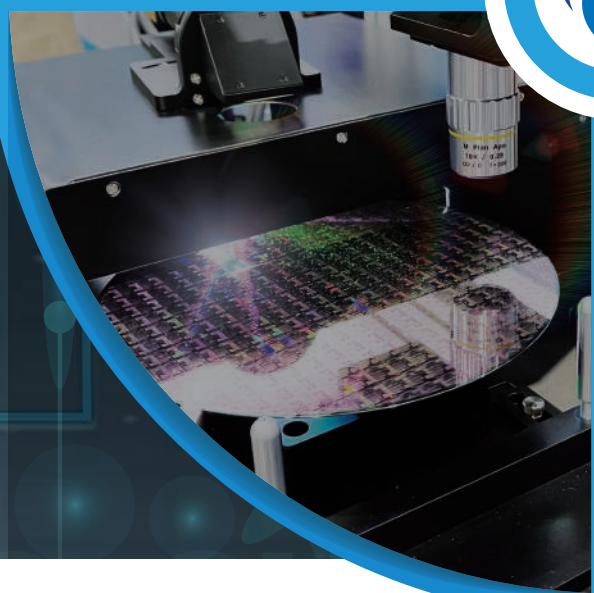
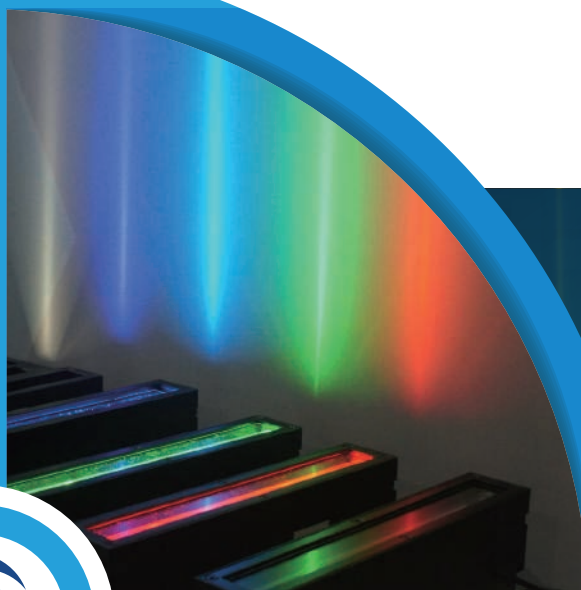
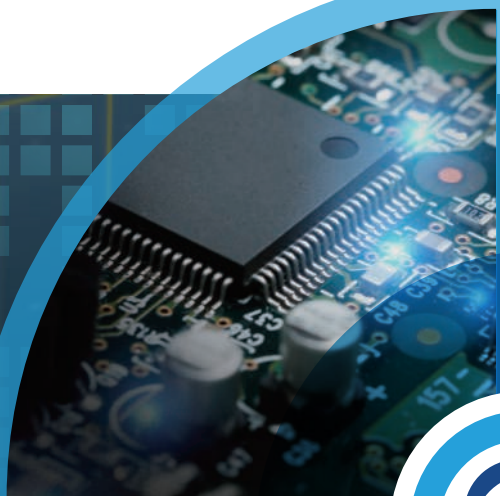


2025

PRODUCT
CATALOG



**REDEFINE
INTEGRATION**
FOR **BEST**
EFFICIENCY





COMPLETE **MACHINE VISION** SOLUTIONS

*BUILD YOUR SOLUTION
SMARTER AND MORE EFFICIENT*

COMPANY PROFILE

Established in 2009, Bestintech has been successfully applied our core capability on Opt-mechatronic Integration Engineering, Image Processing, IC Design and System Integration of SW/HW to develop customer-oriented AOI total solution. Our products and solutions include: Autofocus System, Industrial High Speed CCD/CMOS Camera, Programmable LED Driver, AC/DC Motor Driver, Motion Controller, USB3.0& Giga Ethernet solution and full lineup LED lightings.

Bestintech continues to develop more advanced SoC Embedded System framework, such as Microscope Autofocus System and Intelligent Automation related application and products. We serve our customers in Europe, North America, Southeast Asia, China and Taiwan, who are major manufactures in various industries. We hold a long term relationship with customers so that we are able to extend and multiplied applications in different industries for optical inspection. We aim to keep providing high value added and differentiated products and solutions for our customers to accomplished win-win partnership.

Innovative Technology

Professional Enthusiasm

Best Efficiency

Go Further with Visionary Innovation

COMPANY COMPETITIVENESS AND VISION

Bestintech is constituted with a group of passionate professionals. We have strong knowhow in image processing, SoC embedded design as well as software and hardware development. Applying company philosophy: PURSUING the EXCELLENCE, GENUINE, SHARING, and GLOBAL VISION and outstanding supply chain integration, we provide the best quality machine vision products with high price-performance ratio through designing and manufacturing by ourselves. We hope to enhance the competitiveness for our customers in intelligent automation industry by sharing the successful outcome with customers in the world.

QUALITY POLICY

In order to enhance the service and R & D system quality, we give an all-out effort to execute all the ISO regulations and requirements. By formal training and internal auditing, we are able to make sure all of our team members are executing in standardized working flows according to ISO core value. Bestintech has passed ISO 9001: 2008 since 11th of May in 2015. This milestone confirms our ability of continuous improving and maturing in terms of quality and reliability for the customers.



ENHANCE QUALITY



ON-TIME DELIVERY



REDUCE COST



SATISFIED SERVICE

Autofocus Microscope System



ATF

Autofocus Microscope System

08-09

Programmable LED Driver

Programmable LED Driver Selection Guide 10-11



SCLD LIGHT Series

Single-Channel Lightweight
Constant Current LED Driver

12



DCLD3 Series

Dual-Channel Constant Current
LED Driver

13



DCLD2 Series

Dual-Channel Constant Current
LED Driver

14-15



QCLD LIGHT Series

Quad-Channel Lightweight
Constant Current LED Driver

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QCLD2S Series

Quad-Channel Small-sized
Constant Current LED Driver

17



CQCLD Series

Compact Quad-Channel
Constant Current
LED Driver

18-19



QCLD2 Series

Quad-Channel Constant Current
LED Driver

20-21



OCLD Series

Octal-Channel Constant Current
LED Driver

22



OCLDS-LS Series

Octal-Channel Strobe Optimized
Constant Current LED Driver

23



SkyDRV Series

3/6/12 Channel Constant Current
LED Driver

24-25



CV Series

1/2/4 Channel Constant Voltage
LED Driver

26-27



QCLD Series

Quad-Channel Ethernet
Constant Current LED Driver

28



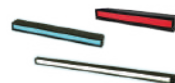
PSU Series

Programmable High Power Source Unit
with Fan monitoring &
Temperature Controlling system

29

LED Lighting

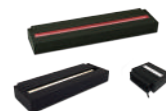
LED Lighting



LLSW/LLS-PAR Series

High Power Linear Lights

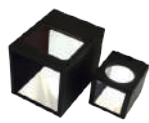
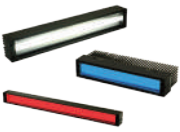
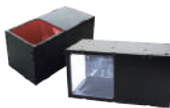
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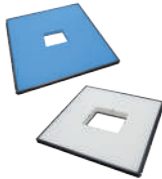
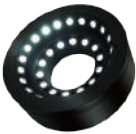
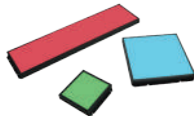
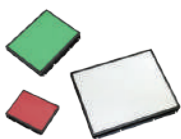


CLLSW/CLLS-PAR Series

High Power Linear Lights

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ATF Series

Autofocus Microscope System



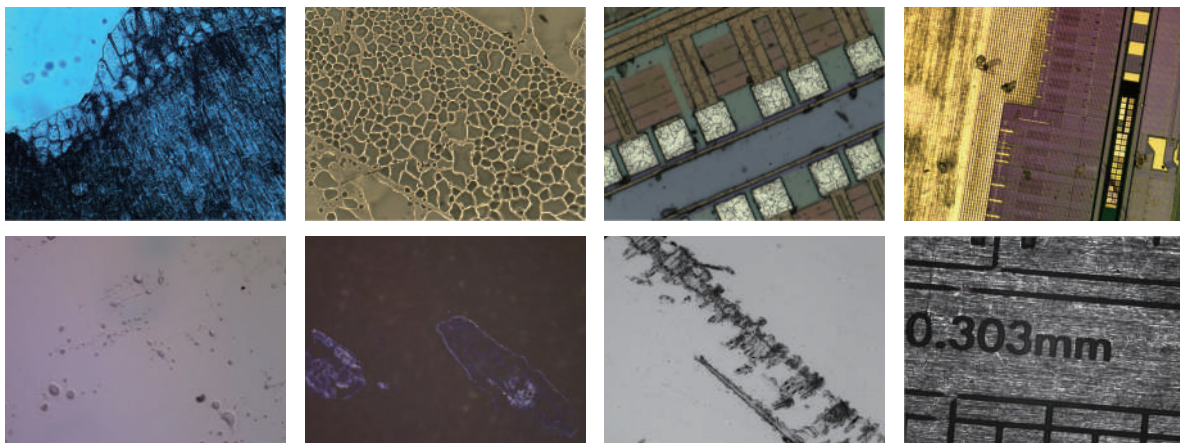
◆ Product Features

- High-speed instant autofocus on moving or static objects.
- Focusing 3K times per second. Built-in high response servo motor controller.
- A complete solution for Area & Line scan in high-speed microscopic image scanning. Highly integrated system for easy setup and use.
- Advanced SoC FPGA technology and fully digitized algorithm provide high reliability and high accuracy.
- Built-in high uniformity light illumination. Optional ultra-high intensity bright & dark field illumination reaches million lux.
- Optional linear lens changer, DIC and fluorescence optical system.
- Compatible with an infinity-corrected microscope system.
- Gigabit Ethernet network control interface provides industrial-grade reliability.

◆ Applications

- Semiconductor Optical Inspection - Wafer, Package and Die Sorting.
- Flat-panel Optical Inspection - TFT-LCD, Solar Cell and Micro-LED.
- Biomedical Science Imaging - Liquid Biopsy, Cell Slide and Fluorescence Microscopy.
- Precision Laser Processing - Cutting, Marking and Dicing.

◆ Case Pictures



◆ Specification Table

Model Name	ATF-S / ATF-SL	ATF-SLX	ATF-SI
Control Interface	Gigabit Ethernet		
Laser Wavelength	785 nm / 820 nm		
Laser Safety	Class 3B		
Focusable sample properties	Reflective surface, matte surface and transparent material		
Specimen Reflectivity	1% ~ 100%		
Image Field	Max. 30 mm		
Camera Mount	C-Mount / M42-Mount		
Focusing Accuracy	One-quarter ~ one-sixth of objective DOF		
Focusing Update Rate	3 KHz	500 Hz	250 Hz
Sampling Rate	15 KHz	2.5 KHz	1.25 KHz
Focusing Range	±700 μm (objective lens 20X)		
	±3,000 μm (objective lens 10X)		
	±9,200 μm (objective lens 5X)		
	±10,000 μm (objective lens 2X)		
Z axis – Travel & profile	±10 mm with adaptive S-curve motion profile		
Z axis - Resolution	0.015 μm with 16-bit encoder		
Z axis - Speed	20mm/s @ single lens. 10mm/s @ linear lens changer and four objectives.	20mm/s @ single lens.	10mm/s @ single lens.
Z axis – Position update rate	3,000 times per second		
Z axis – Max. acceleration	Acceleration: 1,000 mm/s ² Deceleration: 400 mm/s ²		
Illuminator - Default	5W high uniformity lighting with built-in LED driver.		
Illuminator – Options Lighting	MLSU - High power bright field illumination. DFLS - Ultra-high intensity dark field illumination.		
Illuminator – Options LED Driver	Programmable LED Driver with high-speed external trigger synchronization capability. The maximum frequency of strobe input reaches to 500kHz.		

Programmable LED Driver Selection Guide

Image	Series	Channel	Input Voltage	Output Voltage	Output Current (max.)	Interface	Power Supply	Strobe Function
	SCLD-Light	1	DC24V	DC13V~22.5V	2000mA	 	-	YES
	DCLD2-L	2	DC12V~24V	DC1.5V~22V	2000mA	 	-	YES
	DCLD2-LV2		DC24V	DC1.5V~24V	1500mA			
	DCLD2-LS		DC24V	DC12V~24V	1500mA			
	DCLD2	2	DC24V~48V	DC9V~50V	2000mA	 	-	YES
	DCLD2-H	2	DC24V~48V	DC24V~95V	1000mA	 	-	YES
	DCLD3-L	2	DC24V	DC1.5V~24V	5000mA	 	-	YES
	SkyDRV-3CH	3	AC100V~240V	DC24V~51V	1000mA	 	YES	-
	SkyDRV-3CH-L			DC12V~24V				
	SkyDRV-6CH	6	AC100V~240V	DC24V~51V	1000mA		YES	-
	SkyDRV-6CH-L			DC12V~24V				
	SkyDRV-12CH	12	AC100V~240V	DC24V~51V	1000mA		YES	-
	SkyDRV-12CH-L			DC12V~24V				



Analog Version



Digital Version



Digital Button

Compatible with major light guide manufacturers
Full line-up models for your various requirements
Precise current adjustment resolution

Image	Series	Channel	Input Voltage	Output Voltage	Output Current (max.)	Interface	Power Supply	Strobe Function
	CQCLD-CA	4	AC100V~240V	DC1.5V~22V	1000mA	CA :  	YES	YES
	CQCLD-CD			DC1.5V~22.5V		CD :  		
	QCLD2-L	4	AC100V~240V	DC1.5V~22V	3000mA	 	YES	YES
	QCLD2-LV2			DC1.5V~24V	2000mA			
	QCLD2-LS			DC12V~24V	2000mA			
	QCLD2S-L	4	DC12V~24V	DC1.5V~22V	2000mA		-	YES
	QCLD2S-LV2		DC24V	DC1.5V~24V	1000mA			
	QCLD2S-LS		DC24V	DC12V~24V	1000mA			
	QCLD LIGHT	4	DC12V~24V	DC1.5V~22V	750mA	  	-	YES
	QCLD2	4	AC100V~240V	DC5V~52V	5000mA	 	YES	YES
	QCLD	4	AC100V~240V	DC9V~51V	3000mA	 	YES	YES
	OCLD-L	8	AC100V~240V	DC1.5V~24V	1000mA		YES	YES
	OCLDS-LS	8	DC24V	DC12V~24V	1000mA Strobe : 2000mA		-	YES



USB Interface



RS-485 Interface



Ethernet

SCLD LIGHT Series

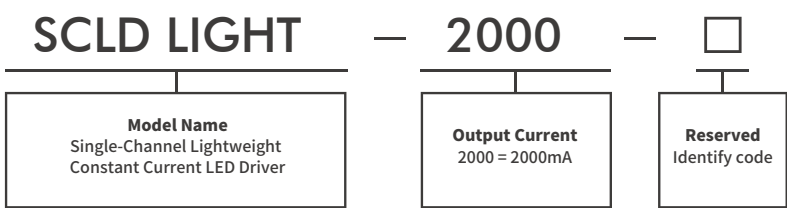
Single-Channel Lightweight Constant Current LED Driver



Product Features

- Input Voltage : DC24V
- Recommend working voltage output : DC13V~22.5V
- Output Current : 2000mA max.
- Automatically stop current output when output short circuit in order to avoid abnormal operating
- External pulse switch control : provides external trigger switch signal to synchronize LED strobe; the maximum frequency of strobe input reaches to 100Hz

Model Guide

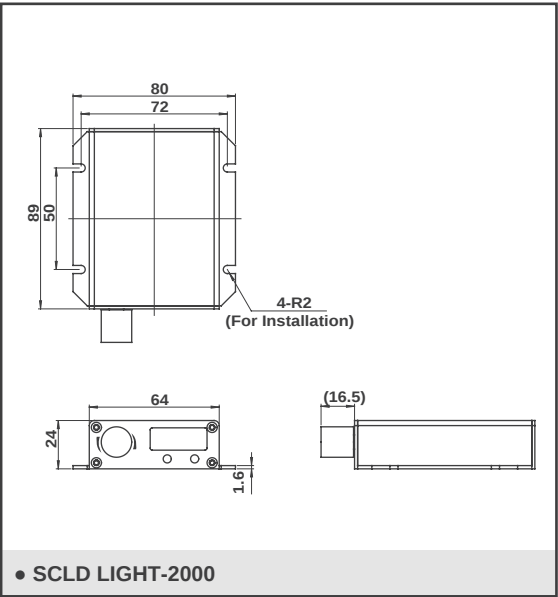


Specification Table

Model	Input Voltage	Output Voltage	Output Current
SCLD LIGHT	DC24V	DC13V~22.5V	2000mA

