High Power Lights

HPR2 / HPD2 Series

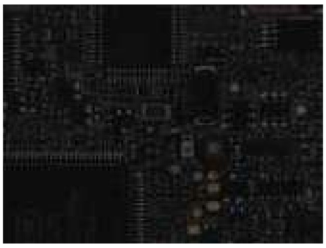
CCS Inc.

"Bright", "Uniform", "Easy to Use"

Improved support by increasing brightness

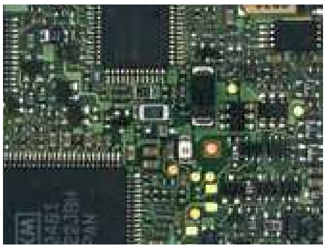
Achieved higher output than the conventional product

Conventional product — Imaging using the HPD-100SW (white)



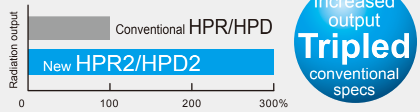
Shutter speed: 1/4,000 (sec)
Amount of light: 70% intensity

New product — Imaging using the HPD2-100SW (white)



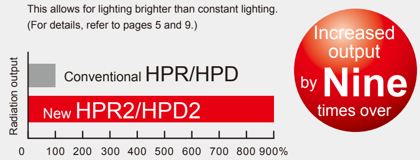
Shutter speed: 1/4,000 (sec)
Amount of light: 70% intensity

■ **Output comparison with the conventional product**



■ **Increase output even further using overdrive**

Combine with our strobe Control Unit to achieve strobe lighting by overdrive.
This allows for lighting brighter than constant lighting.
(For details, refer to pages 5 and 9.)



* This is a comparison between the HPR-100 and HPR2-100, using red and white colors.
* This is a comparison between the HPD-100 and HPD2-100, using red and white colors.
* The graphs included are for reference only. They do not guarantee the quality of this product.
* Brightness varies based on the camera's spectral sensitivity.

Improved support by adding sizes and wavelength variation

	Ring Light HPR2 Series	Dome Light HPD2 Series
Added models of two sizes	• HPR2-75 model • HPR2-200 model Refer to page 3 for examples of usage.	• HPD2-75 model • HPD2-200 model Refer to page 7 for examples of usage.
Added wavelength variation	Full color (RGB) type Refer to page 4 for examples of usage.	• Full color (RGB) type • Infrared (860 nm) type Refer to pages 7 and 8 for examples of usage.

Providing optimal lighting through a rich lineup

Ring Light HPR2 Series - 7 types, 28 models

	Peak wavelength/Correlated color temperature (typ.)			
	Red (635 nm)	White (6000 K)	Blue (470 nm)	NEW! Full color (622/525/470 nm)
HPR2-50 Series Outer diameter size: Ø50				R G B
NEW! HPR2-75 Series Outer diameter size: Ø91				R G B
HPR2-100 Series Outer diameter size: Ø116				R G B
HPR2-150 Series Outer diameter size: Ø166				R G B
NEW! HPR2-200 Series Outer diameter size: Ø216				R G B
NEW! HPR2-250 Series Outer diameter size: Ø266				R G B
HPR2-400-FT Series Outer diameter size: Ø424				R G B

Dome Light HPD2 Series - 6 types, 30 models

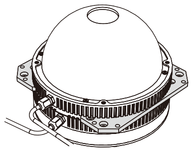
	Peak wavelength/Correlated color temperature (typ.)				
	Red (635 nm)	White (6500 K)	Blue (470 nm)	NEW! Full color (622/525/470 nm)	NEW! Infrared (860 nm)
NEW! HPD2-75 Series Outer diameter size: Ø91				R G B	Infrared 860 nm
HPD2-100 Series Outer diameter size: Ø116				R G B	Infrared 860 nm
HPD2-150 Series Outer diameter size: Ø166				R G B	Infrared 860 nm
NEW! HPD2-200 Series Outer diameter size: Ø216				R G B	Infrared 860 nm
HPD2-250 Series Outer diameter size: Ø266				R G B	Infrared 860 nm
HPD2-400 Series Outer diameter size: Ø424				R G B	Infrared 860 nm

High Power Lights series Renewal

“Achieving expandability through a newly designed bracket”

Light Joint Bracket

Combining the Dome Light and the Ring Light to achieve imaging through one-stage light switching or simultaneous lighting.



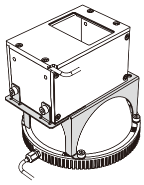
Refer to page 8 for examples of usage.

Can join the HPD2 Series with a Ring Light (HPR2 Series, LDR2-LA Series, LDR-LA1 Series).

Refer to the rear cover.

Coaxial Light Joint Bracket

Combining the Dome Light with the Coaxial Light to solve uneven illumination and achieve uniform illumination from every direction.



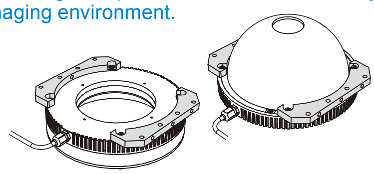
Refer to page 8 for examples of usage.

Can join the HPD2 Series with a Coaxial Light (LFV3 Series).

Refer to the rear cover.

Expansion Mounting Bracket

Achieve installation on installation holes with a larger gap than the installation holes on the light, or installation on a vertical surface.
Providing the optimal installation based on your imaging environment.



Refer to page 4 for examples of usage.

Attaching this to the HPD2 Series or HPR2 Series allows you to increase your choices for your installation method.

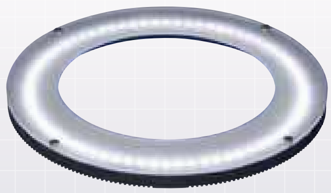
Refer to the rear cover.

“Flexible response through product improvement”

Applying a curved type for the diffusion plate of large Ring Lights

For the HPR2-400-FT model, the diffusion plate is flat.

Conventional product HPR-250



HPR-250SW (White)

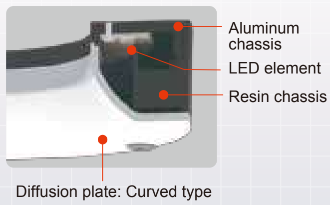
NEW! New product HPR2-250

Achieving illumination with great expandability, from low-angle to high-angle lighting.

Refer to page 4 for examples of usage.

