- **Sample**
  - RLQL80-1
  - TOU-1-31
  - illuminating area: 31 x 31

- **Ring Light Guide**
  - RLQL80-05
  - TOU-05-15
  - illuminating area: 15 x 15

**Telecentric Uniform Illumination Unit**

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

- **Sample**
  - Halogen filament

**General Specifications**

- **Model:** FHL-102
- **Output wavelength:** from VIS to NIR
- **Input voltage:** AC100 - 240V 50/60Hz
  - (Input range: AC90 - 264V)
- **Lamp type:** Reflector halogen lamp 100W 12V/100W (AL)
- **Lamp voltage, current:** 12V/100W(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
- **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**
- **Halogen 100W with reflector**
- **Heatsink**
- **USB/RS-485 cable**
- **Instruction manual**

**Dimensions**

- **Unit:** mm

*Product specifications are subject to change without notice.*