※ Customized output voltage/current available

Dimensional Drawing



DCLD3-L Series

DCLD3-L Series

Dual-Channel Constant Current LED Driver

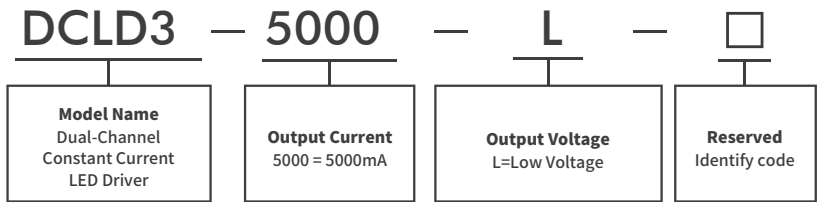


CE

Product Features

- Digital knob and 7-segment display to adjust and indicate output current, two channels can be adjusted and stored data separately
- Electrical isolation USB Interface, ultra-high speed strobe optical receiver
- High current drive capability: Maximum continuous current output for each channel is 5000mA, and able to provide double pulse current output in maximum.
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short-circuit
- Alarm and protection : abnormal input power alarm, system over-current alarm, system overheats alarm
- External pulse switch control: provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to is < 5us; the maximum frequency of strobe input reaches to 100kHz
- LED strobe output width adjustment mechanism: provide 30000X200us exposure width adjustment capability
- With precise current adjustment resolution : digital knob provides 256 current adjusting levels, USB interface provides 4096 current adjusting levels
- Each channel provides 256 sets of programmable and non-volatile LUT units to help users quickly correspond different currents and various brightness & characteristic of LED lights
- Pass EMC and CE Safety test : CE compatible

Model Guide

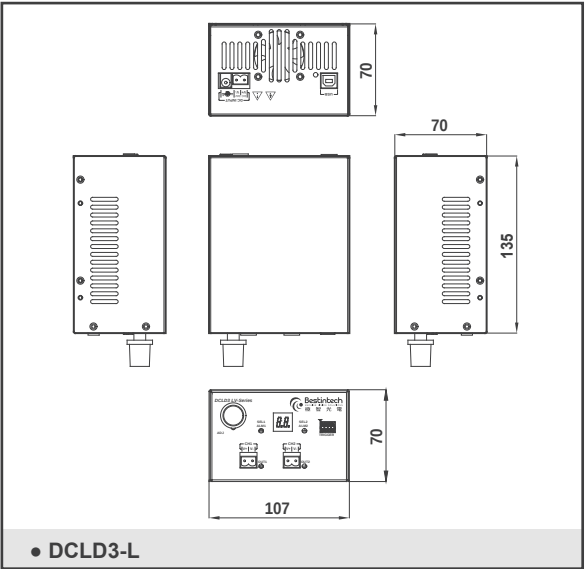


Specification Table

Model	Input Voltage	Output Voltage	Output Current
DCLD3-L	DC24V	DC1.5V~24V	250mA
			500mA
			1000mA
			2000mA
			5000mA

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Dimensional Drawing



DCLD2 Series

Dual-Channel Constant Current LED Driver



• DCLD2



• DCLD2-L
• DCLD2-LV2
• DCLD2-LS



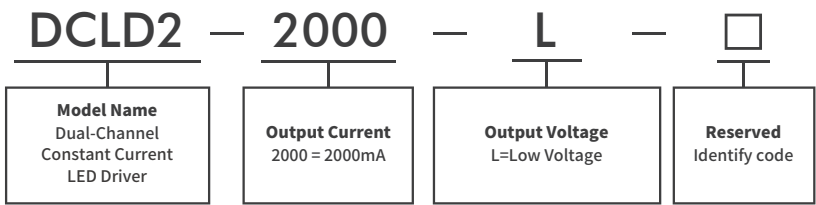
• DCLD2-H



Product Features

- USB interface for electrical isolation : ultra-high speed strobe optical receiver
- Digital knob to adjust output current with 7-segment display indicator : two channels can be adjusted and storage independently
- High-current driving capacity : maximum 2000mA output current per channel
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short-circuit
- Alarm and protection : abnormal input power 、 system over-current 、 system overheats
- Precision current adjustment resolution : digital knob provides 256 adjusting current levels, USB interface provides 4096 adjusting current levels
- LED strobe output width can be adjusted from 1 to 4095us of exposure width
- DCLD2 、 DCLD2-L/LV2 external pulse switch control : provides external trigger switch signal to synchronize LED strobe : the minimum width of LED output reaches to 10us : the maximum frequency of strobe output reaches to 100kHz (periodic)
- DCLD2-H/LS external pulse switch control : provides external trigger switch signal to synchronize LED strobe : the minimum width of LED output reaches to 100us : the maximum frequency of strobe output reaches to 10 kHz
- Each channel provides 256 sets of programmable and non-volatile LUT units to help users quickly correspond different currents and various brightness & characteristic of LED lights
- Pass EMC and CE Safety test : CE compatible (DCLD2-L)

Model Guide

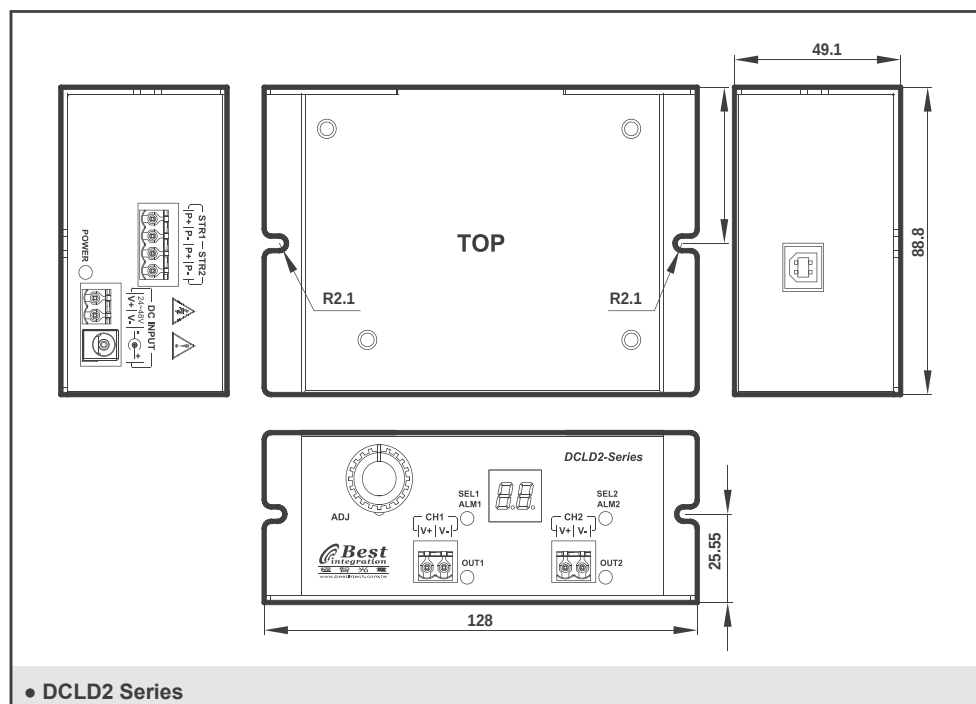


Specification Table

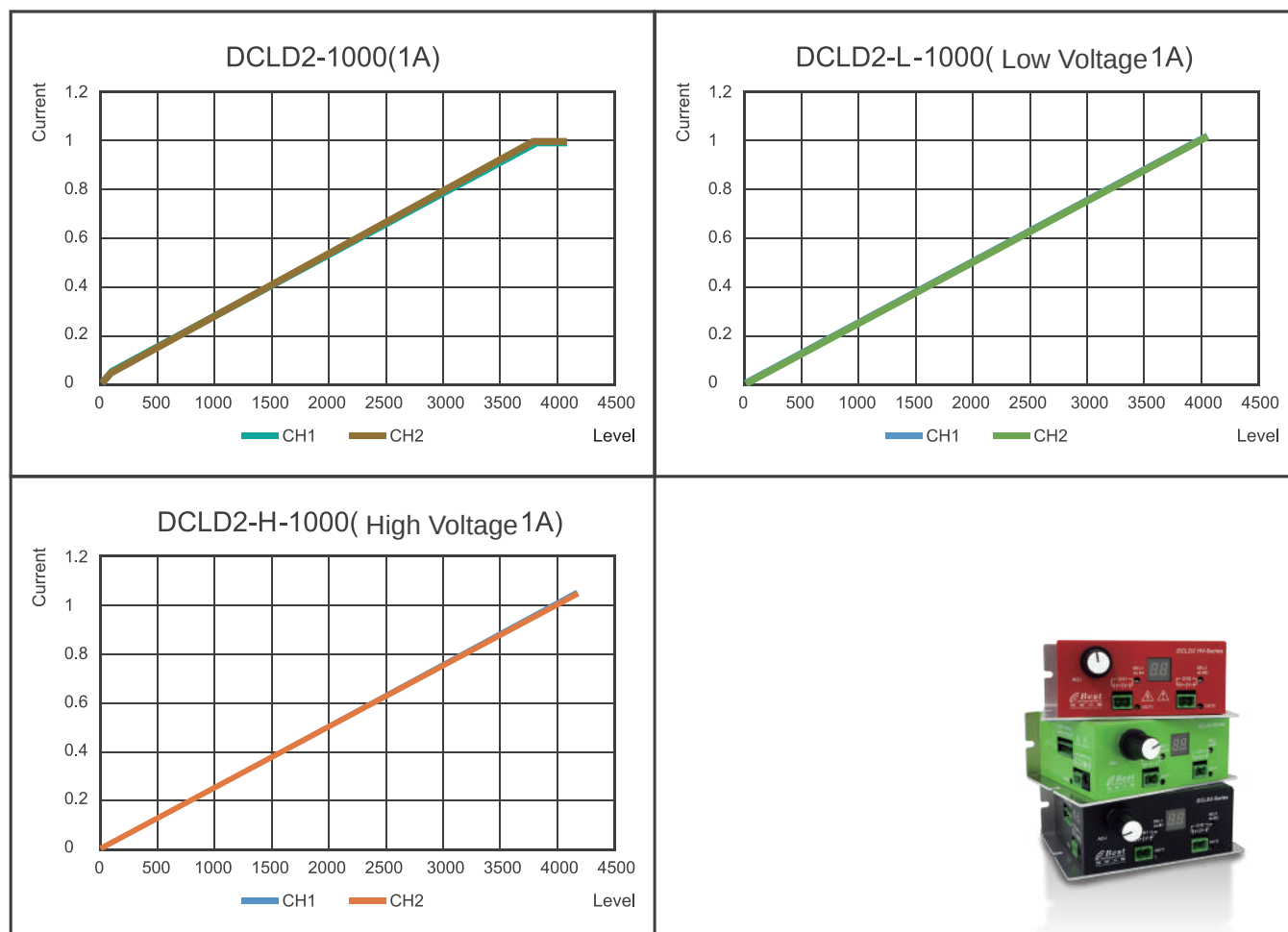
Model	Driver Type	Input Voltage	Output Voltage	Output Current (Max.)
DCLD2	Wide Voltage	DC24V~48V	DC 9V~50V	≤2000mA
DCLD2-L	Low Voltage	DC12V~24V	DC1.5V~22V	≤2000mA
DCLD2-LV2	Low Voltage	DC24V	DC1.5V~24V	≤1500mA
DCLD2-LS	Low Voltage with Strobe Optimized	DC24V	DC12V~24V	≤1500mA
DCLD2-H	High Voltage	DC24V~48V	DC24V~95V	≤1000mA

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◆ Dimensional Drawing



◆ Linear Diagram



QCLD LIGHT Series

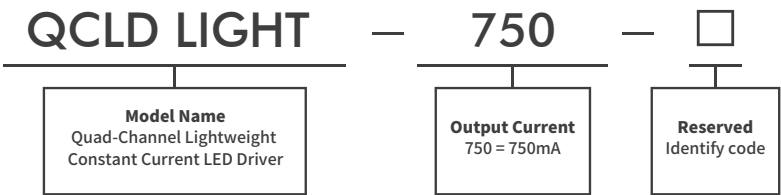
Quad-Channel Lightweight Constant Current LED Driver



Product Features

- Communication interface for electrical isolation : USB2.0/RS-485, maximum 127 devices can be cascaded with RS-485 controller
- Current driving capacity : maximum 750mA output current per channel
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short-circuit
- Alarm and protection : abnormal input power 、 system over-current 、 system overheats
- Wide range of current adjustment resolution : USB/RS-485 interface provides 4096 adjusting current levels
- External pulse switch control : provides external I trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 10ms; the maximum frequency of strobe output reaches to 100Hz
- Each channel provides 256 sets of programmable and non-volatile LUT units to help users quickly correspond different currents and various brightness & characteristic of LED Lights
- Pass EMC and CE Safety test : CE compatible

Model Guide

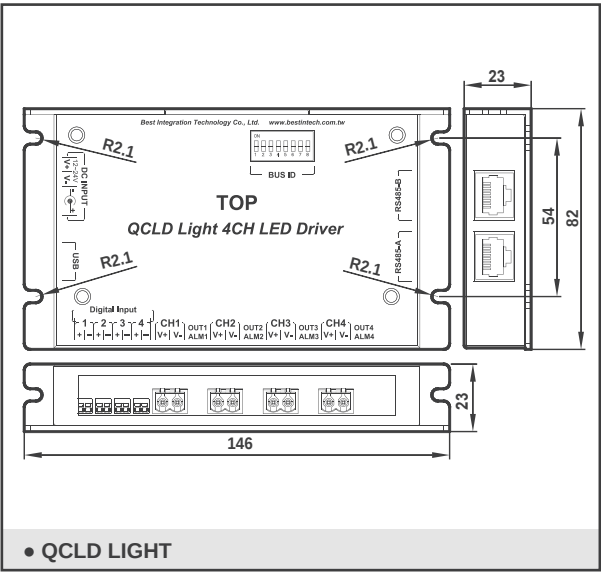


Specification Table

Model	Input Voltage	Output Voltage	Output Current
QCLD LIGHT	DC12V~24V	DC1.5V~22V	200mA
			300mA
			450mA
			600mA
			750mA

※提供客製化輸出電壓/電流規格

Dimensional Drawing



Quad-Channel Small-sized Constant Current LED Driver



Product Features

- USB interface for electrical isolation; ultra-high speed strobe optical receiver
- Wide range of constant current output voltage: DC1.5V~22V(For QCLD2S-L)/DC1.5V~24V(For QCLD2S-LV2)/DC12V~24V(For QCLD2S-LS)
- High-current driving capacity : maximum 2000mA output current per channel
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short-circuit
- Alarm and protection : abnormal input power 、 system over-current 、 system overheats
- QCLD2S-L/LV2 external pulse switch control : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 10us; the maximum frequency of strobe output reaches to 100kHz (periodic)
- QCLD2S-LS external pulse switch control : provides external I trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 100us; the maximum frequency of strobe output reaches to 10kHz
- LED strobe output width can be adjusted from 4096us of exposure width
- Precision current adjustment resolution : USB interface provides 4096 adjusting current levels
- Each channel provides 256 sets of programmable and non-volatile LUT units to help users quickly correspond different currents and various brightness & characteristic of LED lights

Model Guide

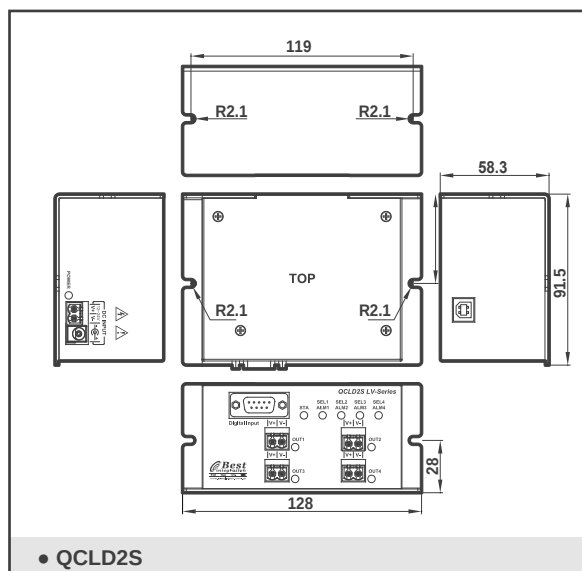
QCLD2S	2000	L	
Model Name Quad-Channel Small-sized Constant Current LED Driver	Output Current 2000 = 2000mA	Output Voltage L = Low Voltage	Reserved Identify code

Specification Table

Model	Input Voltage	Output Voltage	Output Current
QCLD2S-L	DC12V~24V	DC1.5V~22V	500mA
			750mA
			1000mA
			2000mA
QCLD2S-LV2	DC24V	DC1.5V~24V	500mA
			750mA
			1000mA
QCLD2S-LS	DC24V	DC12V~24V	500mA
			750mA
			1000mA

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Dimensional Drawing



CQCLD Series

Compact Quad-Channel Constant Current LED Driver



• CQCLD-CD

• CQCLD-CA

◆ Product Features

- SB interface for electrical isolation; ultra-high speed strobe optical receiver
- Analog Version (CA Type) provides 4 knobs to adjust each channel individually; Digital Version (CD Type) provides digital knob to adjustment with 7-segment display indicator; 4 channels can be adjusted and storage individually.
- High-current driving capacity : Maximum 1000mA output current per channel
- Build-in power supply : 65W
- LED open-loop detection and short-circuit protection (CD Type) : automatically stop output current when no-load or short-circuit
- Alarm and protection (CD / CA Type) : abnormal input power 、 system over-current 、 system overheats
- Precision current adjustment resolution : digital knob provides 256 adjusting current levels, USB interface provides 4096 adjusting current levels
- High-efficiency and high-power factor power circuit
- External pulse switch control : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 1ms; the maximum frequency of strobe output reaches to 1kHz
- Each channel provides 64 sets of programmable and non-volatile LUT units to help users quickly correspond different currents and various brightness & characteristic of LED lights
- Compact design with optional track fixtures at the bottom of the unit to give convenient set up for the users