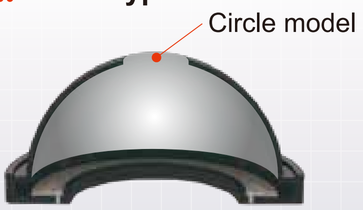
HPR2-250SW (White)

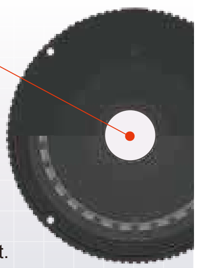
- Cross-section structure(conceptual Image)



Allows for selection of the camera-side aperture of the Dome Light

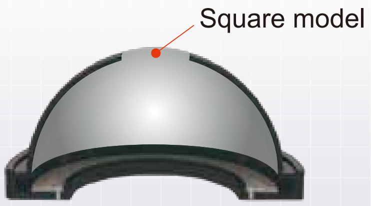
Circle type

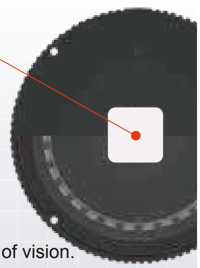




Narrowing the aperture results in a dome effect.

Square type





Widening the aperture broadens the camera's field of vision.

M12 Connector and Flying Leads Light Unit Cables Are Now Available

4-pin M12 Socket Connectors

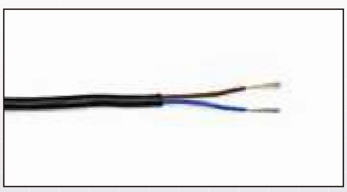
Cable Length : 300mm

Model name :
standard model name
+ “ **-M12** ”

Polarity & Signal :

1 : (+ DC24)
2 : No Connection
3 : (- GND)
4 : No Connection

Flying Leads



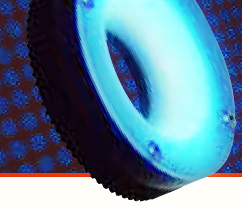
Cable Length : 2000mm

Model name :
standard model name
+ “ **-FL** ”

Polarity & Signal :

Anode(+)Brown/
Cathode(-)Blue

For example, to order the “HPR2-50RD” with an M12 connector attached, specify the model name as “ **HPR2-50RD-M12** ”.

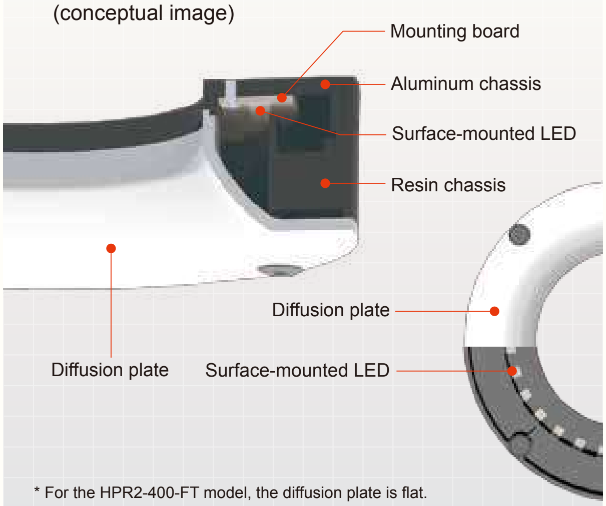


High Power Ring Light HPR2 Series

Uniform illumination of high output diffused light

Through the surface-mounted LED and specially finished* diffusion plate, we achieved high output illumination of uniform diffused light.

● Cross-section structure of the HPR2-100 (conceptual image)



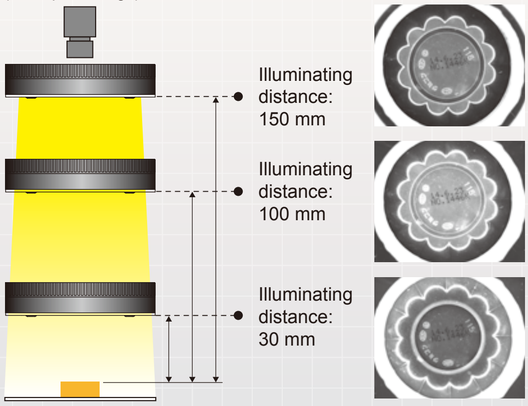
* For the HPR2-400-FT model, the diffusion plate is flat.

Supports a wide variety of applications, from low-angle to high-angle lighting

Our original illuminating mechanism diffuses and illuminates without wasting any of the light illuminated from the LED. Even if the distance from the workpiece to the light is changed, there is little change in the uniform region. Therefore, it can be used in a wide range of applications.

■ Workpiece: Food product container

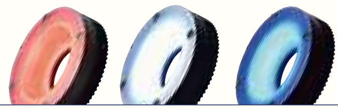
■ Illumination with the HPR2-200BL (conceptual image)



Added size variation

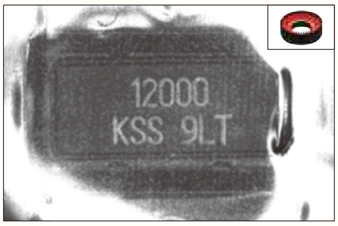
HPR2-75 model NEW!

Applications: Text recognition on electronics parts, detecting edges of metal parts, etc.

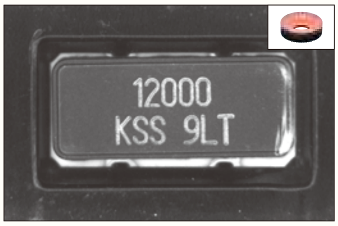


● Comparison of imaging for the HPR2-75RD (red) and with the Ring Light LDR2-70RD2 (red)

Workpiece: Electronics part in embossed tape



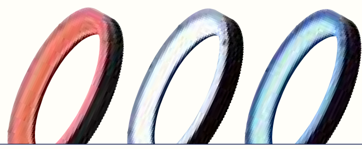
With Ring Lights, reflection from the embossed tape surface makes it difficult to perform stable examination.



The new HPR2-75RD allows for text imaging that limits surface reflection.

HPR2-200 Series NEW!

Applications: Examining food products by color, examining for foreign materials in drugs, etc.

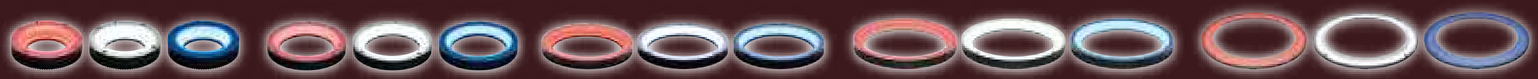


● Comparison of imaging for the HPR2-200SW (white) and with the Ring Light LDR2-90-30SW2 (white)

Workpiece: Snack

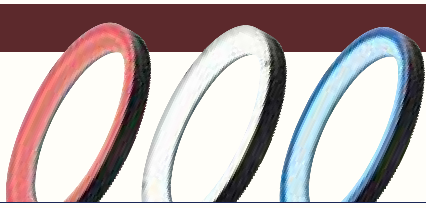
With Ring Lights, reflection from the packaging film makes it difficult to perform stable examination.

