Vision Light Tech
creating optical solutions

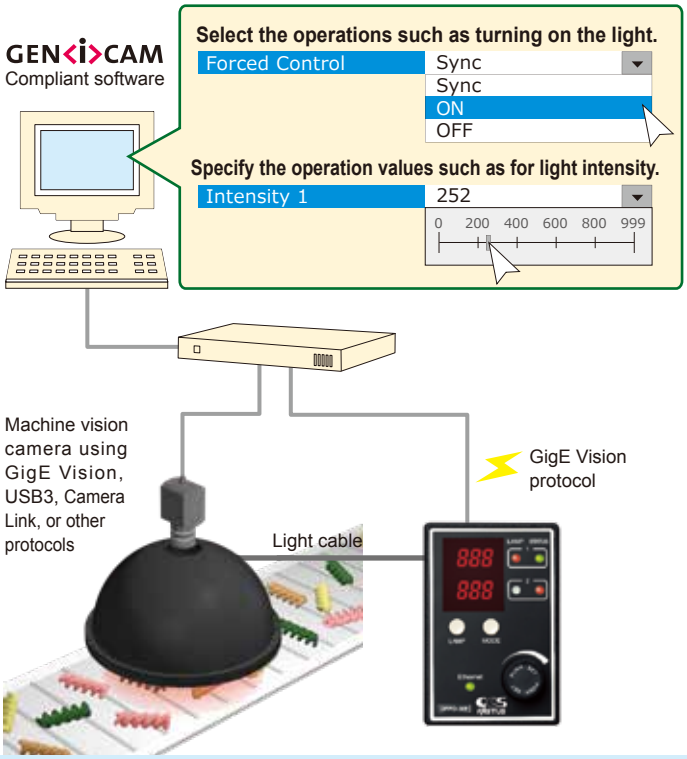
GigE Vision® Compliant LED Lighting Controller

OPPD-30G

Easy GigE Vision Connectivity and Stable Illumination

External Control via GigE Vision Communication

You can control the parameter settings such as light emitting width, lighting delay, and lighting ON/OFF for the OPPD-30G externally from the GigE Vision-compatible image processing systems, including GenICam-compliant software.

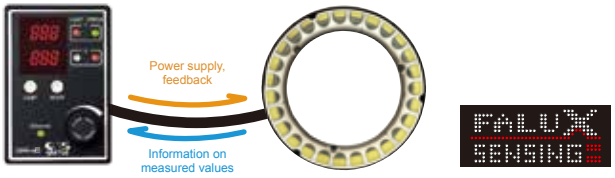


GenICam
GenICam is a generic standard to provide common user interfaces and APIs for camera control protocols such as GigE Vision, Camera Link®, and USB3 used for machine vision.

GigE Vision
GigE Vision is a machine vision camera control protocol featuring broadband data transmission over a long distance, multicasting, and flexible system configuration.

Brightness/Temperature Monitoring and Feedback Control

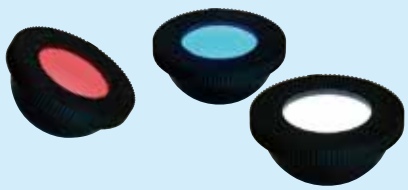
Connecting the OPPD-30G to lighting equipped with "FALUX sensing" enables monitoring of the lighting brightness and temperature.
Based on these monitored values, light intensity feedback control can be performed, allowing brightness to be kept constant.



Sensing LED Dome Lighting

HPDS-100 Series Coming Soon

- "FALUX sensing" enables monitoring of brightness and feedback control.
- Provides diffused light evenly through the dome-shaped reflective panel.



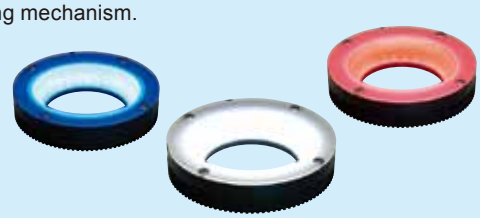
Applications

Inspections on glossy surfaces, curved surfaces, or uneven surfaces; inspection for engraving, damage, or stains on stain finishing; visual inspection of metal with hairline finishing; inspection of parts on circuit boards; etc.

Sensing LED Diffused Lighting

HPRS-100 Series Coming Soon

- "FALUX sensing" enables monitoring of brightness and feedback control.
- Achieves high-uniformity over a flexible LWD range by using a unique illuminating mechanism.



Applications

Inspection for damage or stains, visual inspections, character recognition, text inspection, high angle uniform illumination, characteristic extraction at low angle, etc.

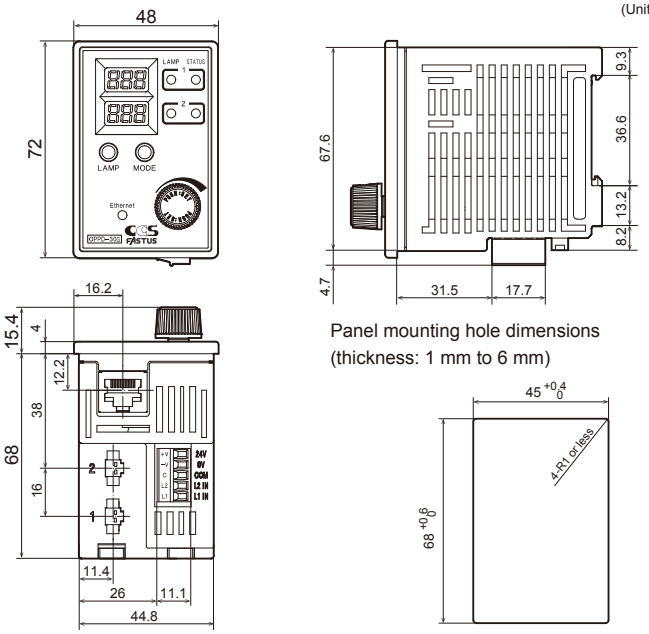
LIGHTING SOLUTION
CCS Inc.