◆ Specification Table

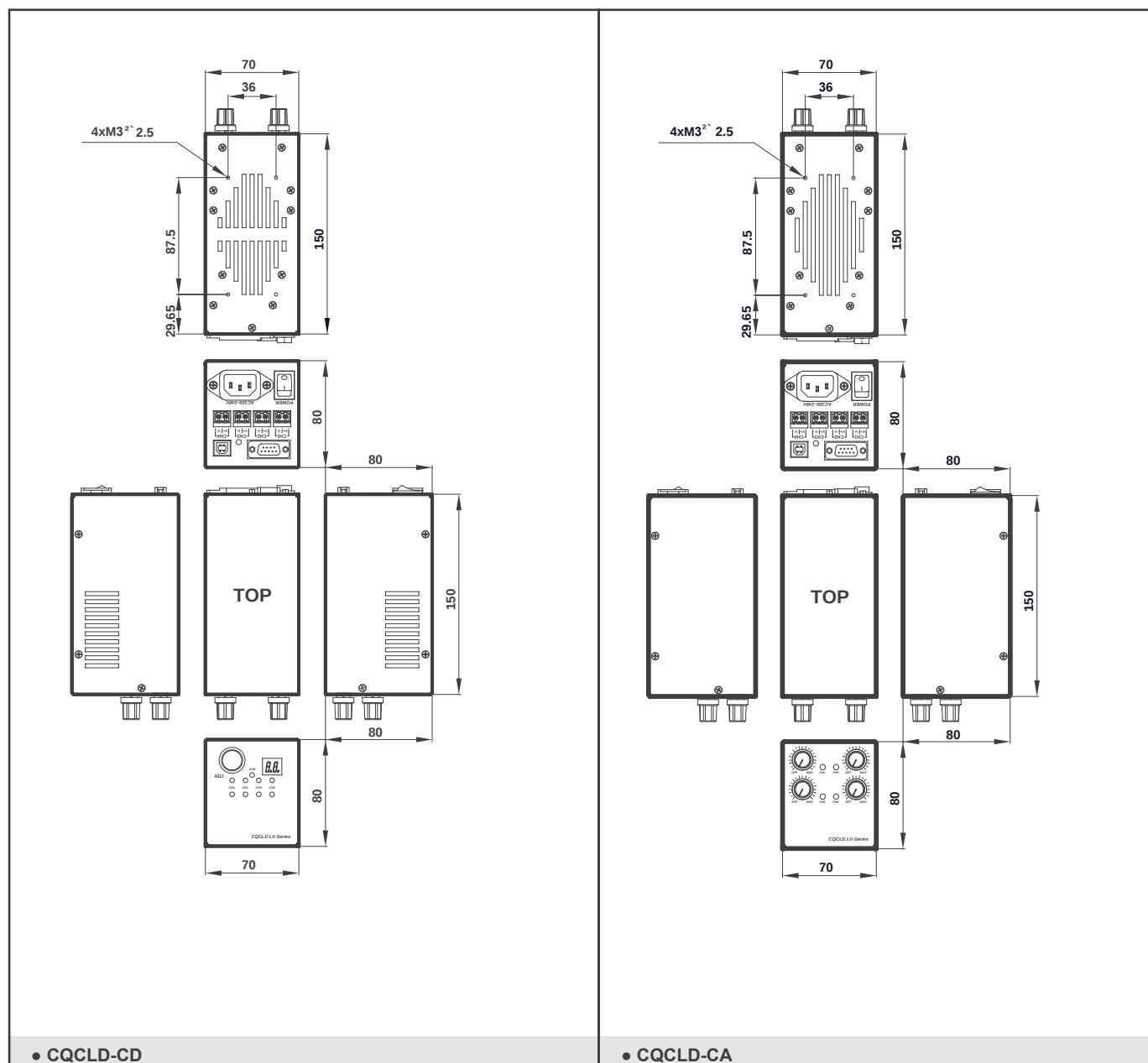
Model	Driver Type	Power Supply	Input Voltage	Output Voltage	Output Current (Max.)
CQCLD-CA	Analog Type	65W	AC100V~240V	DC1.5V~22V	≤1000mA
CQCLD-CD	Digital Type			DC1.5V~22.5V	

※提供客製化輸出電壓/電流規格

◆ Model Guide

CQCLD	— 65 —	1000	— CA —	L	— □
Model Name Compact Quad-Channel Constant Current LED Driver	Power Supply 65 = 65W	Output Current 1000 = 1000mA	Driver Type CA = Analog Type	Output Voltage L = Low Voltage	Reserved Identify code

◆ Dimensional Drawing



QCLD2 Series

Quad-Channel Constant Current LED Driver



• QCLD2



• QCLD2-L
• QCLD2-LV2
• QCLD2-LS



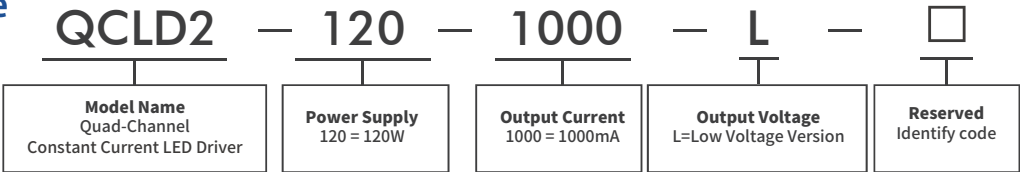
• QCLD2-120W/300W-L
• QCLD2-120W/300W-LV2
• QCLD2-120W/300W-LS



◆ Product Features

- USB interface for electrical isolation; ultra-high speed strobe optical receiver
- Digital knob to adjust output current with 7-segment display indicator; channels can be adjusted and storage individually
- High-current driving capacity : maximum 3000mA output current per channel
- Build-in power supply
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short-circuit
- Alarm and protection : abnormal input power 、 system over-current 、 system overheats
- Precision current adjustment resolution : digital knob provides 256 adjusting current levels, USB interface provides 4096 adjusting current levels
- High-efficiency and high-power factor power circuit
- LED strobe output width can be adjusted from 1us~64s of exposure width
- QCLD2 、QCLD2-L/LV external pulse switch control : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 10us; the maximum frequency of strobe output reaches to 100kHz (periodic)
- QCLD2-LS external pulse switch control : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 100us; the maximum frequency of strobe output reaches to 10kHz (periodic)
- Each channel provides 256 sets of programmable and non-volatile LUT units to help users quickly correspond different currents and various brightness & characteristic of LED Lights

◆ Model Guide

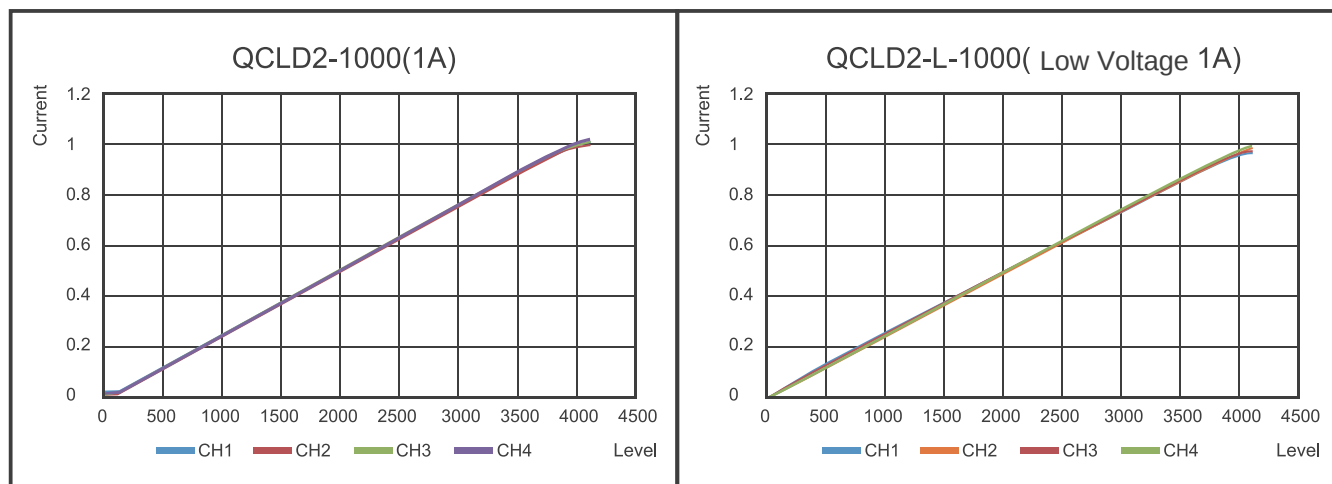


◆ Specification Table

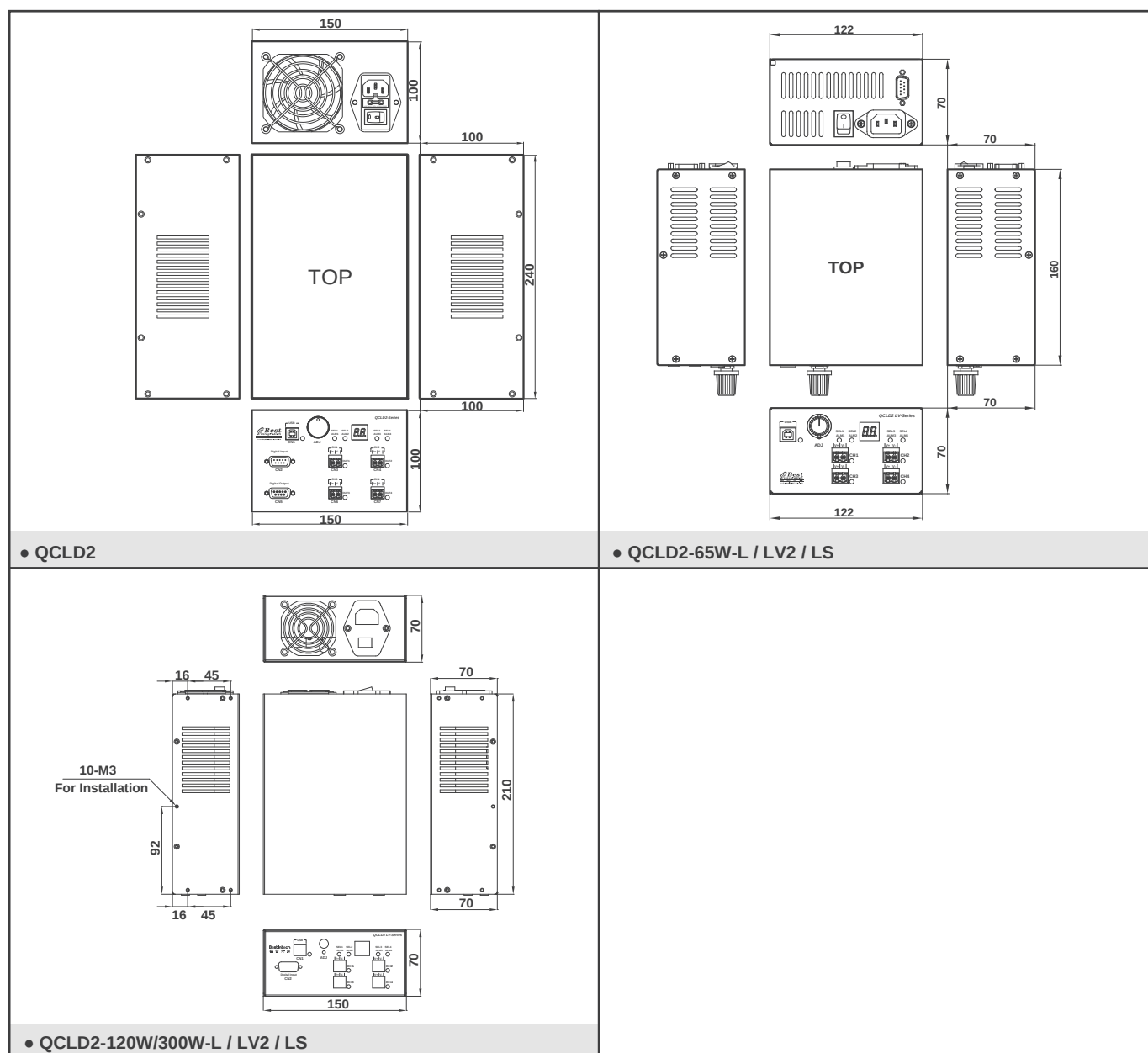
Model	Driver Type	Power Supply	Input Voltage	Output Voltage	Output Current (Max.)
QCLD2	Wide Voltage	200W	AC100V~240V	DC5V~52V	≤5000mA
		400W			
		600W			
QCLD2-L	Low Voltage	65W	AC100V~240V	DC1.5V~22V	≤3000mA
		120W			
		300W			
QCLD2-LV2	Low Voltage	65W	AC100V~240V	DC1.5V~24V	≤2000mA
		120W			
		300W			
QCLD2-LS	Low Voltage with Strobe Optimized	65W	AC100V~240V	DC12V~24V	≤2000mA
		120W			
		300W			

※ Customized output voltage/current available

Linear Diagram



Dimensional Drawing



OCLD Series

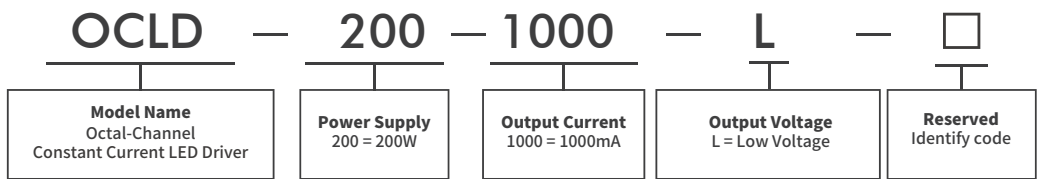
Octal-Channel Constant Current LED Driver



Product Features

- USB interface for electrical isolation; ultra-high speed strobe optical receiver
- High-current driving capacity : maximum 1000mA output current per channel
- Build-in 200W Power Supply
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short-circuit
- Alarm and protection : abnormal input power 、 system over-current 、 system overheats
- Precision current adjustment resolution : digital knob provides 256 adjusting current levels, USB interface provides 4096 adjusting current levels
- High-efficiency and high-power factor power circuit
- External pulse switch control : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 1ms; the maximum frequency of strobe output reaches to 1kHz
- Each channel provides 64 sets of programmable and non-volatile LUT units to help users quickly correspond different currents and various brightness & characteristic of LED lights

Model Guide

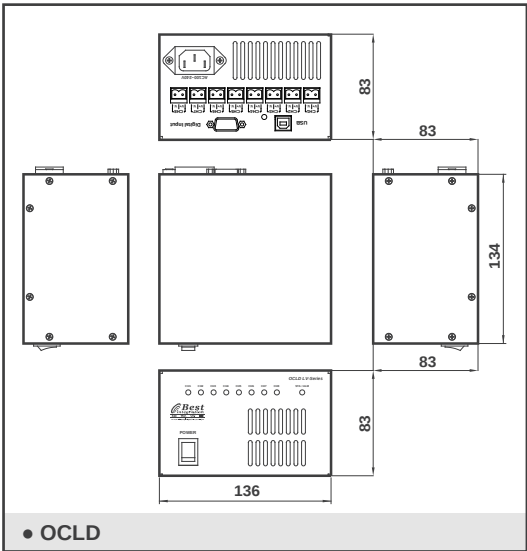


Specification Table

Model	Power Supply	Input Voltage	Output Voltage	Output Current
OCLD-L	200W	AC100V~240V	DC1.5V~23V	200mA
				300mA
				400mA
				600mA
				800mA
				1000mA

※ Customized output voltage/current available

Dimensional Drawing



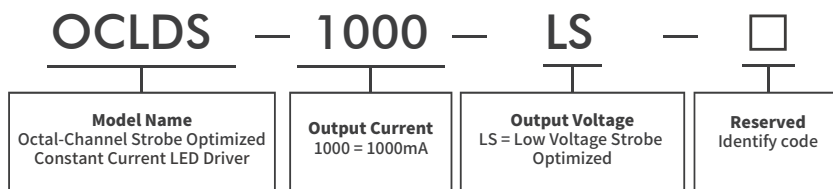
Octal-Channel Strobe Optimized Constant Current LED Driver



Product Features

- USB interface for electrical isolation; ultra-high speed strobe optical receiver
- High-current driving capacity : maximum 2000mA output current per channel
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short-circuit
- Alarm and protection : abnormal input power 、 system over-current 、 system overheats
- Precision current adjustment resolution : digital knob provides 256 adjusting current levels, USB interface provides 4096 adjusting current levels
- High-efficiency and high-power factor power circuit
- LED strobe output width can be adjusted from 1us~64s of exposure width
- External pulse switch control : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 100us; the maximum frequency of strobe output reaches to 10kHz
- Each channel provides 128 sets of programmable and non-volatile LUT units to help users quickly correspond different currents and various brightness & characteristic of LED lights