The new HPR2-200SW allows for exterior surface imaging that limits surface reflection.



HPR2-100 Series | HPR2-150 Series | NEW! HPR2-200 Series | NEW! HPR2-250 Series | HPR2-400-FT Series

Changed the shape of the diffusion plate



HPR2-250 Series NEW!

Applications: Examining text on packaging containers, examining the exterior of plastic products, etc.

● Comparison of imaging for the conventional HPR-250SW (white) and the new HPR2-250SW (white)

Workpiece: Instant food product

The conventional product had difficulty with imaging of print on the package from a low angle.

Illuminating distance: 50 mm

The new product allows for imaging of print on the package from a low angle.

Illuminating distance: 50 mm

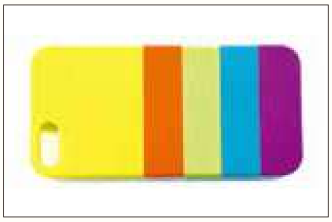
Added wavelength variation

* The change in the radiation amount over time varies for each color (red, green, blue). Periodic adjustments may be necessary after initial radiation settings.

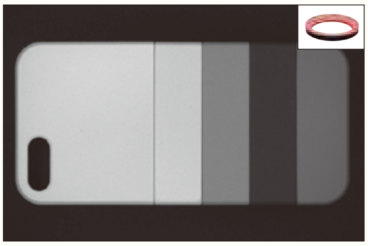
Lineup of full color (RGB) types NEW!

Applications: Examining the exterior by color for multi-colored workpieces, examining the exterior of food products, etc.

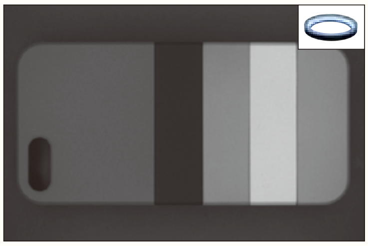
● Imaging with the HPR2-200FC (full color)



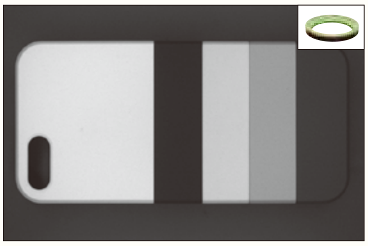
Workpiece: Smartphone case



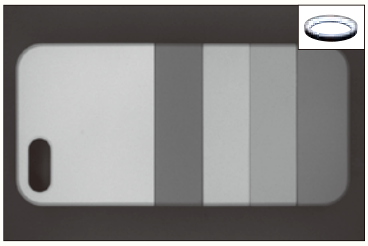
Imaging with red illumination



Imaging with blue illumination



Imaging with green illumination



Imaging with white (all colors lit up) illumination

Providing an expansion mounting bracket

* Not supported for the HPR2-400-FT or HPD2-400 models.

We provide the installation method that is optimal for your examination environment, such as by using the expansion mounting bracket to perform examinations on the side or bottom of the workpiece.

Refer to the rear cover.

● Examples of using the expansion mounting bracket

Ring light:
Image of usage with the HPR2-200RD

Dome Light:
Image of usage with the HPD2-250SW

High Power Ring Light HPR2 Series

HPR2-50 Series

NEW! HPR2-75 Series

Specifications

Series name	Model	LED color	Power consumption (max.)	Peak wavelength/Correlated color temperature (typ.)	Weight (max.)
HPR2-50 Series	HPR2-50RD	Red	7.6 W	635 nm	46 g
	HPR2-50SW	White	9.1 W	6000 K	
	HPR2-50BL	Blue	9.1 W	470 nm	
	HPR2-50FC	(Red/Green/Blue)	3.8 W (Red: 1.0 W / Green: 1.4 W / Blue: 1.4 W)	(622 nm / 525 nm / 470 nm)	
HPR2-75 Series	HPR2-75RD	Red	17 W	635 nm	160 g
	HPR2-75SW	White	16 W	6000 K	
	HPR2-75BL	Blue	16 W	470 nm	
	HPR2-75FC	(Red/Green/Blue)	6.0 W (Red: 1.4W / Green: 2.3W / Blue: 2.3W)	(622 nm / 525 nm / 470 nm)	
HPR2-100 Series	HPR2-100RD	Red	17 W	635 nm	170 g
	HPR2-100SW	White	23 W	6000 K	
	HPR2-100BL	Blue	23 W	470 nm	
	HPR2-100FC	(Red/Green/Blue)	11 W (Red: 2.8W / Green: 4.1W / Blue: 4.1W)	(622 nm / 525 nm / 470 nm)	
HPR2-150 Series	HPR2-150RD	Red	27 W	635 nm	250 g
	HPR2-150SW	White	27 W	6000 K	
	HPR2-150BL	Blue	27 W	470 nm	
	HPR2-150FC	(Red/Green/Blue)	15 W (Red: 3.7W / Green: 5.5W / Blue: 5.5W)	(622 nm / 525 nm / 470 nm)	
HPR2-200 Series	HPR2-200RD	Red	34 W	635 nm	380 g
	HPR2-200SW	White	41 W	6000 K	
	HPR2-200BL	Blue	41 W	470 nm	
	HPR2-200FC	(Red/Green/Blue)	19 W (Red: 4.6W / Green: 6.9W / Blue: 6.9W)	(622 nm / 525 nm / 470 nm)	
HPR2-250 Series	HPR2-250RD	Red	45 W	635 nm	510 g
	HPR2-250SW	White	46 W	6000 K	
	HPR2-250BL	Blue	46 W	470 nm	
	HPR2-250FC	(Red/Green/Blue)	24 W (Red: 5.5W / Green: 9.1W / Blue: 9.1W)	(622 nm / 525 nm / 470 nm)	
HPR2-400-FT Series	HPR2-400RD-FT	Red	45 W	635 nm	1,050 g
	HPR2-400SW-FT	White	46 W	6000 K	
	HPR2-400BL-FT	Blue	46 W	470 nm	
	HPR2-400FC-FT	(Red/Green/Blue)	30 W (Red: 7.3W / Green: 11W / Blue: 11W)	(622 nm / 525 nm / 470 nm)	

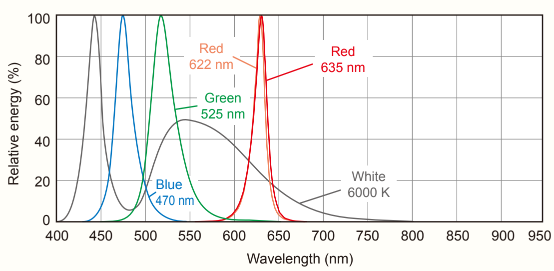
* Compared to the conventional HPR Series, the power consumption, peak wavelength, and correlated color temperature have changed. Confirm specifications and the applicable Control Unit before selecting.
* Regarding use of the full color type: The change in the radiation amount over time varies for each color (red, green, blue). Periodic adjustments may be necessary after initial radiation settings.

