LFV2

HLV2

LNSD LND2 HLND LT

LNV/HLDN LNIS-FN

Macro Lens

# **LED Light Sources PFBR** series

CCS PFBR

Use a search engine





# Provides light output that exceeds that of a 250 W metal halide light source



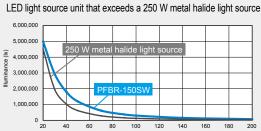


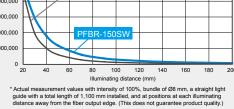
The supplied AC cord is for use with 100 to 120 VAC CCS recommends using the following with 200 to 240 VAC. Cable: GTCE-3 x 1.0 mm² (Kawasaki Electric Wire) Connector: KS-31AY (Kawasaki Electric Wire)

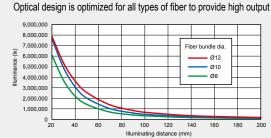
Connect to light guides and use as a light source

This product emits high-intensity visible light. Materials that absorb light may convert that light into heat and be damaged. Check the instructions in the "Instruction Guide" and use this product in a safe manner.

# Achieves the highest level in the industry with 2 million Ix \*Actual measurement values with a bundle of 0910 mm, a straight with a total length of 1,000 mm installed, and at a position 50 mm the fiber output edge. (This does not guarantee product quality) to Current as of our in-house inspection in January 2015.





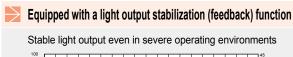


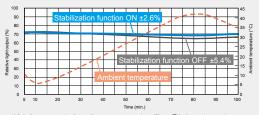
\*Actual measurement values with intensity of 100%, bundles of Ø8, 10, and 12 mm, a straiglight guide with a total length of 1,080 mm installed, and at positions at each illuminating distance away from the fiber output edge. (This does not guarantee product quality.)

### 1,024-step intensity. Linear characteristics with reproducibility

Our unique correction function is a standard function. Provides linearity with reproducibility







Actual measurement values using our measurement conditions. (This does not guarantee product quality.) Stabilization function is set to OFF when shipped from the factory.

## Standard compatibility with three types of light guides

Check the dimensions of the light guide to be used before selecting an adapter.

- \* For details, refer to the Light Guide Adapter Dimensions Chart on P. 122
- \* Be careful as plastic fiber cannot be used.

■Intensity value can be adjusted in steps

. 1,024-step intensity (10-bit)

### External control by use of a large variety of communication methods

Compatible with sink and Digital communication control:

source types

Analog communication control: Intensity control from 0 to 5 V

RS-232C Serial communication control:

Ethernet communication control: TCP/IP and UDP/IP protocols

We have various materials.

3D CAD

· 256-step intensity (8-bit)

Product Fliers

Data Sheets

Download here http://www.ccs-grp.com/dl/

LDR2

LDR2-LA

LDR-LA1 SQR

SQR-TP Diphing HLDR-IP

HPR LFR Diffused LKR

FPR

FPQ2

LDL2 Lighting TDTB HLDL2

> TH LFL HPD2 HPD

LDM2 LAV PDM LFX2

LEV3 LFV2

Collimated Lighting MSM NAW

IR2

HLV2 LV LSP

HFS/HFR HLV2-NR

HLV2-3M-RGB-3W

PFB2 LNSP

CONVERGENT CONVERGENT

LNSD

LND2 Diffused Lighting HTND

LN/LN-HK

LNV/HLDN LNIS-FN

Ultraviolet Lighting UV2 UV LNSP-UV-FN

**Examples of Custom** 

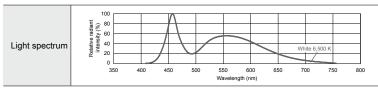
# Lineup

Model name	LED color	Power consumption	Correlated color temperature	Options	Weight
PFBR-150SW-MN	White	200 VA	6,500 K	Light guide adapter  External control cable	3,900 g

Options

▶ P.215

# LED properties



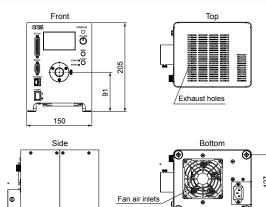
Be sure to read the "Instruction Guide" included with the product before use and observe cautionary information. The data included is for reference only and does not guarantee the quality of this product.

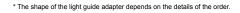
- Inquire with your light guide manufacturer for
- details about the light guide. Installation method: Do not place anything within 100 mm of the top of the PFBR unit.

#### CCS will provide custom order products. Please feel free to consult with us.

- Change to wavelength (Red, blue, and green)
- Change to light distribution angle, etc.

## **Dimensions (mm)**





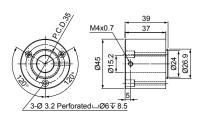
# **Specifications**

Applicable fiber bundle diameter	Ø8 to Ø14 mm		
Light distribution angle	Total angle of 30°		
Drive method	Constant-current system		
Intensity control method	Variable-current control		
No. of channels	1 channel		
Input power supply	100 to 240 VAC (±10%), 50/60 Hz		
Power consumption (typ.)	200 VA		
Inrush current (typ.)	15 A at 100 VAC, 30 A at 200 VAC * From a cold start		
Ground leakage current	3.5 mA max. (264 VAC, 60 Hz, with no load)		
Insulation withstand voltage (Input-FG)	1,500 VAC 1-min. cutoff current 10 mA 500 VDC 20 MΩ		
Operating environment	Temperature: 5 to 40°C, Humidity: 20% to 80%RH (with no condensation) Altitude: 2,000 m max., Transient overcurrent: Category II, Pollution level:		
Storage environment	Temperature: -15 to 60°C Humidity: 20% to 85%RH (with no condensation)		
Cooling method	Forced air cooling		
CE marking	Safety standard: EN61010-1 compliant, EMC standard: Complies with EN61000-6-2 and EN61000-		
Environmental regulations	RoHS compliant		
Material, coating, surface processing	Aluminum alloy (black alumite)		
Accessories	Instruction Guide x 1, 3-prong AC cord with ground terminal (2 m) x 1		

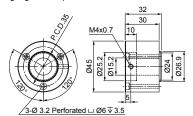
# **Options**

### Light guide adapter: AD-PFBR-150-MO

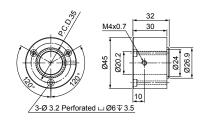
180



Light guide adapter: AD-PFBR-150-HY



Light guide adapter: AD-PFBR-150-SU

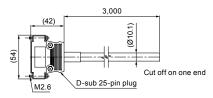


Caution

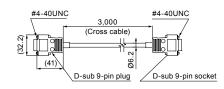
- · Be careful as plastic fiber cannot be used.
- Please be aware that the light guide adapter must be installed after purchase by the customer. Inquire with your CCS sales representative regarding sizes not listed here.

#### External control cable: EXCB2-25M-3

Parallel communication cable (Compatible with digital and analog intensity)



External control cable: EXCB2-9M-9F-3-CR Serial communication cable (RS-232C)



You can inquire using our website.

Requests for Light Unit Selection

Requests for Loar

Inquire on our website here. http://www.ccs-grp.com/contact/ Macro Lens