Model Guide

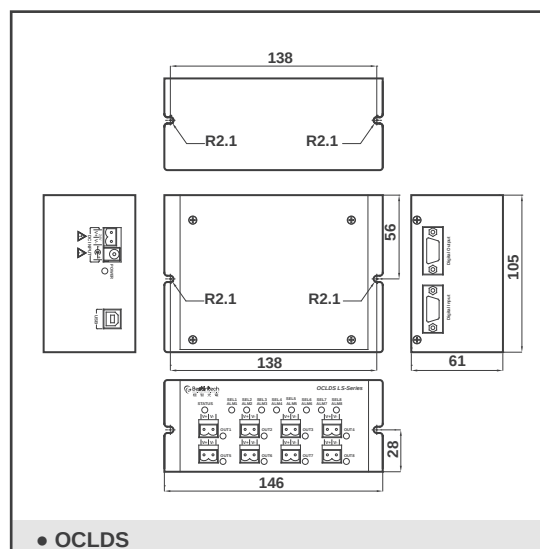


Specification Table

Model	Input Voltage	Output Voltage	Output Current
OCLDS-LS	DC24V	DC12V~24V	500mA
			1000mA
			2000mA (For Strobe)

※ Customized output voltage/current available

Dimensional Drawing



SkyDRV Series

3/6/12 Channel Constant Current LED Driver



• SkyDRV-3CH



• SkyDRV-6CH



• SkyDRV-12CH

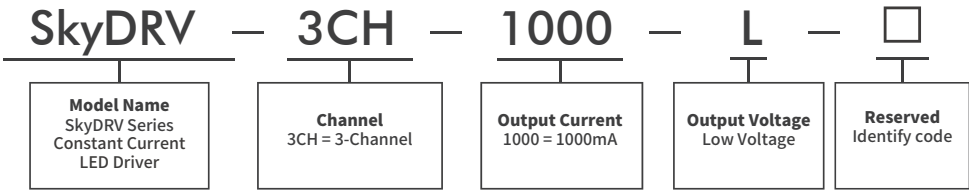


◆ Product Features

- Multi independent channels available : Triple-Channel 、 Six-Channel 、 Twelve -Channel
- USB interface for electrical isolation
- Digital knob to adjust output current with 7-segment display indicator; channels can be adjusted and storage individually
- Build-in power supply
- High-current driving capacity : maximum 1000mA output current per channel
- Wide range of output voltage : DC24V~51V / DC12V~24V (Low voltage version)
- High current linearity (>95%) : low current error between channels (<3%)
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short-circuit
- Alarm and protection : abnormal input power 、 system over-current 、 system overheats
- Precision current adjustment resolution : digital knob provides 256 adjusting current levels, USB interface provides 4096 adjusting current levels
- High-efficiency and high-power factor power circuit
- External pulse switch control (6CH Optional) : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 30us; the maximum frequency of strobe output reaches to 30kHz (periodic)

Each channel provides 256 sets of programmable and non-volatile LUT units to help users quickly correspond different currents and various brightness & characteristic of LED lights

◆ Model Guide

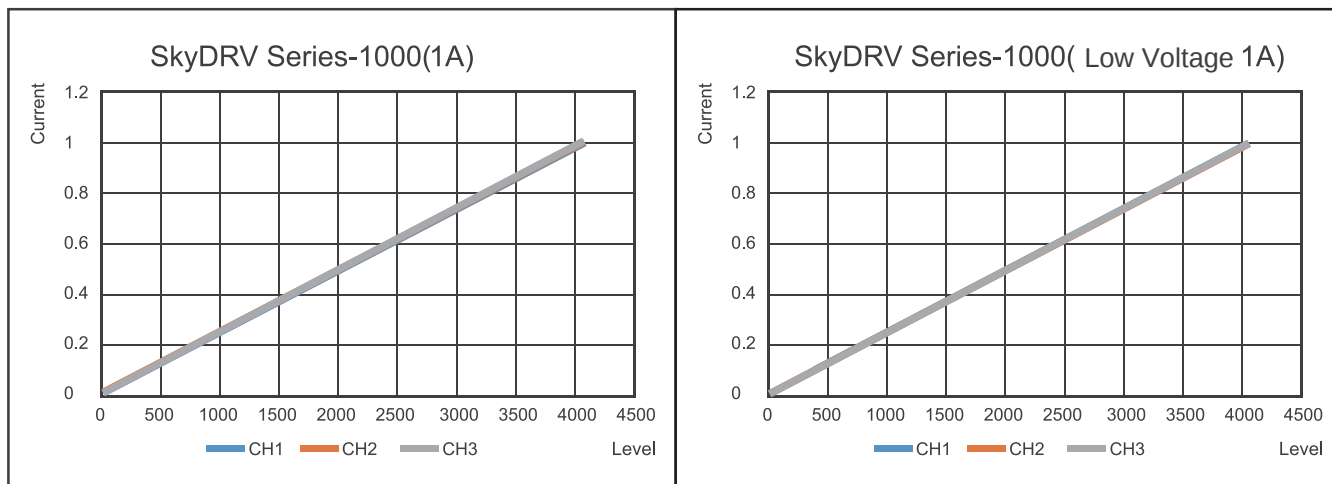


◆ Specification Table

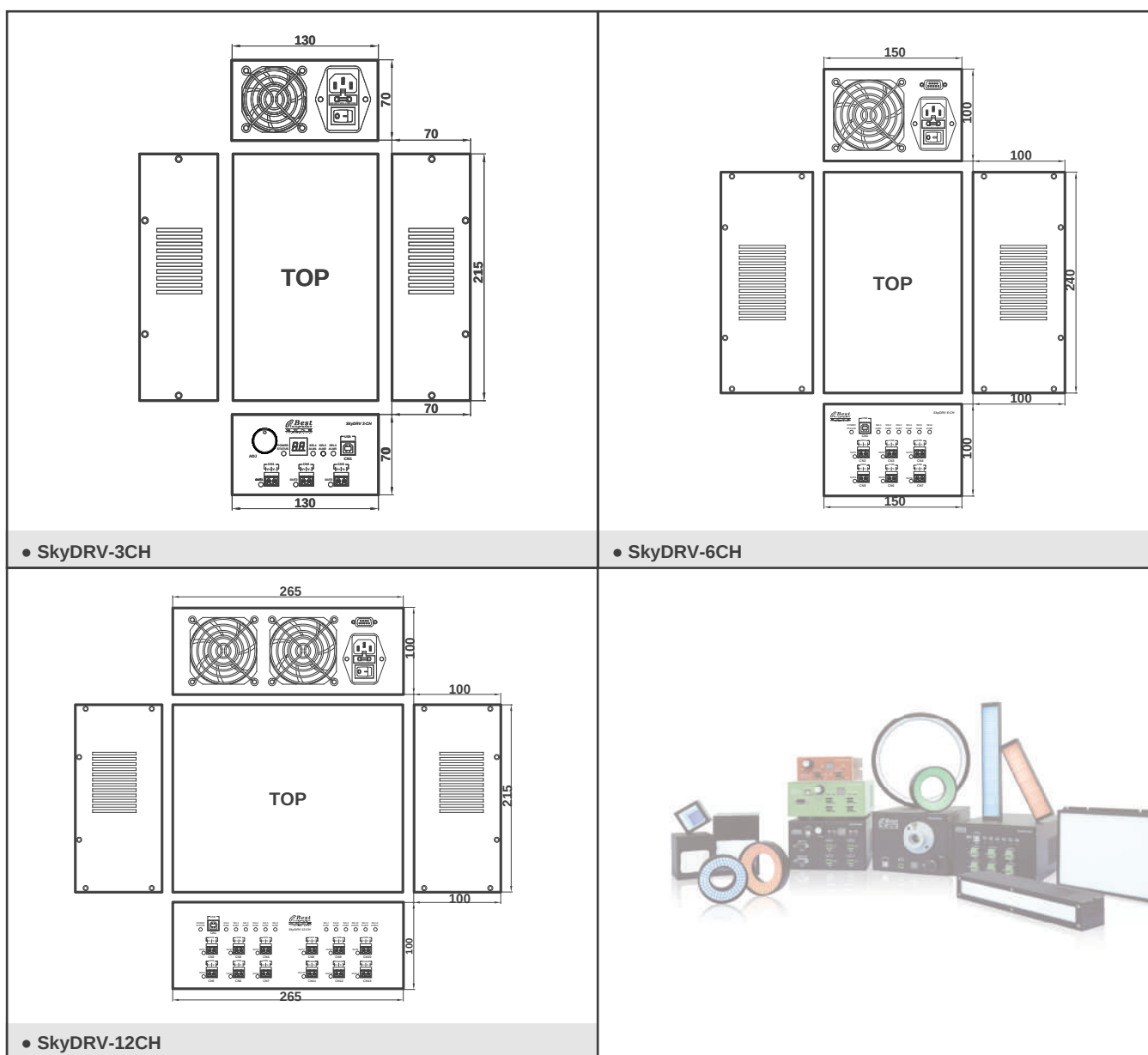
Model	Channels	Power Supply	Input Voltage	Output Voltage	Output Current (Max.)
SkyDRV-3CH	3	160W	AC100~240V	DC12V~24V (Low Voltage)	200mA
					400mA
SkyDRV-6CH	6	320W		DC24V~51V (Normal)	500mA
					600mA
SkyDRV-12CH	12	640W		DC24V~51V (Normal)	750mA
					1000mA

※ Customized output voltage/current available

◆ Linear Diagram



◆ Dimensional Drawing



CV Series

1/2/4 Channel Constant Voltage LED Driver



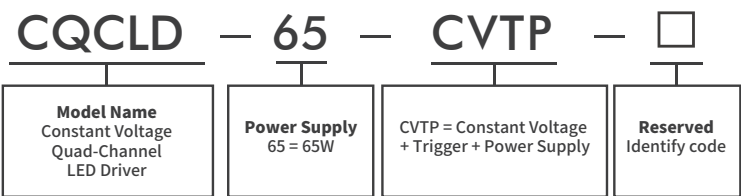
- SCLD-VR
- CDCLD-CV
• CDCLD-CVT
- CDCLD-CVP
- CDCLD-CVTP
- CQCLD-CVP
• CQCLD-CVTP



◆ Product Features

- Users can adjust output voltage for each channel individually. Current output is independent for each channel.
- Ultra-high speed strobe optical receiver
- Constant voltage output range : DC14~23V $\pm 0.5V$
- Constant voltage output range : DC14~23V $\pm 1V$ (FOR SCLD-VR)
- Optional build-in power supply : 65W
- External strobe pulse switch control is available
- High-efficiency and high-power factor power circuit
- High current driving capacity : maximum 2000mA output current per channel
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short circuit
- External pulse switch control (optional) : provide external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 50us, the maximum frequency of strobe input reaches to 10kHz

◆ Model Guide

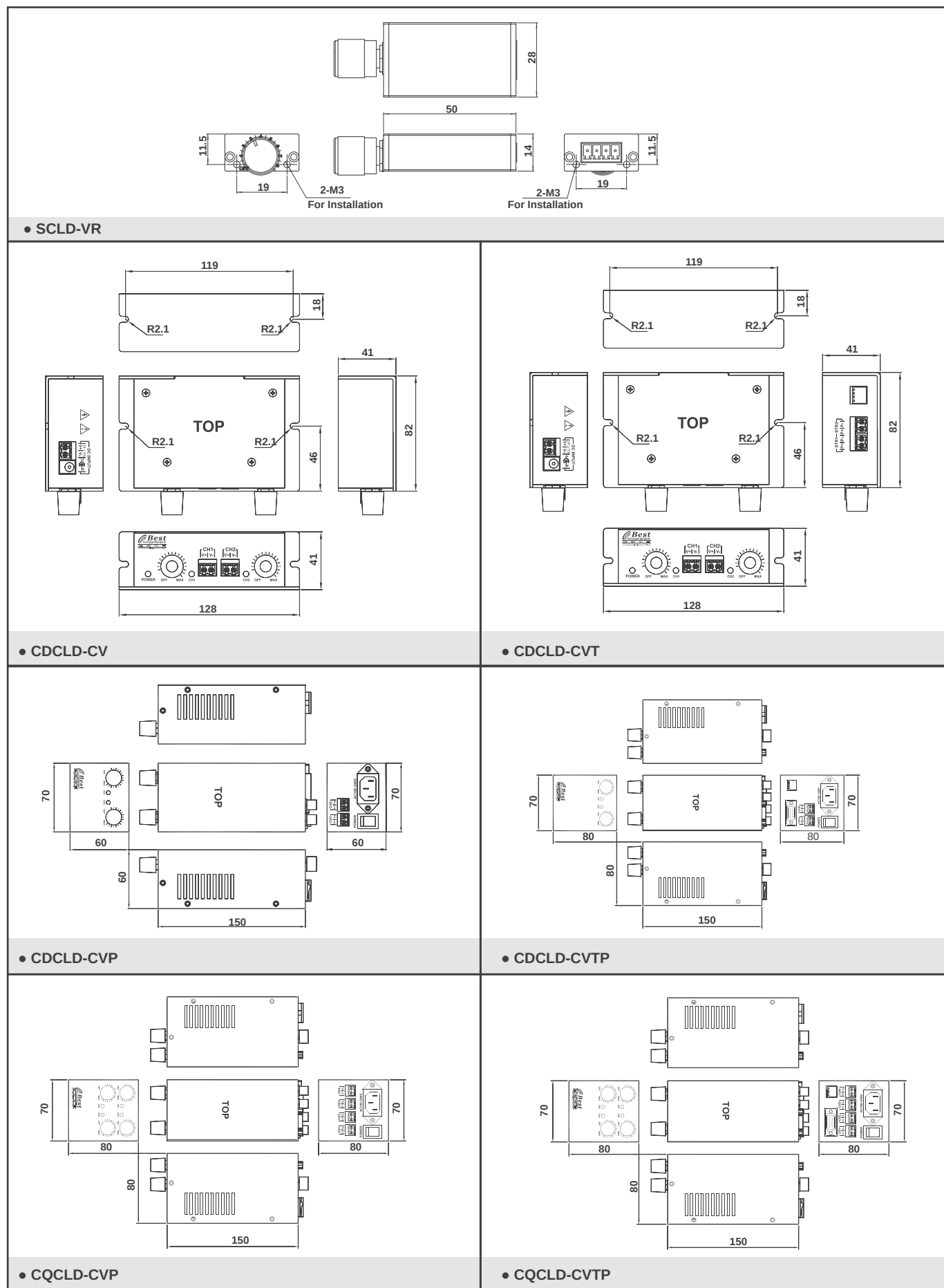


◆ Specification Table

Model	Channels	Driver Type	Power Supply	Output Voltage (Max.)
SCLD-VR	1	Constant Voltage	-	DC22V $\pm$ 1V
CDCLD-CV	2	Constant Voltage	-	DC22V $\pm$ 0.5V
CDCLD-CVT	2	Constant Voltage + Trigger		
CDCLD-CVP	2	Constant Voltage + Power Supply	65W	DC23V $\pm$ 0.5V
CDCLD-CVTP	2	Constant Voltage + Trigger + Power Supply		
CQCLD-CVP	4	Constant Voltage + Power Supply	65W	DC 23V $\pm$ 0.5V
CQCLD-CVTP	4	Constant Voltage + Trigger + Power Supply		

※ Customized output voltage available

◆ Dimensional Drawing



QCLD Series

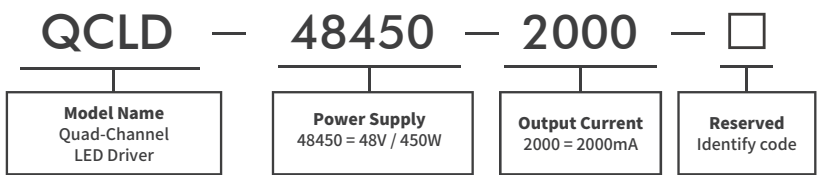
Quad-Channel Ethernet Constant Current LED Driver



Product Features

- Dual communication interface for electrical isolation : USB2.0/Ethernet
- High-current driving capacity : maximum 3000mA output current per channel
- TCP/IP support : Build-in Web Server for remote access without installing any software
- External input voltage : AC100V~240V (w/PFC) 、AC200V~240V (w/o PFC)
- Various build-in power supply for selection : 12V~48V/350W~600W
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short-circuit
- Alarm and protection : abnormal input power 、system over-current 、system overheats
- 12-bit current adjustment resolution : provides 4096 adjusting current levels
- High-efficiency and high-power factor power circuit
- LED strobe output width can be adjusted from 1 to 4095us of exposure width
- External pulse switch control : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 10us; the maximum frequency of strobe output reaches to 100kHz (periodic)
- Each channel provides 256 sets of programmable and non-volatile LUT units to allow users quickly correspond different currents and various brightness & characteristic of LED Lights

Model Guide

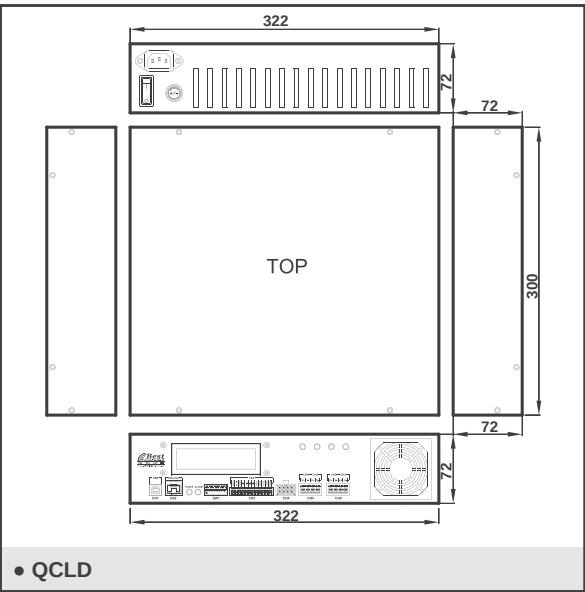


Specification Table

Model	Power Supply	Output Current
QCLD	24V / 350W	300mA
	48V / 350W	500mA
	48V / 450W	750mA
	24V / 450W	1000mA
	48V / 600W	2000mA
	24V / 600W	3000mA