Common specifications

Input voltage	24 VDC
Connector	SMR-03V-B *
Polarity	1: (+), 2: NC, 3: (-)
Cable length	300 mm
Cooling method	Natural cooling
Operating environment (indoors only)	Temperature: 0 to 40°C, Humidity: 20% to 85% RH (with no condensation)
Storage environment	Temperature: -20 to 60°C, Humidity: 20% to 85% RH (with no condensation)
CE marking	Safety standard: EN62471 compliant
Environmental regulation	RoHS compliant
Case material	Aluminum alloy, Resin

* There are three connectors for the full color type.

Light spectrum



Strobe lighting through overdrive achieves high output that is approximately triple* of the constant lighting

* This is a calculated value. Results may vary for individual units.

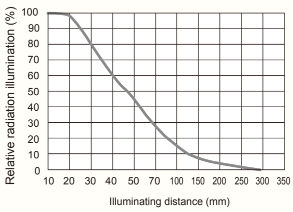
Combine with our strobe Control Unit (PTU2/BB Series) to achieve strobe lighting by overdrive.
This allows for lighting much brighter than constant lighting (the full color type is not supported).

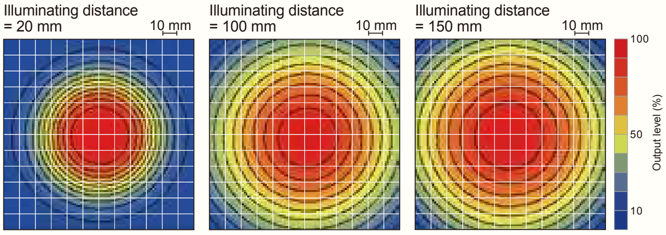
* Overdrive: The voltage or current provided to the light is increased, allowing for lighting brighter than normal.

Data: Radiation illumination graph / uniformity graph (Representative example)

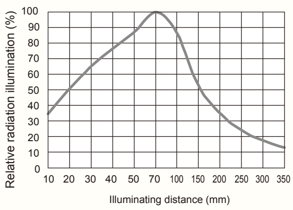
* The graphs included are for reference only. They do not guarantee the quality of this product.

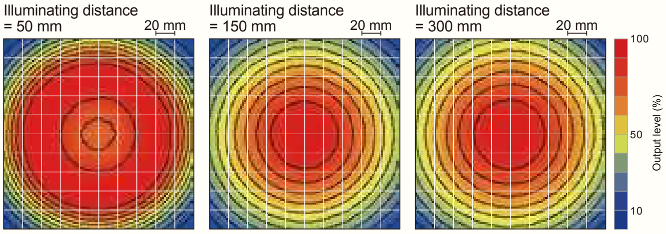
HPR2-75SW





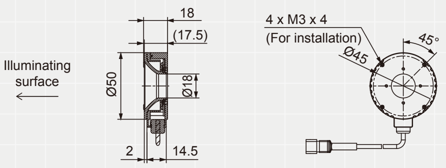
HPR2-200SW



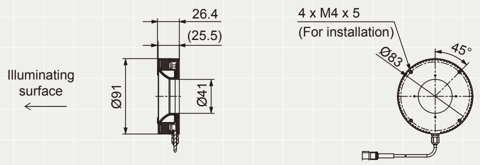


Dimensions (mm)

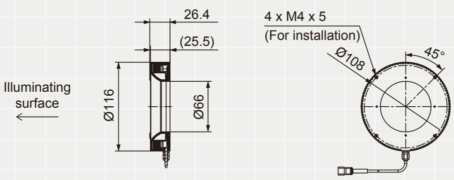
HPR2-50RD/SW/BL/FC



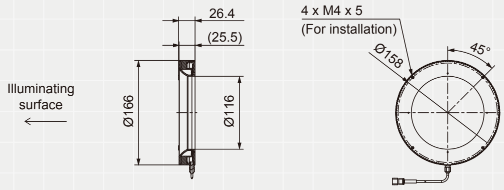
HPR2-75RD/SW/BL/FC



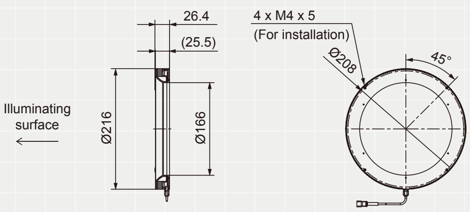
HPR2-100RD/SW/BL/FC



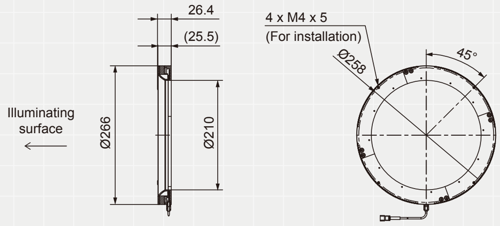
HPR2-150RD/SW/BL/FC



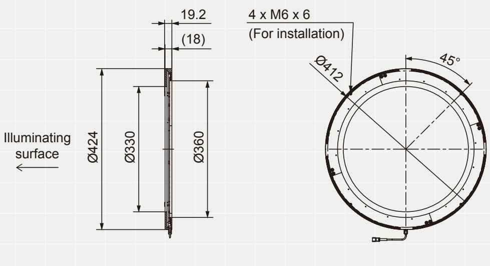
HPR2-200RD/SW/BL/FC



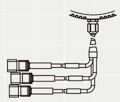
HPR2-250RD/SW/BL/FC



HPR2-400RD-FT/SW-FT/BL-FT/FC-FT



* For the HPR2-400-FT model, the diffusion plate is flat.



* The full color type (HPR2-□□FC, HPR2-400FC-FT) has three connectors.
Use a Control Unit equipped with three channels when adjusting intensity by color.

* The full color type and our company's strobe Control Unit (PTU2/BB Series) cannot be used together.