OPPD-30G Specifications

Model name	OPPD-30G
Power supply voltage	24 VDC ±10%
Current consumption	Max. 1.3 A
Illumination output	2 ch
Connectable lighting	Max. 30 W (total for 2 channels)
Illumination output voltage	PWM mode: 12 VDC
Illumination output current	Max. 2.5 A (total for 2 channels)
Light intensity control	PWM intensity control, Frequency: 50/100/99/98/97 kHz
Monitoring	Lighting brightness monitor / Lighting internal temperature monitor, Monitor brightness alarm upper/lower limit value setting
Feedback	PWM correction method
Input	External illumination control × 2 ON voltage: 12 V or more, OFF voltage: 2 V or less, Max. input voltage: 30 V Input response time (actual value) With 24 V input (OFF→ON: 5 µs), (ON→OFF: 50 µs) With 12 V input (OFF→ON: 8 µs), (ON→OFF: 45 µs) Input resistance: 3.9 kΩ, insulated
Communication interface	Ethernet 10BASE-T/100BASE-TX, Auto MDI-X
Communication protocol	GigE Vision compliant
Protective functions	Overcurrent, controller internal temperature monitoring (PWM output cut to 1/4 at 105°C)
Regulations	Conforms to EMC (2014/30/EU) / RoHS (2011/65/EU, directive 32)
Standards	Conforms to EN 61326-1: 2013, EN 55011: 2009 / A1: 2010 Group 1, Class A
Protection rating	IP30 (IEC 60529: 1989 / A1: 1999 + A2: 2013)
Ambient temperature / humidity	0 to 40°C / 35 to 85% RH (no condensation)
Storage temperature / humidity	-20 to 70°C / 35 to 95% RH (no condensation)

Vibration resistance	10 to 55 Hz; amplitude: 1.5 mm; 2 hours in each of the X, Y, and Z directions
Shock resistance	Approximately 10 G, 3 times in each of the X, Y, and Z directions
Insulation resistance	500 VDC, 10 MΩ or more
Material	Housing: Polycarbonate and aluminum
Weight	150 g
Accessories	Instruction manual, Terminal block × 1
Options (sold separately)	Panel mounting bracket, Panel stand

(Unit: mm)



Panel mounting hole dimensions
(thickness: 1 mm to 6 mm)

HPDS-100 and HPRS-100 Series Specifications

Common Specifications

Input voltage	12 VDC
Connector	SMR-02V-B
Polarity	1: (+), 2: (-)
Cable length	300 mm
Cooling method	Natural air-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: Conforms to EN62471
Case material	Aluminum alloy, Resin

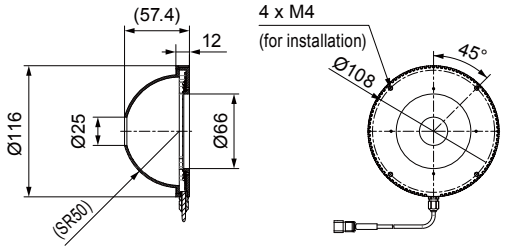
Specifications by Model

Model name	LED color	Peak wavelength / correlated color temperature (typ.)	Power consumption (max.)	Weight (max.)
HPDS-100RD	Red	635 nm	17 W	170 g
HPDS-100SW	White	6500 K	23 W	
HPDS-100BL	Blue	470 nm	23 W	
HPRS-100RD	Red	635 nm	17 W	180 g
HPRS-100SW	White	6500 K	23 W	
HPRS-100BL	Blue	470 nm	23 W	

Note: The design and specifications of this product are subject to change without notification for product improvement.

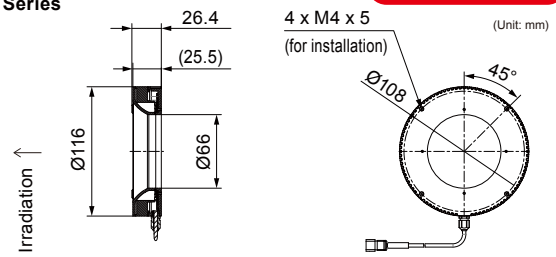
Coming Soon

HPDS-100 Series



Coming Soon

HPRS-100 Series



Notes

- 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.
- The workpiece imaging examples included in this brochure are intended to serve only as references to help you select a suitable Light Unit. Please verify the functionality and conditions required for your particular application before you make a final selection. The sample workpieces used in this brochure have been processed specifically for sample imaging. They are not intended to represent product quality and performance.

CCS
CREATING CUSTOMER SATISFACTION

Vision Light Tech
creating optical solutions

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