※ Customized output voltage/current available

Dimensional Drawing



PSU2 Series

PSU2 Series

Programmable High Power Source Unit with Fan monitoring & Temperature Controlling system



• PSU2-300/300-H

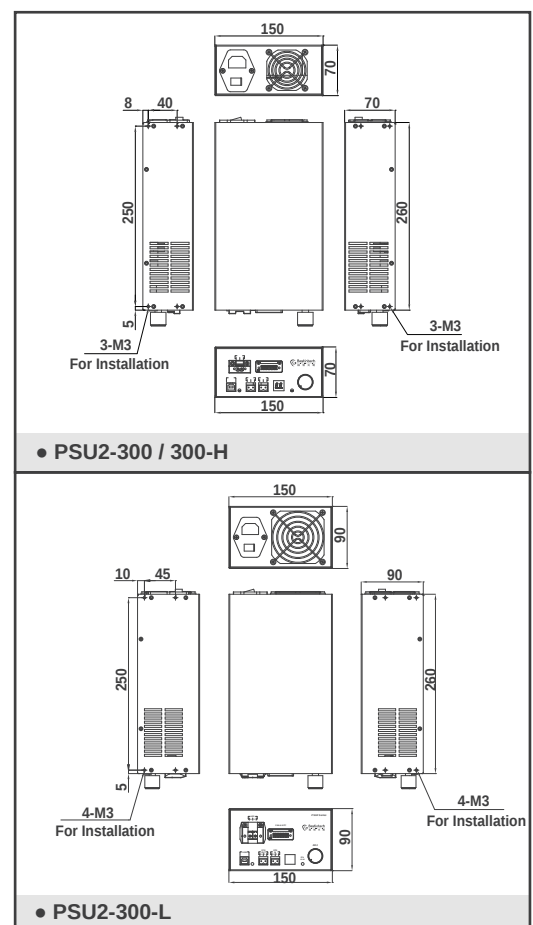


• PSU2-300-L

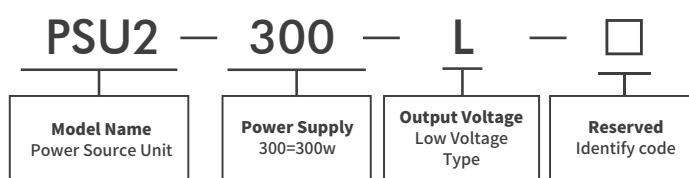
◆ Product Features

- Digital knob to adjust output current; 7-segment display indicator and store function
- USB communication interface with electrical isolation; ultra-high speed strobe optical receiver
- High-current driving capacity : maximum 30000mA output current
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short-circuit
- Alarm and protection : abnormal input power \ system over-current \ system overheats
- LED decay & abnormal alarm function
- PSU-200 \ PSU2-300 \ PSU2-300-H external pulse switch control : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 10us; the maximum frequency of strobe input reaches to 100kHz
- PSU2-300-L external pulse switch control : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 10us; the maximum frequency of strobe input reaches to 100kHz
- Precision current adjustment resolution : digital knob provides 256 adjusting current levels, USB interface provides 4096 adjusting current levels
- Provides 256 sets of programmable and non-volatile LUT units to help users quickly correspond different currents and various brightness & characteristic of LED lights

◆ Dimensional Drawing



◆ Model Guide



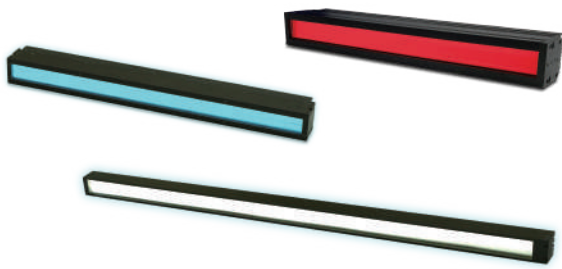
◆ Specification Table

Model	Power Supply (W)	Input Voltage	Output Voltage	Output Current(Max.)
PSU2-300	300	AC110V ~240V	8V~20V	10000mA
PSU2-300-L	300		1V~7V	30000mA
PSU2-300-H	300		18V~34V	10000mA

※ Customized output voltage/current available

LLSW/LLS-PAR Series

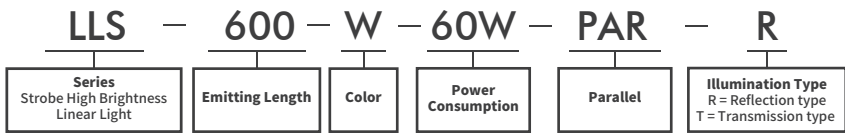
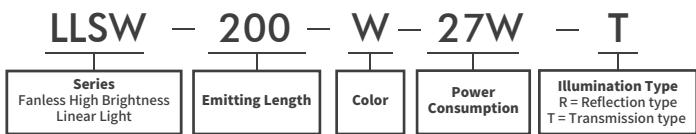
Fanless High Brightness Linear Lights



Product Features

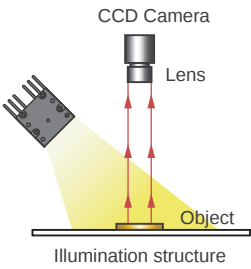
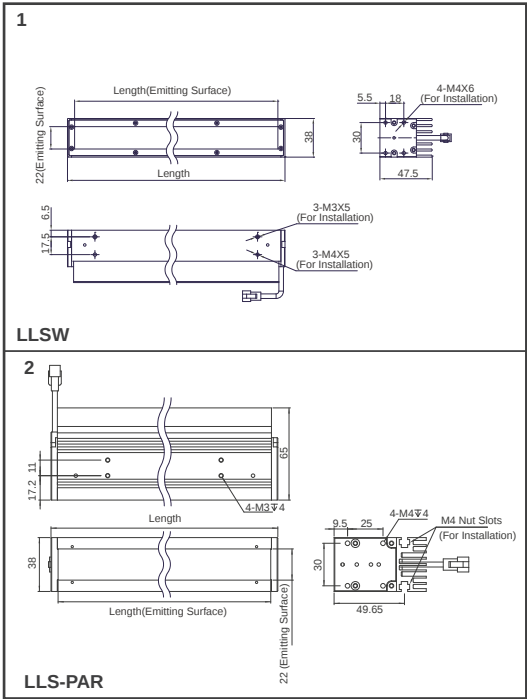
- Suitable for high speed / high definition Line Scan imaging
- Higher brightness : LLS-PAR series > 500K Lux ; LLSW series > 1M Lux
- Best light efficiency, no need for cooling fan for more convenient installation
- Provide over drive strobe to reach 2X brightness
- Customized length available, the longest up to 3.2 meters

Model Guide



Dimensional Drawing

(mm)



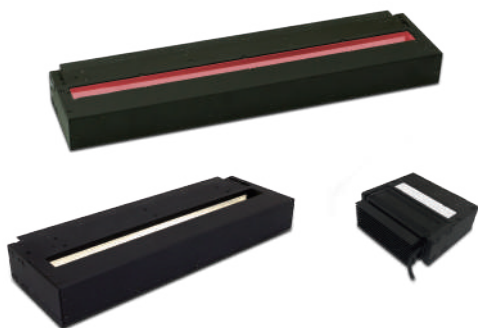
Specification Table

Model	Color	Current / Power	No. of Channel	Dimensions (mm)			Diagrams
				Length	Width	Height	
LLSW-100	● ● ● ○	0.5A / 16W	1	114	51.5	38	1
LLSW-150	● ● ● ○	0.5A / 20W	1	164	51.5	38	1
LLSW-200	● ● ● ○	0.5A / 27W	2	214	51.5	38	1
LLSW-300	● ● ● ○	0.5A / 33W	2	314	51.5	38	1
LLSW-400	● ● ● ○	0.75A / 45W	2	414	51.5	38	1
LLSW-500	● ● ● ○	0.75A / 54W	2	514	51.5	38	1
LLSW-600	● ● ● ○	0.75A / 60W	2	614	51.5	38	1
LLSW-1200	● ● ● ○	0.75A / 120W	4	1214	51.5	38	1
Model	Color	Current / Power	No. of Channel	Dimensions (mm)			Diagrams
				Length	Width	Height	
LLS-100-PAR	● ● ● ○	0.5A / 16W	1	114	65	38	2
LLS-150-PAR	● ● ● ○	0.5A / 20W	1	160	65	38	2
LLS-200-PAR	● ● ● ○	0.5A / 27W	2	214	65	38	2
LLS-300-PAR	● ● ● ○	0.5A / 33W	2	314	65	38	2
LLS-400-PAR	● ● ● ○	0.75A / 45W	2	414	65	38	2
LLS-500-PAR	● ● ● ○	0.75A / 54W	2	514	65	38	2
LLS-600-PAR	● ● ● ○	0.75A / 60W	2	614	65	38	2
LLS-1200-PAR	● ● ● ○	0.75A / 120W	4	1214	65	38	2

※ Only operated by constant current LED driver, and please pay attention to rated current

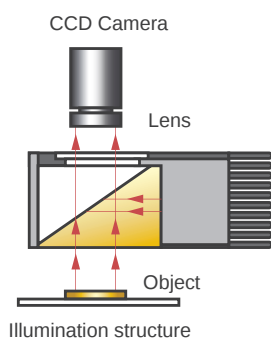
CLLSW/CLLS-PAR Series

Coaxial Fanless High Brightness Linear Lights



Product Features

- Suitable for high speed / high definition Line Scan imaging
- Higher brightness : LLS-PAR series > 500K Lux ; LLSW series > 1M Lux
- Best light efficiency, no need for cooling fan for more convenient installation
- Provide over drive strobe to reach 2X brightness



Model Guide

CLLSW	—	200	—	W	—	27W	—	T
Series Coaxial Fanless High Brightness Linear Light		Emitting Length		Color		Power Consumption		Illumination Type Transmission type only

CLLS	—	400	—	W	—	45W	—	PAR	—	T
Series Coaxial Strobe High Brightness Linear Light		Emitting Length		Color		Power Consumption		Parallel		Illumination Type Transmission type only

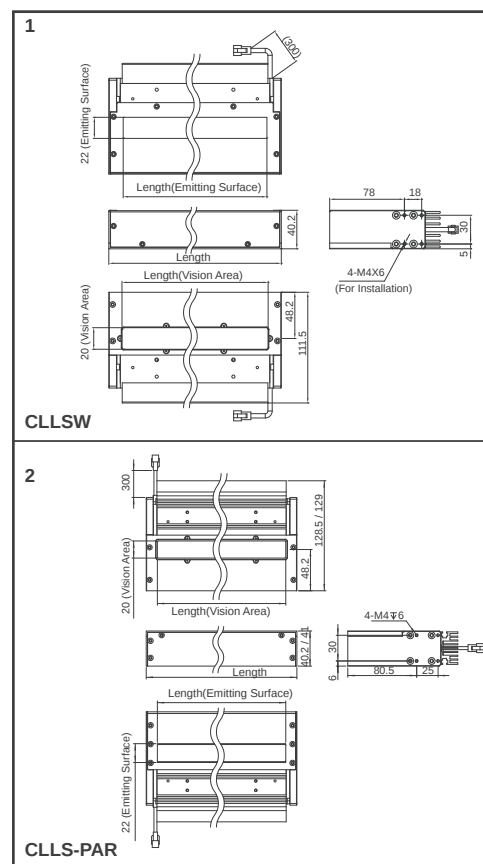
Specification Table

Model	Color	Current / Power	No. of Channel	Dimensions (mm)			Diagrams
				Length	Width	Height	
CLLSW-100	● ● ● ○	0.5A / 16W	1	130	115.5	40.2	1
CLLSW-150	● ● ● ○	0.5A / 20W	1	180	115.5	40.2	1
CLLSW-200	● ● ● ○	0.5A / 27W	2	230	115.5	40.2	1
CLLSW-300	● ● ● ○	0.5A / 33W	2	330	115.5	40.2	1
CLLSW-400	● ● ● ○	0.75A / 45W	2	430	115.5	40.2	1
CLLSW-500	● ● ● ○	0.75A / 54W	2	530	115.5	40.2	1

Model	Color	Current / Power	No. of Channel	Dimensions (mm)			Diagrams
				Length	Width	Height	
CLLS-100-PAR	● ● ● ○	0.5A / 16W	1	130	129	41	2
CLLS-150-PAR	● ● ● ○	0.5A / 20W	1	176	128.5	41	2
CLLS-200-PAR	● ● ● ○	0.5A / 27W	2	230	129	41	2
CLLS-300-PAR	● ● ● ○	0.5A / 33W	2	330	129	41	2
CLLS-400-PAR	● ● ● ○	0.75A / 45W	2	430	129	41	2
CLLS-500-PAR	● ● ● ○	0.75A / 54W	2	530	129	40.2	2

Dimensional Drawing

(mm)



※ Only operated by constant current LED driver, and please pay attention to rated current

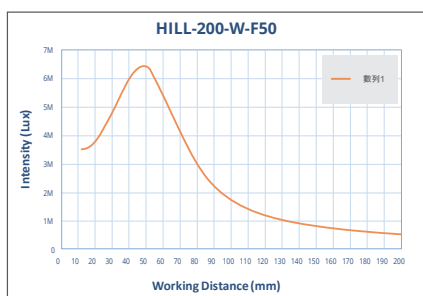
HILL Series

High Intensity Linear Lights

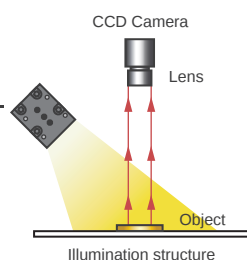
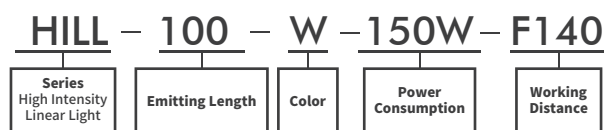


Product Features

- Ideal for high speed/high resolution Line Scan imaging
- Ultra high intensity, high power density, up to 6M Lux
- Optional built-in cooling fan & temperature sensor for thermal management.



Model Guide

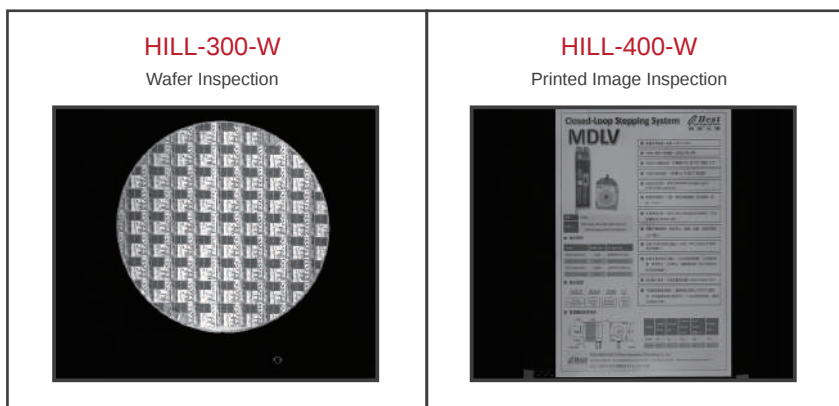


Specification Table

Model	Color	Current / Power	No. of Channel	Dimensions (mm)			Diagrams
				Length	Width	Height	
HILL-50	● ● ● ○	3A / 100W	1	132.8	70	70	1
HILL-100	● ● ● ○	2.5A / 180W	2	129	117	52	2
HILL-200	● ● ● ○	2A / 288W	4	220	129	54.5	3
HILL-200	COLOR	2A / 240W	4	220	129	54.5	4
HILL-300	● ● ● ○ ●	2.5A / 300W R : 2A / 180W	3	318	106	52	5
HILL-400	● ● ● ○ ●	2.5A / 400W 2A / 240W	4	418	107	55.3	6

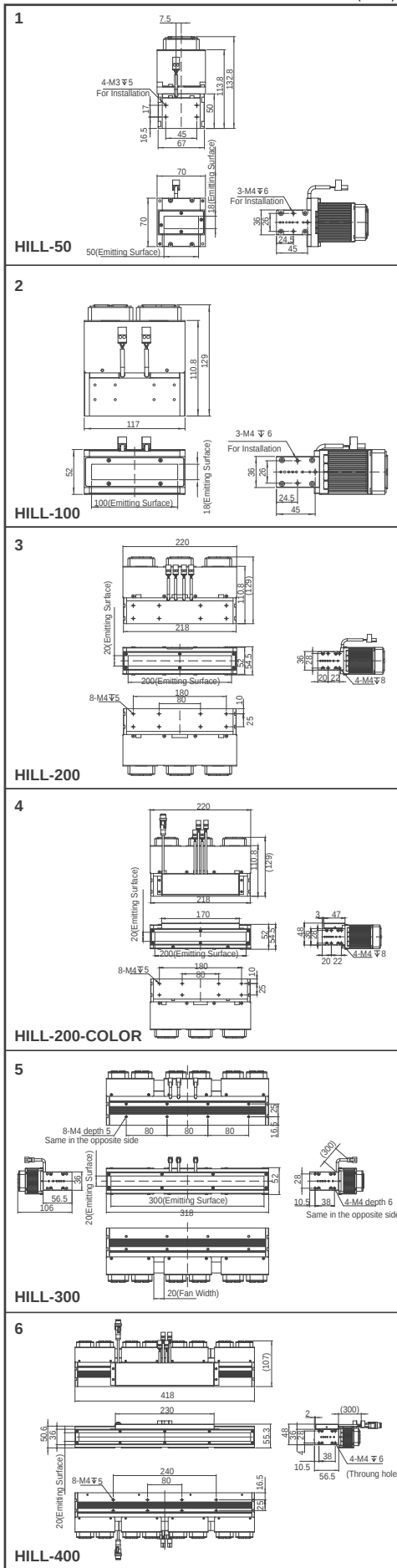
※ Only operated by constant current LED driver, and please pay attention to rated current

Case Pictures



Dimensional Drawing

(mm)



CHILL Series

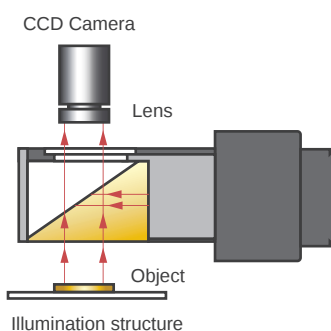
HILL / CHILL Series

Coaxial High Intensity Linear Lights



Product Features

- Ideal for high speed/high resolution Line Scan imaging
- Ultra high intensity, high power density, up to 6M Lux
- Coaxial type available
- Optional built-in cooling fan & temperature sensor for thermal management.