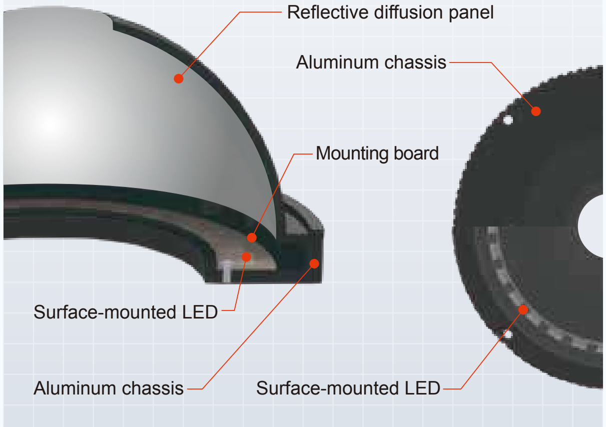
High Power Dome Light HPD2 Series

NEW! HPD2-75 Series

Uniform illumination of high output diffused light

Light from the surface-mounted LED is scattered inside of the dome-shaped reflective diffusion panel. The scattered light from the wide uniform region is illuminated onto the workpiece surface evenly.

● Cross-section structure of the HPD2-100 (conceptual image)



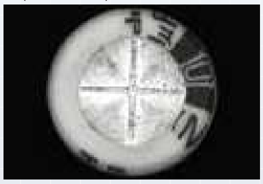
Supports applications for a wide variety of industries

The Dome Lights are applicable for uses in various industry. The usage includes the appearance inspection of the glossy, curved or uneven surface, and also includes the printing inspection, color discrimination inspection and so on.

● Semiconductor industry (Substrate)

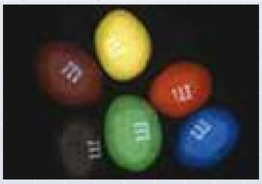
HPD2-100SW (White)

● Electronics part industry (Condenser)



HPD2-150SW (White)

● Food industry (Chocolate)



HPD2-250SW (White)

● Packaging industry (Top of a beverage container)

HPD2-150SW (White)

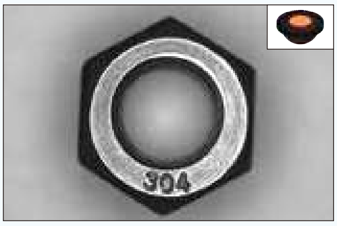
Added size variation

HPD2-75 model NEW!

Applications: Examining the text and exterior of metal parts, etc.

● Imaging via the HPD2-75RD (red)

Workpiece: Nut



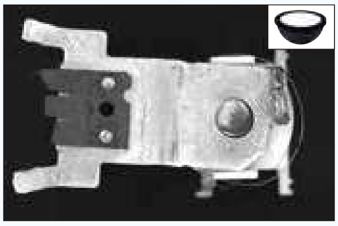
Performs accurate imaging of the engraved text, reducing reflection from the nut surface.

HPD2-200 model NEW!

Applications: Examining faults, engraving, or print on glossy surfaces, etc.

● Imaging via the HPD2-200SW (White)

Workpiece: Metal parts



Performs accurate imaging of the exterior, reducing reflection from the metal surface.

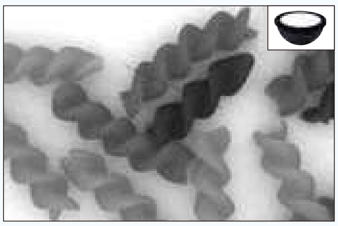
Added wavelength variation

Lineup of infrared types NEW!

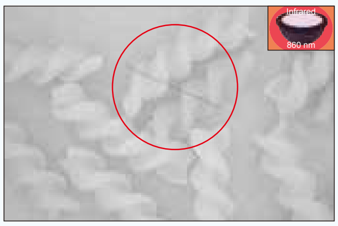
Applications: Examining for foreign material mixed in with food products, examining exterior of packaging, etc.

● Comparison of imaging for the HPD2-200IR860 (infrared) and HPD2-200SW (white)

Workpiece: Macaroni



White light imaging makes differentiating between the foreign material and the macaroni difficult.



Infrared light imaging allows for differentiating between the foreign material and the macaroni.

HPD2-100 Series HPD2-150 Series NEW! HPD2-200 Series HPD2-250 Series HPD2-400 Series

Added wavelength variation

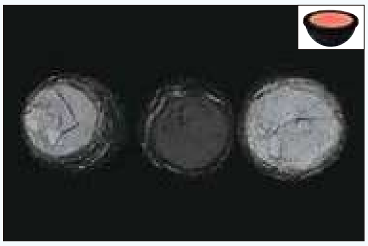
* The change in the radiation amount over time varies for each color (red, green, blue). Periodic adjustments may be necessary after initial radiation settings.

Lineup of full color (RGB) types NEW!

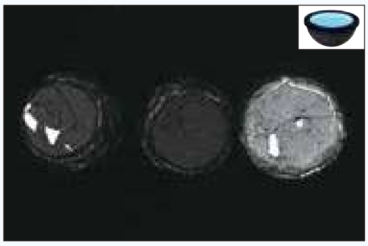
Applications: Examining the exterior by color for multi-colored workpieces, examining the exterior of food products, etc.

● Comparison of imaging via the HPD2-200FC (full color)

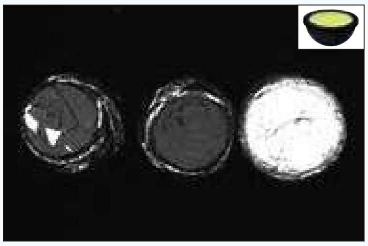
Workpiece: Chocolate



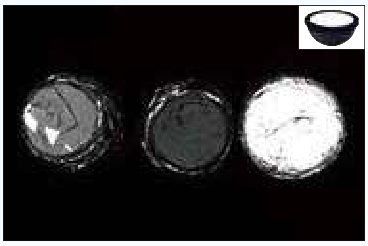
Imaging with red illumination



Imaging with blue illumination



Imaging with green illumination



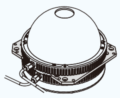
Imaging with white (all colors lit up) illumination

Provided two types of joint brackets

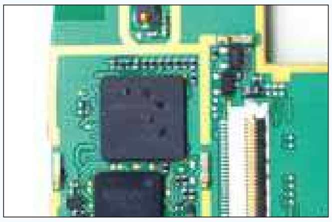
* Not supported for the HPR2-400-FT or HPD2-400 models.

Achieve optimal imaging by combining the Dome Light HPD2 Series with the Ring Light or Coaxial Light. Refer to the rear cover.