Model Guide

CHILL	—	200	—	W	—	200W	—	PAR
Series		Emitting Length		Color		Power Consumption		Parallel
Coaxial High Intensity Linear Light								

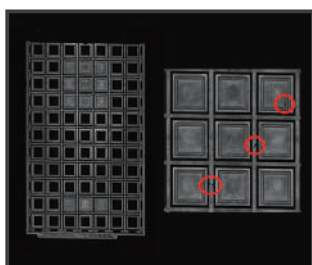
Specification Table

Model	Color	Current / Power	No. of Channel	Dimensions (mm)			Diagrams
				Length	Width	Height	
CHILL-50	● ● ● ○	3A / 100W	1	196.8	70	70	1
CHILL-100	● ● ● ○	2.5A / 180W	2	193	117	52	2
CHILL-200	● ● ● ○	2A / 288W	4	220	191	54.5	3
CHILL-200	COLOR	2A / 240W	4	220	191	54.5	4
CHILL-300	● ● ● ○ ●	2.5A / 300W 2A / 300W	3	334	106	52	5
CHILL-400	● ● ● ○ ●	2.5A / 400W 2A / 240W	4	418	168	54.5	6

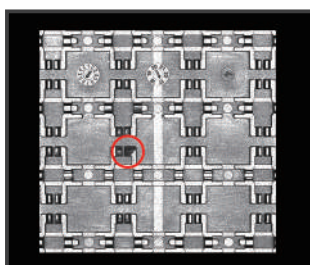
※ Only operated by constant current LED driver, and please pay attention to rated current

Case Pictures

CHILL-300-W
IC tray outer defect inspection

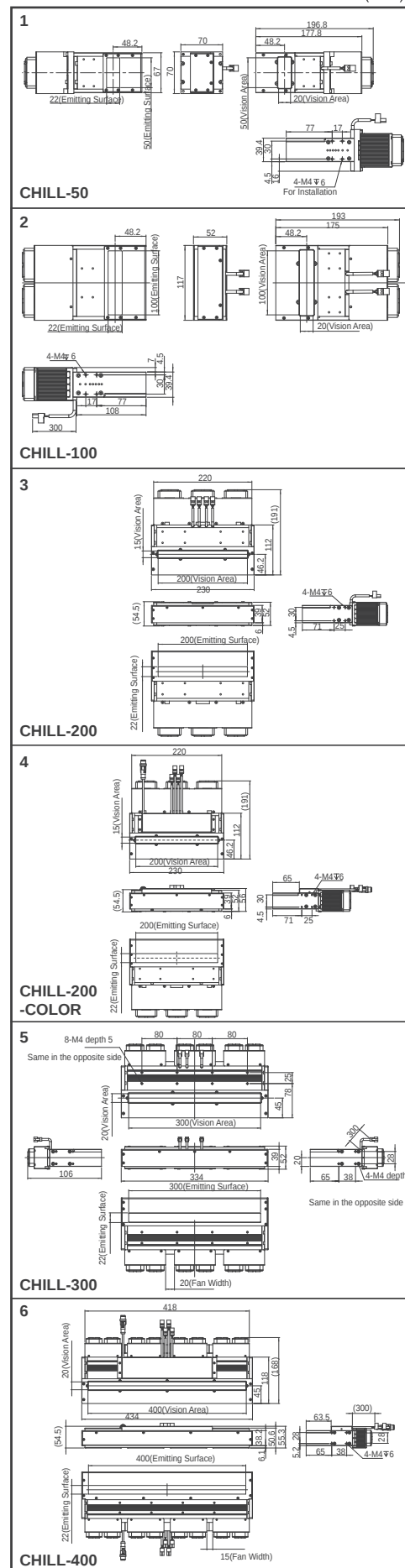


CHILL-200-W
Tray outer defect inspection



Dimensional Drawing

(mm)



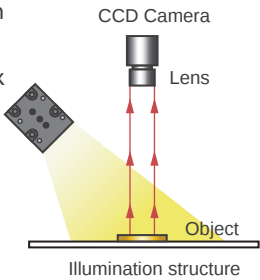
LL Series

Linear Lights

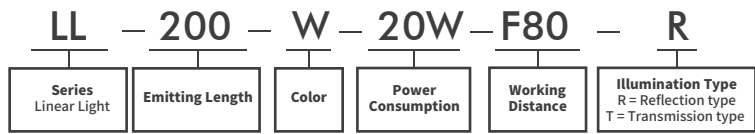


Product Features

- Ideal for high speed/high resolution Line Scan imaging
- Very high uniformity, low cost, 200K~500K Lux
- Excellent brightness without cooling fan



Model Guide



Specification Table

Model	Color	Current / Power	No. of Channel	Dimensions (mm)			Diagrams
				Length	Width	Height	
LL-100-F80 / PAR	● ● ● ○	0.35A / 10W	1	118 / 114	62 / 65	38	1 / 2
LL-150-F80 / PAR	● ● ● ○	0.5A / 15W	1	168 / 160	62 / 65	38	1 / 2
LL-200-F80 / PAR	● ● ● ○	0.5A / 20W	1	218 / 214	62 / 65	38	1 / 2
LL-300-F80 / PAR	● ● ● ○	0.75A / 30W	1	318 / 314	62 / 65	38	1 / 2
LL-400-F80 / PAR	● ● ● ○	1A / 40W	1	418 / 414	62 / 65	38	1 / 2
LL-500-F80 / PAR	● ● ● ○	1A / 50W	1	518 / 514	62 / 65	38	1 / 2
LL-200-F80 / PAR-L	● ● ● ○	0.5A / 20W	1	218 / 214	63	38	-
LL-300-F80 / PAR-L	● ● ● ○	0.75A / 30W	1	318 / 314	62	38	-
LL-400-F80 / PAR-L	● ● ● ○	1A / 40W	1	418 / 414	61.8	38	-

※ Only operated by constant current LED driver, and please pay attention to rated current

Case Pictures

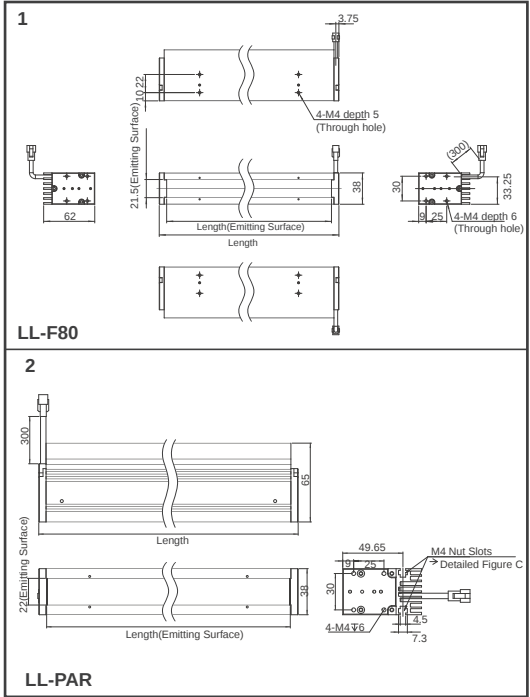
LL-400-W
Cling film packaging inspection

LL-300-W
Wafer back side, check scratch

LL-300-W
Wafer top side, check pattern

Dimensional Drawing

(mm)



CLL Series

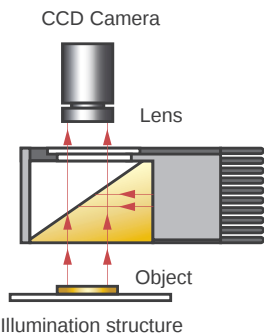
Coaxial Linear Lights

LL / CLL Series



Product Features

- Ideal for high speed / high resolution Line Scan imaging
- Very high uniformity, low cost, 200K~500K Lux
- Excellent brightness without cooling fan
- Coaxial type for Line Scan application

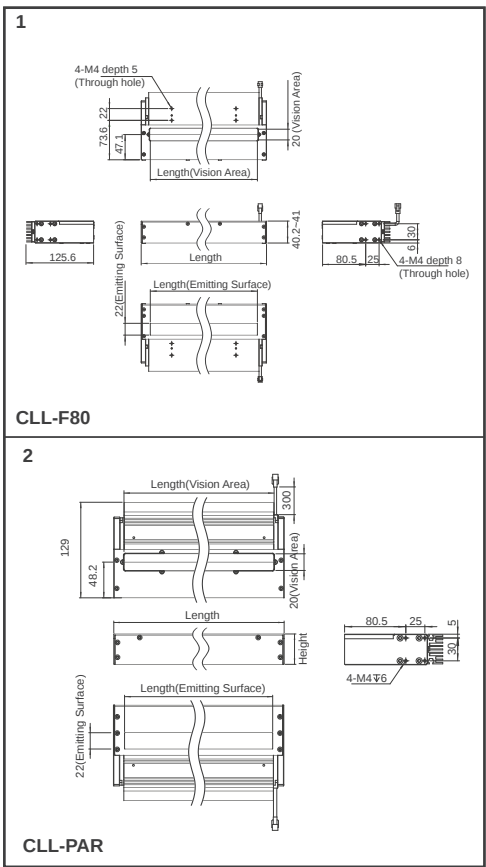


Model Guide

CLL	—	300	—	W	—	30W	—	F80	—	T
Series Coaxial Linear Light		Emitting Length		Color		Power Consumption		Working Distance		Illumination Type R = Reflection type T = Transmission type

Dimensional Drawing

(mm)

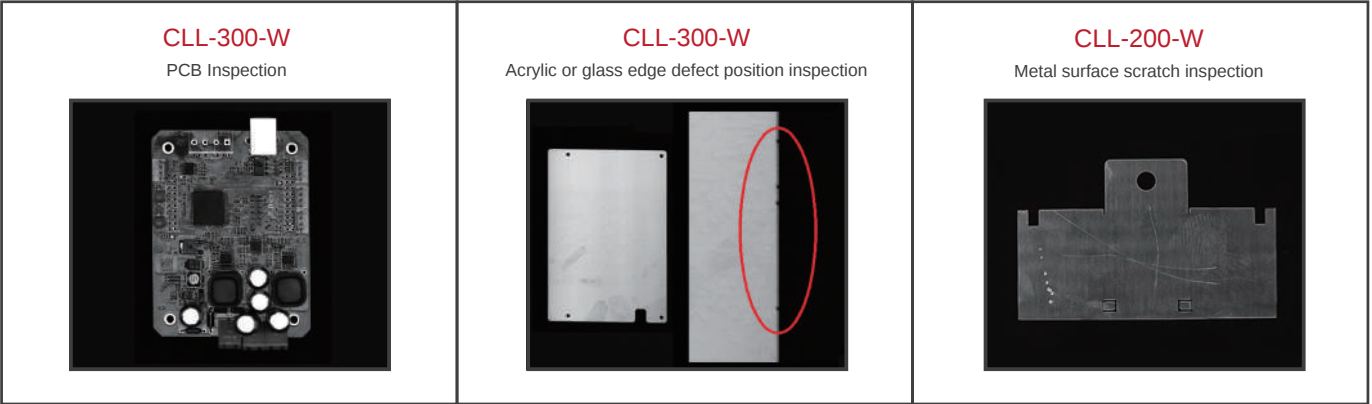


Specification Table

Model	Color	Current / Power	Dimensions (mm)			Diagrams
			Length	Width	Height	
CLL-100-F80 / PAR	● ● ● ○	0.25A / 10W	134 / 130	125.6 / 129	41	1 / 2
CLL-150-PAR	● ● ● ○	0.5A / 20W	176	128.5	41	2
CLL-200-F80 / PAR	● ● ● ○	0.5A / 20W	234 / 230	125.6 / 129	41	1 / 2
CLL-300-F80 / PAR	● ● ● ○	0.75A / 30W	334 / 330	125.6 / 129	40.2	1 / 2
CLL-400-F80 / PAR	● ● ● ○	1A / 40W	434 / 430	125.6 / 129	40.2	1 / 2
CLL-500-F80 / PAR	● ● ● ○	1.2A / 60W	534 / 530	125.6 / 129	40.2	1 / 2

※ Only operated by constant current LED driver, and please pay attention to rated current

Case Pictures



TLL Series

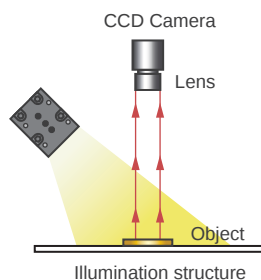
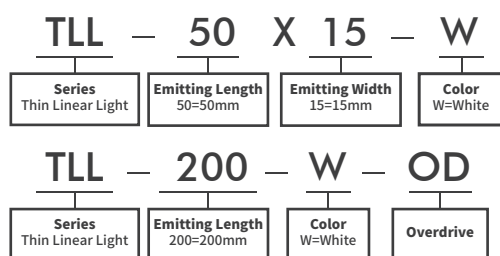
Thin Linear Lights



Product Features

- Ideal for high speed/high resolution Line Scan imaging
- Ultra-high uniformity and slim design are good to multi-angle optical architecture
- Provide more than 600Klux brightness without fan inside
- OD series provides overdrive strobe to 1.5x~2x brightness

Model Guide

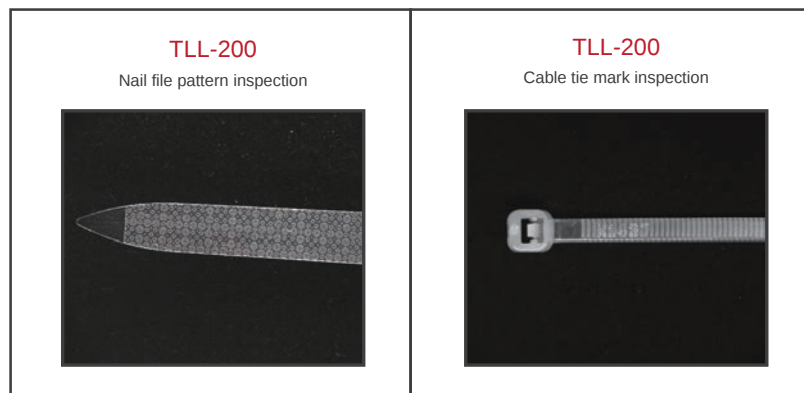


Specification Table

Model	Color	Current / Power	Dimensions (mm)			Diagrams
			Length	Width	Height	
TLL-50x15	●○●●	0.2A / 4W	80	17	12	1
TLL-100x16	●○●●	Continuous : 0.25A / 10W Strobe : 0.5A / 20W	122	24	45	2
TLL-200x16	●○●●	0.25A / 10W	222	20	16	3
TLL-200	●○●●	Continuous : 0.6A / 20W Strobe : 0.9A / 32W	230	36	28	4
TLL-400	●○●●	0.8A / 35W	432	36	28	5
TLL-800	●○●●	1.6A / 70W	834	36	28	6
TLL-1200	●○●●	2.5A / 120W	1236	36	28	7