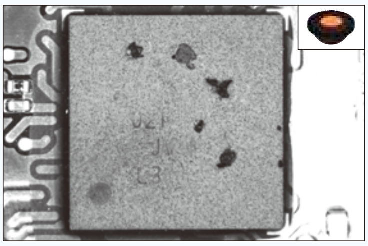
Examples of using the light joint bracket



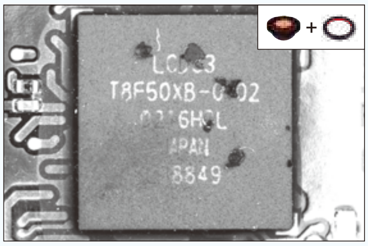
● Comparison of imaging for the HPD2-75RD (red) and the combination with the low angle light LDR-96RD2-LA1 (red)



Workpiece: Electronics part on a substrate

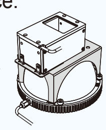


With Dome Light imaging, the surface text is erased but the foreign materials and dirt are captured.



Combining the Dome Light and the low angle light allows for imaging of the text, foreign material, and dirt on the surface.

Examples of using the Coaxial Light joint bracket



● Comparison of imaging for the HPD2-200RD (red) and the combination with the Coaxial Light LFV3-70RD (red)

Workpiece: Pet food container

Imaging with Dome Light captures reflections from the bumps on the container.

Allows for uniform imaging of the whole container by combining the Dome Light with a Coaxial Light.

High Power Dome Light HPD2 Series

Specifications

Series name	Model	LED color	Power consumption (max.)	Peak wavelength/Correlated color temperature (typ.)	Weight (max.)
HPD2-75 Series	HPD2-75RD	Red	17 W	635 nm	140 g
	HPD2-75SW	White	16 W	6500 K	
	HPD2-75BL	Blue	16 W	470 nm	
	HPD2-75FC	(Red/Green/Blue)	6.0 W (Red: 1.4 W / Green: 2.3 W / Blue: 2.3 W)	(622 nm / 525 nm / 470 nm)	
	HPD2-75IR860	Infrared	12 W	860 nm	
HPD2-100 Series	HPD2-100RD	Red	17 W	635 nm	160 g
	HPD2-100SW	White	23 W	6500 K	
	HPD2-100BL	Blue	23 W	470 nm	
	HPD2-100FC	(Red/Green/Blue)	11 W (Red: 2.8 W / Green: 4.1 W / Blue: 4.1 W)	(622 nm / 525 nm / 470 nm)	
	HPD2-100IR860	Infrared	23 W	860 nm	
HPD2-150 Series	HPD2-150RD	Red	27 W	635 nm	285 g
	HPD2-150SW	White	27 W	6500 K	
	HPD2-150BL	Blue	27 W	470 nm	
	HPD2-150FC	(Red/Green/Blue)	15 W (Red: 3.7W / Green: 5.5W / Blue: 5.5W)	(622 nm / 525 nm / 470 nm)	
	HPD2-150IR860	Infrared	35 W	860 nm	
HPD2-200 Series	HPD2-200RD	Red	34 W	635 nm	460 g
	HPD2-200SW	White	41 W	6500 K	
	HPD2-200BL	Blue	41 W	470 nm	
	HPD2-200FC	(Red/Green/Blue)	19 W (Red: 4.6W / Green: 6.9W / Blue: 6.9W)	(622 nm / 525 nm / 470 nm)	
	HPD2-200IR860	Infrared	46 W	860 nm	
HPD2-250 Series	HPD2-250RD	Red	45 W	635 nm	650 g
	HPD2-250SW	White	46 W	6500 K	
	HPD2-250BL	Blue	46 W	470 nm	
	HPD2-250FC	(Red/Green/Blue)	24 W (Red: 5.5W / Green: 9.1W / Blue: 9.1W)	(622 nm / 525 nm / 470 nm)	
	HPD2-250IR860	Infrared	46 W	860 nm	
HPD2-400 Series	HPD2-400RD	Red	45 W	635 nm	1,300g
	HPD2-400SW	White	46 W	6500 K	
	HPD2-400BL	Blue	46 W	470 nm	
	HPD2-400FC	(Red/Green/Blue)	30 W (Red: 7.3W / Green: 11W / Blue: 11W)	(622 nm / 525 nm / 470 nm)	
	HPD2-400IR860	Infrared	46 W	860 nm	

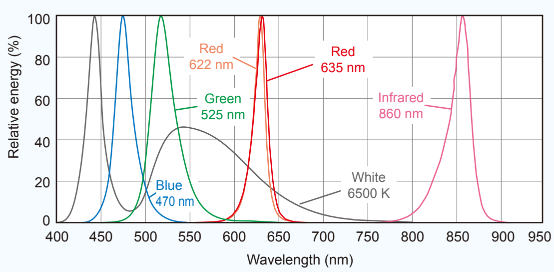
* Compared to the conventional HPR Series, the power consumption, peak wavelength, and correlated color temperature have changed. Confirm specifications and the applicable Control Unit before selecting.
* Regarding use of the full color type: The change in the radiation amount over time varies for each color (red, green, blue). Periodic adjustments may be necessary after initial radiation settings.

Common specifications

Input voltage	24 VDC
Connector	SMR-03V-B *
Polarity	1: (+), 2: NC, 3: (-)
Cable length	300 mm
Cooling method	Natural cooling
Operating environment (indoors only)	Temperature: 0 to 40°C, Humidity: 20% to 85% RH (with no condensation)
Storage environment	Temperature: -20 to 60°C, Humidity: 20% to 85% RH (with no condensation)
CE marking	Safety standard: EN62471 compliant
Environmental regulation	RoHS compliant
Case material	Aluminum alloy, Resin

* There are three connectors for the full color type.

Light spectrum



Strobe lighting through overdrive achieves high output that is approximately triple* of the constant lighting

* This is a calculated value. Results may vary for individual units.

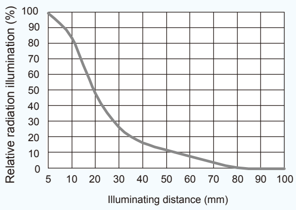
Combine with our strobe Control Unit (PTU2/BB Series) to achieve strobe lighting by overdrive.
This allows for lighting much brighter than constant lighting (the full color type is not supported).

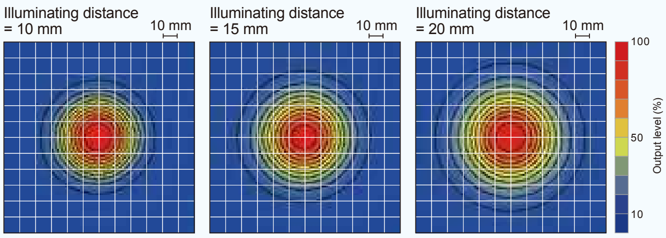
* Overdrive: The voltage or current provided to the light is increased, allowing for lighting brighter than normal.

Data: Radiation illumination graph / uniformity graph (Representative example)

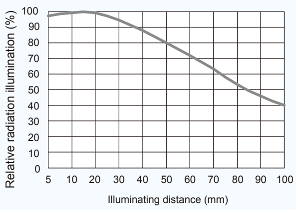
* The graphs included are for reference only. They do not guarantee the quality of this product.

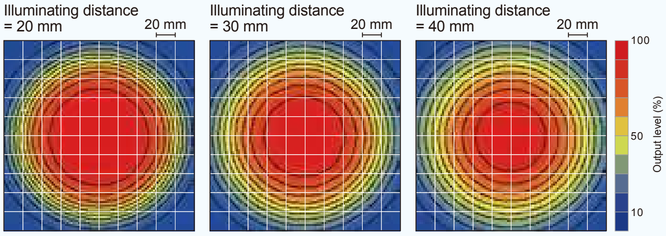
HPD2-75SW





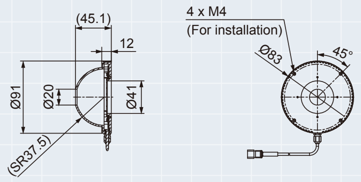
HPD2-200SW



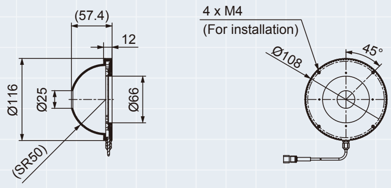


Dimensions (mm)

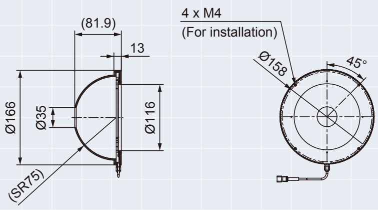
HPD2-75RD/SW/BL/FC/IR860



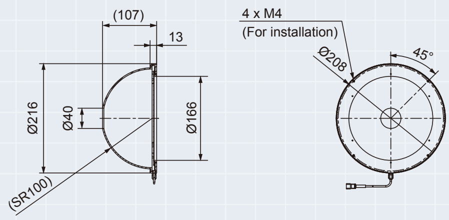
HPD2-100RD/SW/BL/FC/IR860



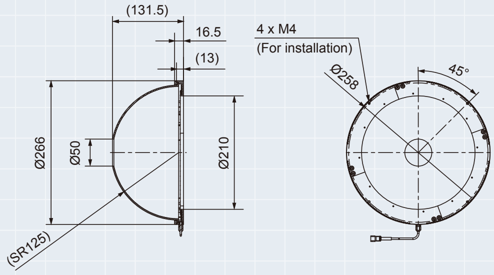
HPD2-150RD/SW/BL/FC/IR860



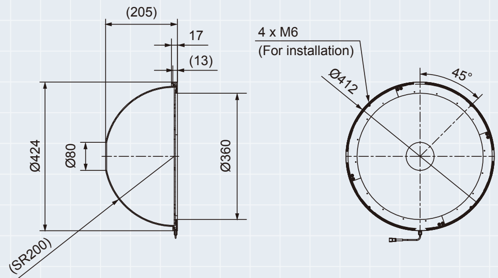
HPD2-200RD/SW/BL/FC/IR860

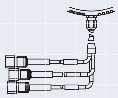


HPD2-250RD/SW/BL/FC/IR860

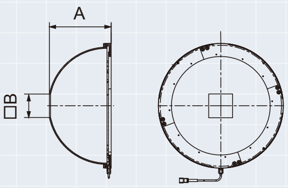


HPD2-400RD/SW/BL/FC/IR860





- **Square type dimensions**



- **Dimensions table**

Model	A dimension	B dimension
HPD2-75□-SQ20	45.1	20
HPD2-100□-SQ30	56.7	30
HPD2-150□-SQ40	81.3	40
HPD2-200□-SQ50	105.8	50
HPD2-250□-SQ60	130.3	60
HPD2-400□-SQ80	205	80

* □ is a placeholder for letters that indicate the color of the emitted light.

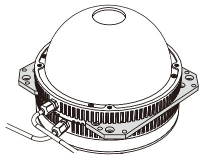
* The full color type (HPD2-□□FC) has three connectors. Use a Control Unit equipped with three channels when adjusting intensity by color.
* The full color type and our company's strobe Control Unit (PTU2/BB Series) cannot be used together.

Bracket Dimensions (mm)

Light Joint Bracket

(Includes two clamps and light installation screws)

Installation image for the HPD2-100 and HPR2-100

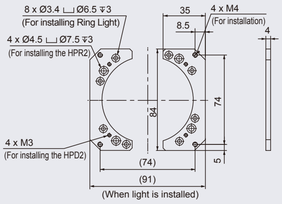


Supported Dome Lights (HPD2 Series)

Supported Ring Lights (HPR2 Series / LDR2-LA Series / LDR-LA1 Series)

BK-75-JO

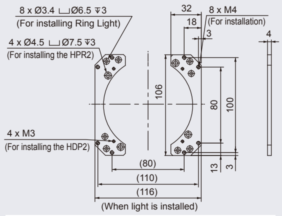
(Used for all HPD2-75 colors)



Supported Ring Lights	Used for all HPR2-75 colors Used for all LDR2-100-LA colors Used for all LDR-96-LA1 colors

BK-100-JO

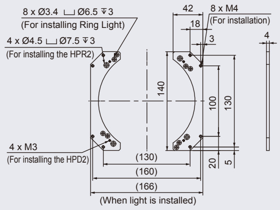
(Used for all HPD2-100 colors)



Supported Ring Lights	Used for all HPR2-100 colors Used for all LDR2-132-LA colors Used for all LDR-146-LA1 colors

BK-150-JO

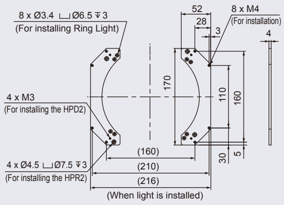
(Used for all HPD2-150 colors)



Supported Ring Lights	Used for all HPR2-150 colors Used for all LDR2-170-LA colors Used for all LDR-176-LA1 colors

BK-200-JO

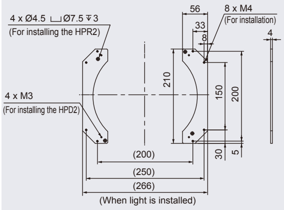
(Used for all HPD2-200 colors)