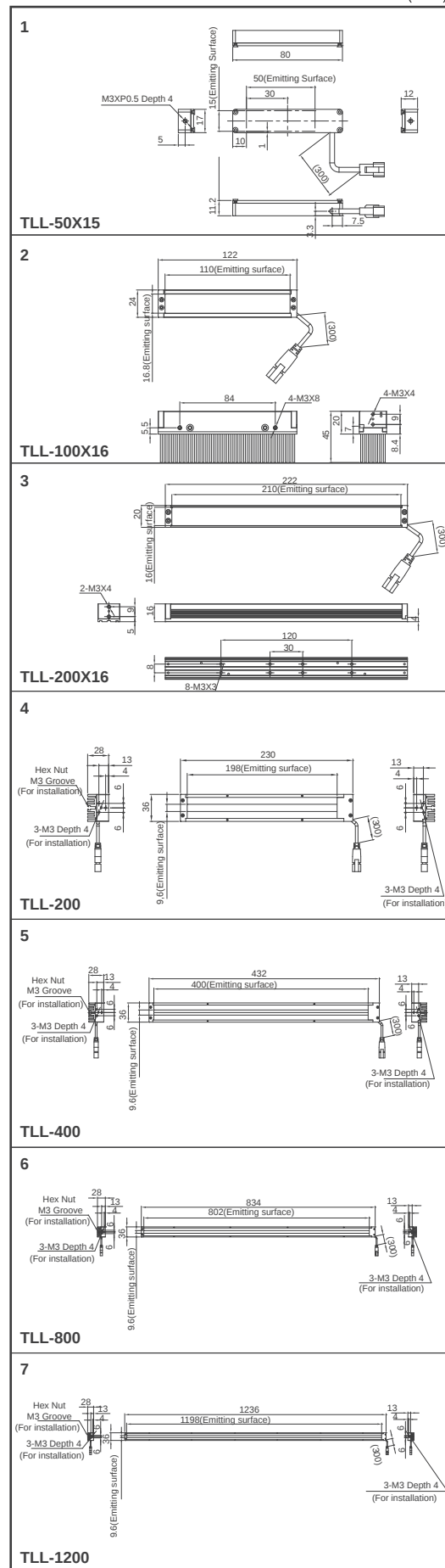
※ Only operated by constant current LED driver, and please pay attention to rated current

Case Pictures



Dimensional Drawing

(mm)



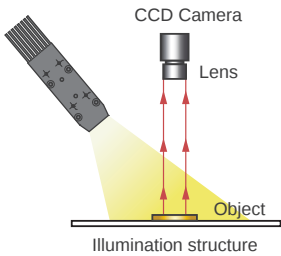
HDLL Series

High Density Linear Lights



Product Features

- Suitable for high speed/high resolution in Line Scan imaging
- Smaller divergence angle to effectively increase Image contrast
- High light efficiency that FANLESS type can reach up to 2M Lux
- Flat and high density design is suitable multi-path lighting environment
- FAN type equipped build in cooling fan and temperature monitoring module



Model Guide

HDLL	—	280	—	W	—	R
Series High Power Thin Linear Light	Emitting Length	Color	Illumination Type R = Reflection type			
HDLL	—	140	—	B	—	R — FAN
Series High Power Thin Linear Light	Emitting Length	Color	Illumination Type R = Reflection type		Fan Monitoring	

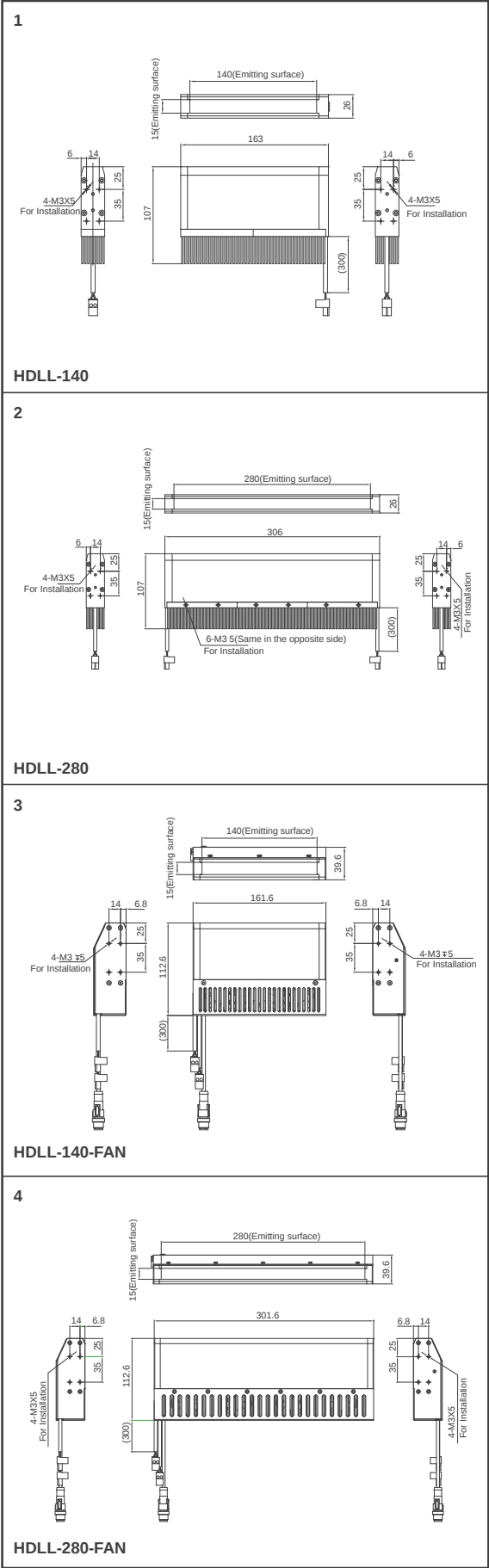
Specification Table

Model	Color	Current / Power	No. of Channel	Dimensions (mm)			Diagrams
				Length	Width	Height	
HDLL-140		1.6A/33W	1	163	107	26	1
HDLL-280		1.6A/66W	2	306	107	26	2
HDLL-140-FAN		2A/90W	2	161.6	112.6	39.6	3
HDLL-280-FAN		2A/180W	4	301.6	112.6	39.6	4

※ Only operated by constant current LED driver, and please pay attention to rated current

Dimensional Drawing

(mm)



DOL Series

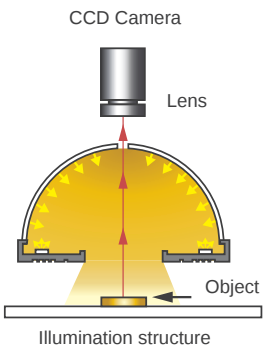
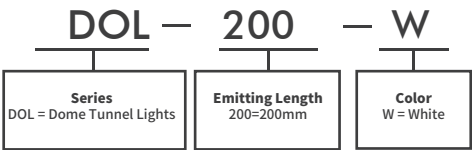
Dome Tunnel Lights



Product Features

- Ideal for high speed & high resolution Line Scan imaging
- Diffused light source with high brightness and high uniformity
- Provides big area illumination and excellent shadow-free effect
- Suitable for high reflective & uneven surface defect inspection

Model Guide

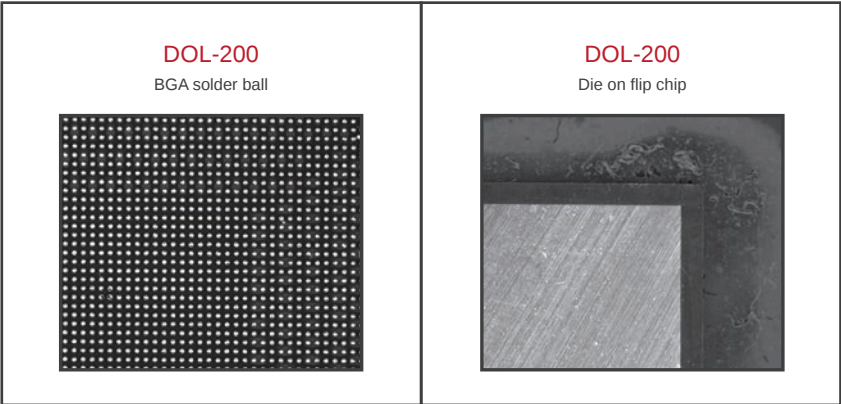


Specification Table

Model	Color	Current / Power	No. of Channel	Dimensions (mm)			Diagrams
				Length	Width	Height	
DOL-100	● ● ● ○	0.2A / 12W	2	125	106	56	1
DOL-150	● ● ● ○	0.25A / 18W	2	175	106	56	2
DOL-200	● ● ● ○	0.35A / 24W	2	225	106	56	3
DOL-300	● ● ● ○	0.5A / 36W	2	325	106	56	4
DOL-400	● ● ● ○	0.7A / 48W	2	425	106	56	5
DOL-500	● ● ● ○	0.9A / 60W	2	525	106	56	6

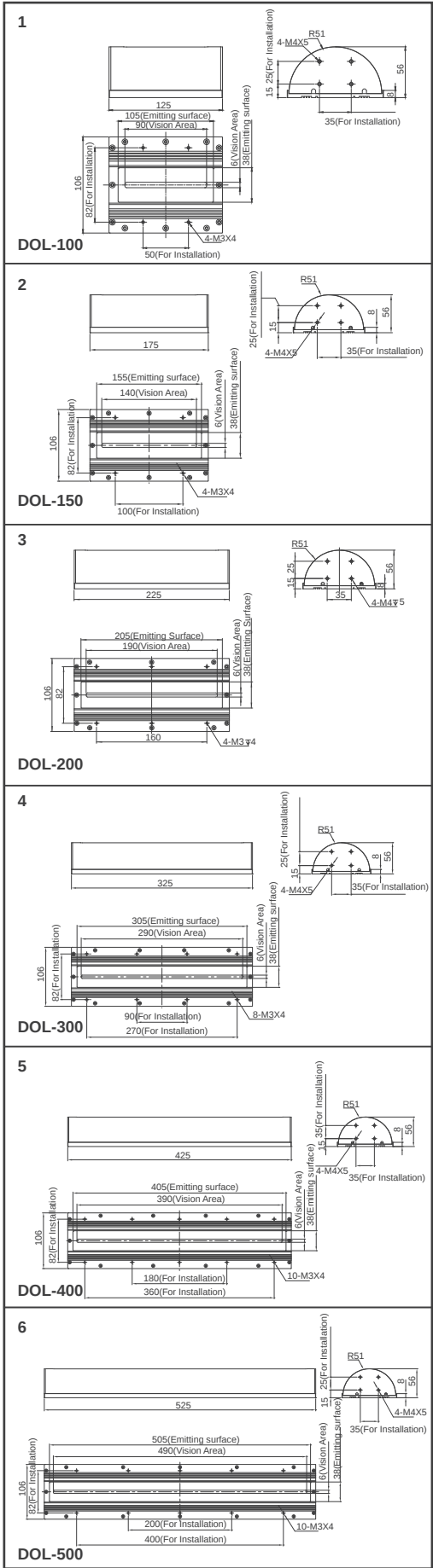
※ Only operated by constant current LED driver, and please pay attention to rated current

Case Pictures



Dimensional Drawing

(mm)



CNS/HICNS Series

CNS/HICNS Series

Diffused Ring Light/High Power Diffused Ring Lights



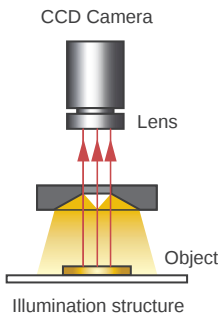
Product Features

Evenly distributed LEDs go through the light panels to form a diffused light

Good uniformity and high brightness

Suitable for illumination on the surface that requires high uniformity and able to avoid reflective light interference

Over 1M Lux.



Model Guide

CNS	—	68	—	W
Series		O.D.		Color
CNS = Diffused Ring Light		68 = 68mm		W = White

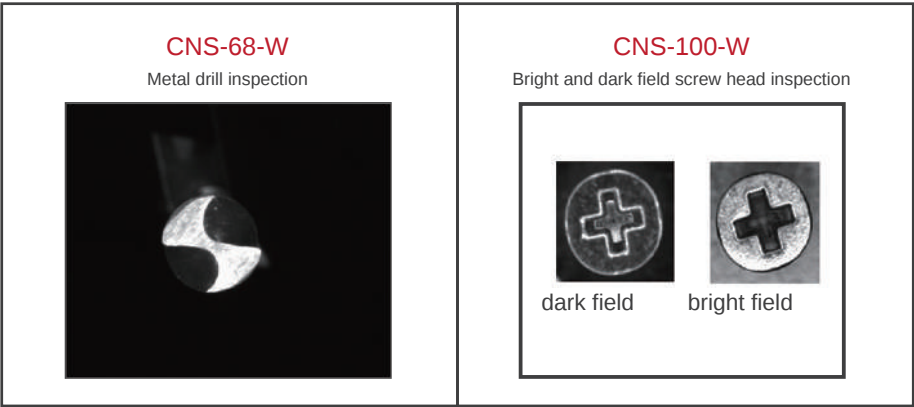
Specification Table

Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
					O.D.	I.D.	Height	
CNS-48	24V		2	3	48	10	14	1
CNS-68	24V		4	6.4	68	22.5	14	2
CNS-100	24V		5.6	9	100	35	18	3
CNS-125	24V		8	12.5	125	35	26	4
CNS-150	24V		9.5	14	150	60	24	5

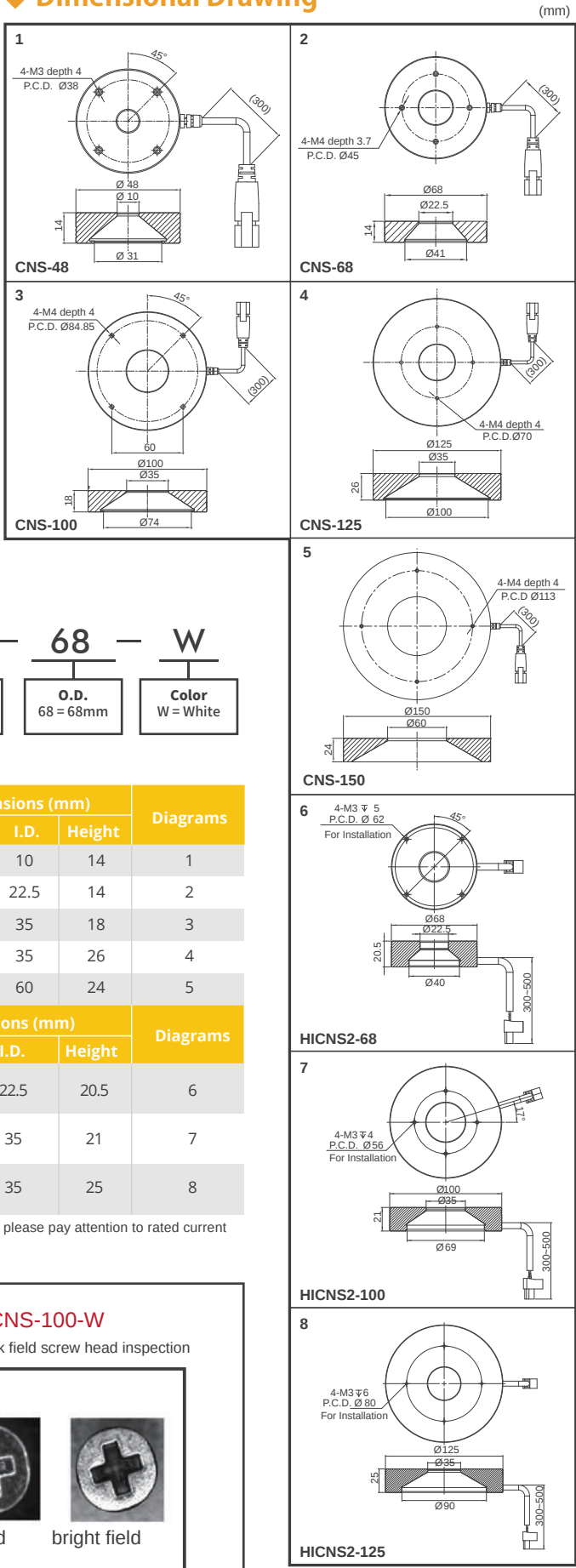
Model	Color	Current / Power	Dimensions (mm)			Diagrams
			O.D.	I.D.	Height	
HICNS2-68		Continuous: 0.35A/6.7W Strobe: 4A/89.5W	68	22.5	20.5	6
HICNS2-100		Continuous: 0.6A/12W Strobe: 6A/135W	100	35	21	7
HICNS2-125		Continuous: 0.9A/17.5W Strobe: 8A/182W	125	35	25	8

Remarks : Only operated by constant current LED driver, and please pay attention to rated current

Case Pictures



Dimensional Drawing



HCNS Series

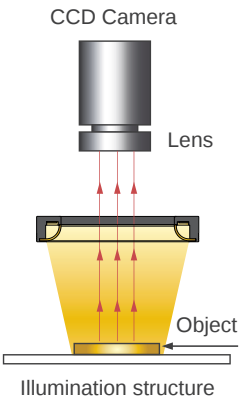
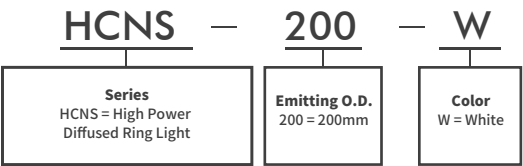
High Power Diffused Ring Lights



Product Features

- Unique illumination structure effectively provides brighter and more uniform diffused light
- High illumination uniformity and large irradiated area
- High reflective & uneven surface defect inspection
- Food & medical & SEMI packaging appearance inspection
- Compact, easy to install, wide application