Supported Ring Lights	Used for all HPR2-200 colors Used for all LDR2-208-LA colors Used for all LDR-206-LA1 colors

BK-250-JO

(Used for all HPD2-250 colors)

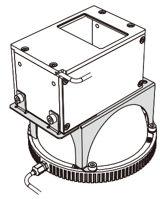


Supported Ring Lights	Used for all HPR2-250 colors

Coaxial Light Joint Bracket

(Includes one clamp and light installation screws)

Installation image for the HPD2-100 and LFV3-50

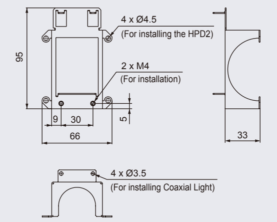


Supported Dome Lights (HPD2 Series)

Supported Coaxial Light (LFV3 Series)

BK-HPD2-75-LFV

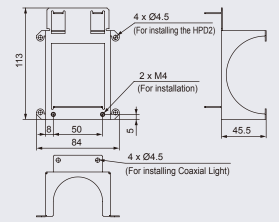
(Used for all HPD2-75 colors)



Supported Coaxial Light	Used for all LFV3-35 colors

BK-HPD2-100-LFV

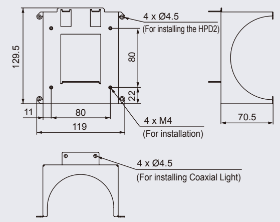
(Used for all HPD2-100 colors)



Supported Coaxial Light	Used for all LFV3-50 colors

BK-HPD2-150-LFV

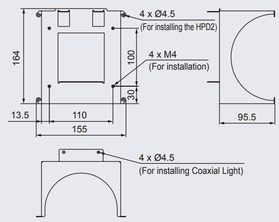
(Used for all HPD2-150 colors)



Supported Coaxial Light	Used for all LFV3-50 colors

BK-HPD2-200-LFV

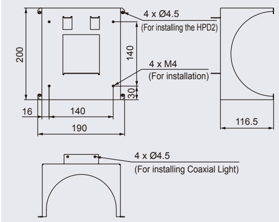
(Used for all HPD2-200 colors)



Supported Coaxial Light	Used for all LFV3-70 colors

BK-HPD2-250-LFV

(Used for all HPD2-250 colors)

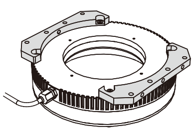


Supported Coaxial Light	Used for all LFV3-70 colors

Expansion Mounting Bracket

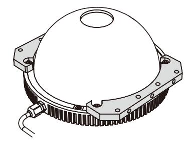
(Includes two clamps and light installation screws)

Installation image for the HPR2-100



Supported Ring Lights (HPR2 Series)

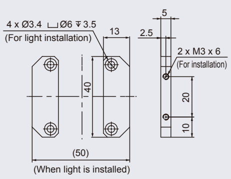
Installation image for the HPD2-100



Supported Dome Lights (HPD2 Series)

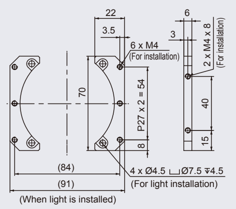
BK-50-CI

(Used for all HPR2-50 colors)



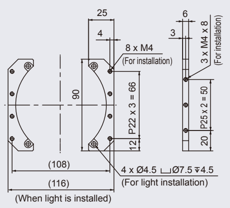
BK-75-CI

(Used for all HPR2-75 colors)
(Used for all HPD2-75 colors)



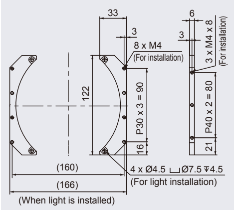
BK-100-CI

(Used for all HPR2-100 colors)
(Used for all HPD2-100 colors)



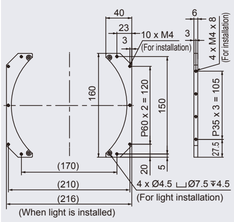
BK-150-CI

(Used for all HPR2-150 colors)
(Used for all HPD2-150 colors)



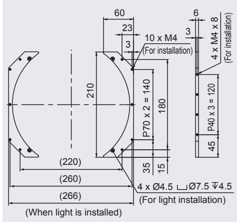
BK-200-CI

(Used for all HPR2-200 colors)
(Used for all HPD2-200 colors)



BK-250-CI

(Used for all HPR2-250 colors)
(Used for all HPD2-250 colors)



* If you would like to use the Light Joint Brackets together with the Coaxial Lihgt Joint Bracket, contact CCS.

CAUTION

● To ensure proper and safe use of the product, please read the *Instruction Guide* completely before using the product.
● The design and specifications of this product are subject to change without notification for product improvement.

CCS Inc.

Headquarters
Shimodachiuri-agaru, karasuma-dori, kamigyo-ku,
Kyoto 602-8011 JAPAN
TEL : +81-75-415-8284 / FAX : +81-75-415-8278
URL : http://www.ccs-grp.com/
E-mail : sales@ccs-inc.co.jp

CCS America, Inc
5 Burlington Woods Suite 204 Burlington, MA 01803 USA
TEL : +1-781-272-6900 / FAX : +1-781-272-6902
URL : http://www.ccsamerica.com/
Email : info@ccsamerica.com

CCS Europe NV/SA
Bergensesteenweg 423, Bus 13
1600 Sint-Pieters-Leeuw, Belgium
TEL : +32-(0)2-333-0080 / FAX : +32-(0)2-333-0081
Email : info@ccseu.com

CCS Asia PTE LTD
63 Hillview Avenue #07-10, Lam Soon Industrial
Building, Singapore 669569
TEL : +65-6769-1669 / FAX : +65-6769-3422
URL : http://www.ccs-asia.com.sg/
Email : sales@ccs-asia.com.sg

CCS Inc. Shanghai Office
Room 308B-309, CIMIC Tower No.1090 Century Avenue,
Pu Dong New Area, Shanghai 200120, P.R. China
TEL : +86-21-5835-8728 / FAX : +86-21-5835-8928
Email : ccschina@ccs-inc.co.jp

CCS Inc. Shenzhen office
17B,China Economic Trade Building, 7Rd Zizhu, Zhuzilin,
Futian District, Shenzhen 518040 P.R.China
TEL : +86-755-8279-0477 / FAX : +86-755-8279-0478
Email : ccschina@ccs-inc.co.jp

Content current as of May 2014. 02002-00-1405-HPR2_HPD2