Model Guide



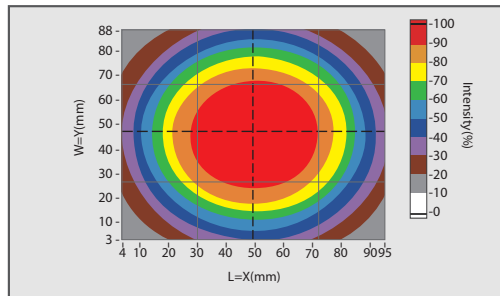
Specification Table

Model	Color	Current / Power	Dimensions (mm)			Diagrams
			O.D.	I.D.	Height	
HCNS-75	●	Continuous : 0.35A/6.5W Strobe : 0.75A/17W	91	41	26	1
	● ●	Continuous : 0.35A/7W Strobe : 0.79A/19W	91	41	26	
	○	Continuous : 0.35A/7W Strobe : 0.7A/16.5W	91	41	26	
HCNS-100	●	Continuous : 0.5A/10W Strobe : 1A/24W	116	66	26	2
	● ●	Continuous : 0.5A/10.5W Strobe : 1A/24W	116	66	26	
	○	Continuous : 0.5A/10.5W Strobe : 0.93A/22W	116	66	26	
HCNS-150	●	Continuous : 1A/20.5W Strobe : 1.5A/34.5W	166	116	26	3
	● ●	Continuous : 1A/22W Strobe : 1.5A/36W	166	116	26	
	○	Continuous : 1A/24W Strobe : 1.8A/43W	166	116	26	
HCNS-200	●	Continuous : 1.2A/24W Strobe : 2A/48W	216	166	28	4
	○ ● ●	Continuous : 1.2A/26W Strobe : 2A/48W	216	166	28	

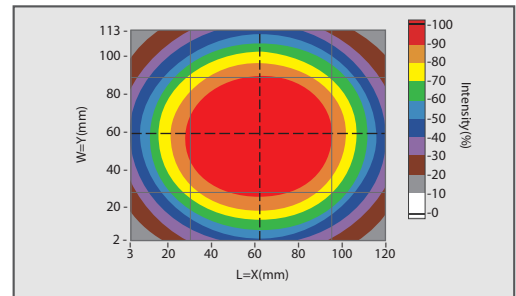
※ Only operated by constant current LED driver, and please pay attention to rated current

◆ Uniformity

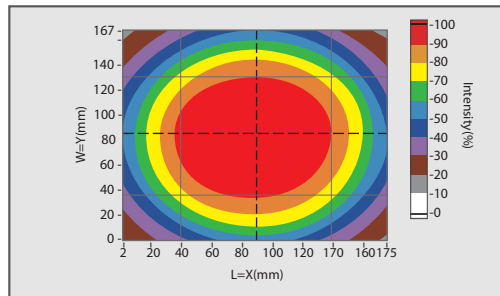
▲ HCNS-75-W



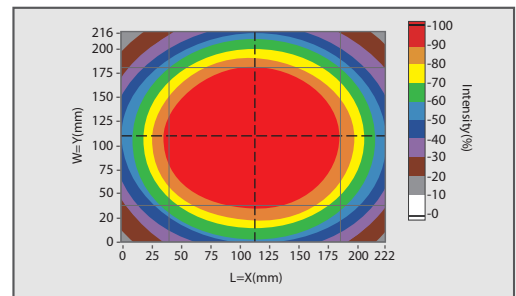
▲ HCNS-100-W



▲ HCNS-150-W



▲ HCNS-200-W



◆ Dimensional Drawing

(mm)

1 HCNS-75	2 HCNS-100
3 HCNS-150	4 HCNS-200

◆ Case Pictures

HCNS-100 Image Uniformity Comparison Object CIR-90X60-80 HCNS-100	HCNS-100 Image Uniformity Comparison Object CIR-90X60-80 HCNS-100
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LCNS Series

Diffused Low Angle Ring Lights

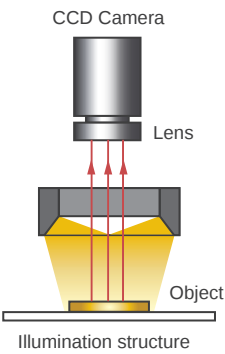


Product Features

- High density LED perpendicularly distributed
- Use special material to diffuse light evenly in low angle
- Suitable for inspecting object' edge and scratch

Model Guide

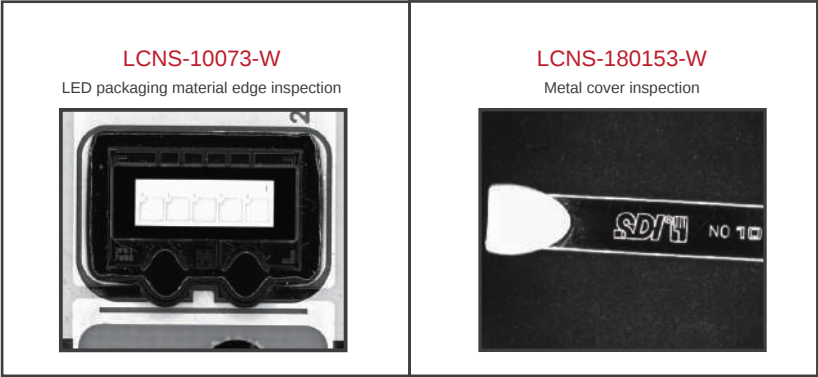
LCNS	—	136	109	—	W
Series		O.D.	I.D.		Color
LCNS = Diffused Low Angle Ring Light		136 = 136mm	109 = 109mm		W = White



Specification Table

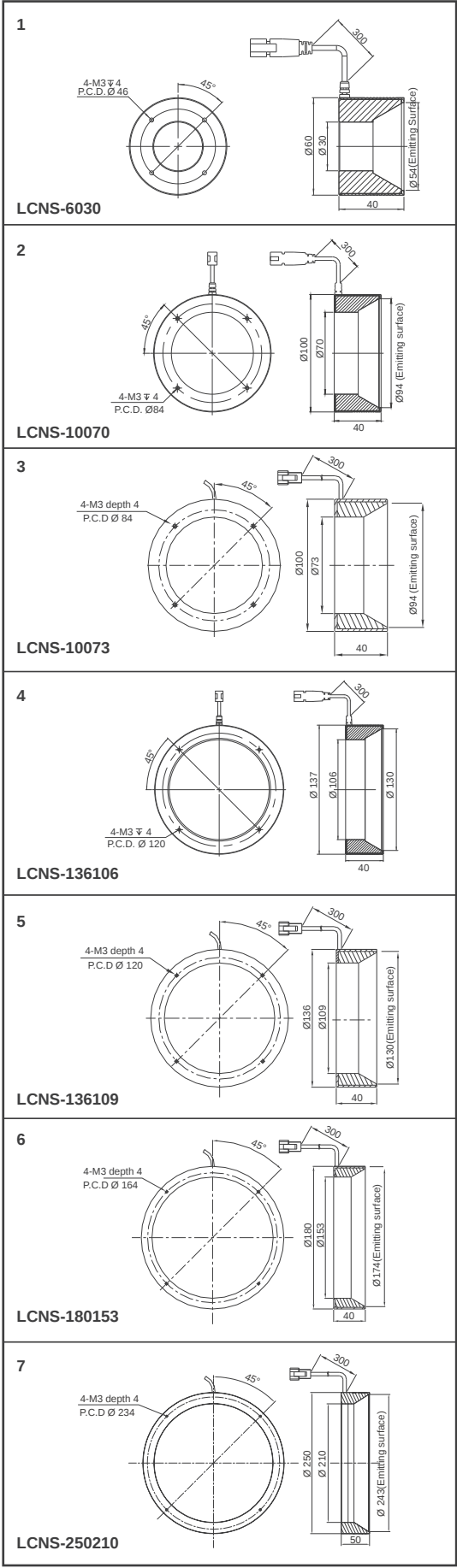
Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	●	Length	Width	Height	
LCNS-6030	24V	● ● ● ○	3.6	4.5	60	30	40	1
LCNS-10070	24V	● ● ● ○	6	7.6	100	70	40	2
LCNS-10073	24V	● ● ● ○	6	7.6	100	73	40	3
LCNS-136106	24V	● ● ● ○	5.2	8.6	136	106	40	4
LCNS-136109	24V	● ● ● ○	5.2	8.6	136	109	40	5
LCNS-180150	24V	● ● ● ○	12	13.5	180	150	40	-
LCNS-180153	24V	● ● ● ○	12	13.5	180	153	40	6
LCNS-250207	24V	● ● ● ○	15	22	250	207	50	-
LCNS-250210	24V	● ● ● ○	15	22	250	210	50	7

Case Pictures



Linear Diagram

(mm)



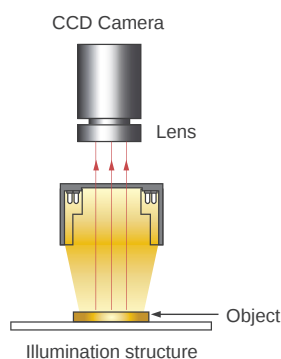
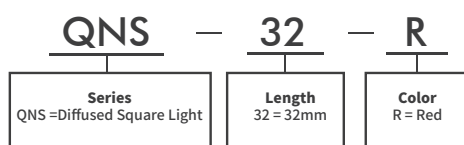
Diffused Square Lights



Product Features

- Evenly distributed LEDs go through the light panels to form a diffused light
- Good uniformity and high brightness
- Suitable for illumination on the edge that requires high uniformity and able to avoid reflective light interference

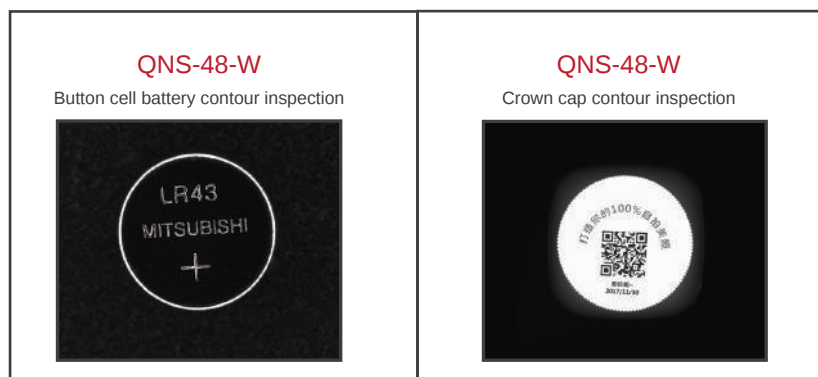
Model Guide



Specification Table

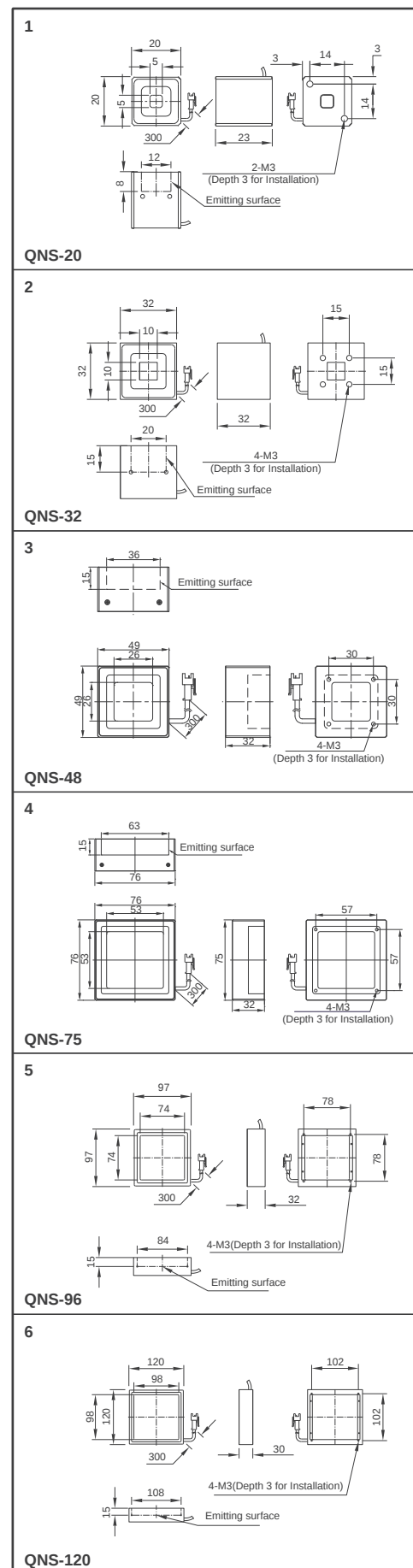
Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	●	Length	Width	Height	
QNS-20	24V	● ● ● ○	1	2.5	20	5	23	1
QNS-32	24V	● ● ● ○	2.5	4.5	32	10	32	2
QNS-48	24V	● ● ● ○	3.5	5	49	26	32	3
QNS-75	24V	● ● ● ○	5	8.5	76	53	32	4
QNS-96	24V	● ● ● ○	7	11.5	97	74	32	5
QNS-120	24V	● ● ● ○	11	15	120	98	30	6

Case Pictures



Linear Diagram

(mm)



CL/CL2/CL3/CLSP/HICL2 Series

Coaxial Lights/High Power Coaxial Lights



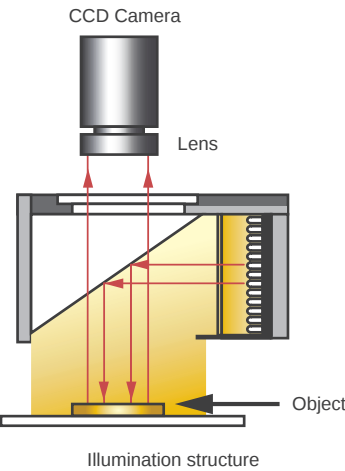
◆ Product Features

- High density SMD LED and automatic welding to reach high brightness
- Special heat conducting materials and compact structure design without cooling fan
- Solid mounting method and flexible installation
- Apply high rank coating spectroscop to provide high quality optical result
- Suitable for inspecting scratches and other defect in highly reflective surface
- CLSP series with compact design to save installation space

◆ Specification Table

Model	Voltage	Color	Power (W)		No. of Channel	Dimensions (mm)			Diagrams
						Length	Width	Height	
CL-20	24V		1.7	1.5	1	46	30	26	1
CL-30	24V		2.5	2.5	1	56	38	36	2
CL2-40	24V		4.3	6	1	86	50	47	3
CL2-50	24V		7	9	1	75	60	55	4
CL2-60	24V		10	10	1	106	70	67	5
CL2-70	24V		11	11	1	120	85.4	79	6
CL2-90	24V		24	18	1	130	98	87	7
CL2-100	24V		18	22	1	146	110	107	8
CL2-120	24V		24	30	1	168	135	132	9
CL2-130X80	24V		40	50	1	147	130	87	10
CL2-150	24V		48	60	1	198	165	162	11
CL2-180X80	24V		28	35	1	190	126	80	12
CLSP-40	24V		2	2.5	1	52	50	47	13
CL3-40	24V		4.3	6	1	86	50	47	3
CL3-50	24V		10	10	1	75	60	55	4
CL3-60	24V		12	12	1	106	70	67	5
CL3-70	24V		15	15	1	120	85.4	79	6
CL3-100	24V		24	24	1	146	110	107	8
Model		Color	Current / Power		No. of Channel	Dimensions (mm)			Diagrams
						Length	Width	Height	
HICL2-50			1.5A / 18W		1	190.8	70	70	14
HICL2-250X100			2A / 90W		1	264	173	116	15
HICL2-300			1.25A / 200W		4	370	314	316	16

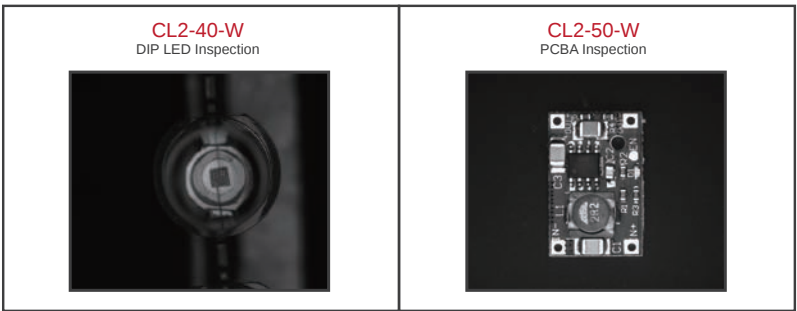
※ HICL2 Only operated by constant current LED driver, and please pay attention to rated current



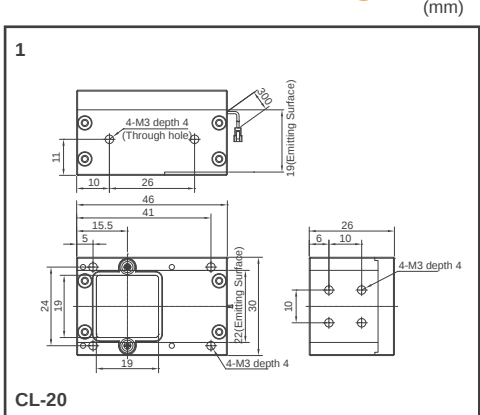
◆ Model Guide

CL3 — 40 — W		
Series CL/CL2/CL3 = Coaxial Lights CLSP = Compact Coaxial Lights	Emitting Area 50 = 50mm	Color W = White

◆ Case Pictures

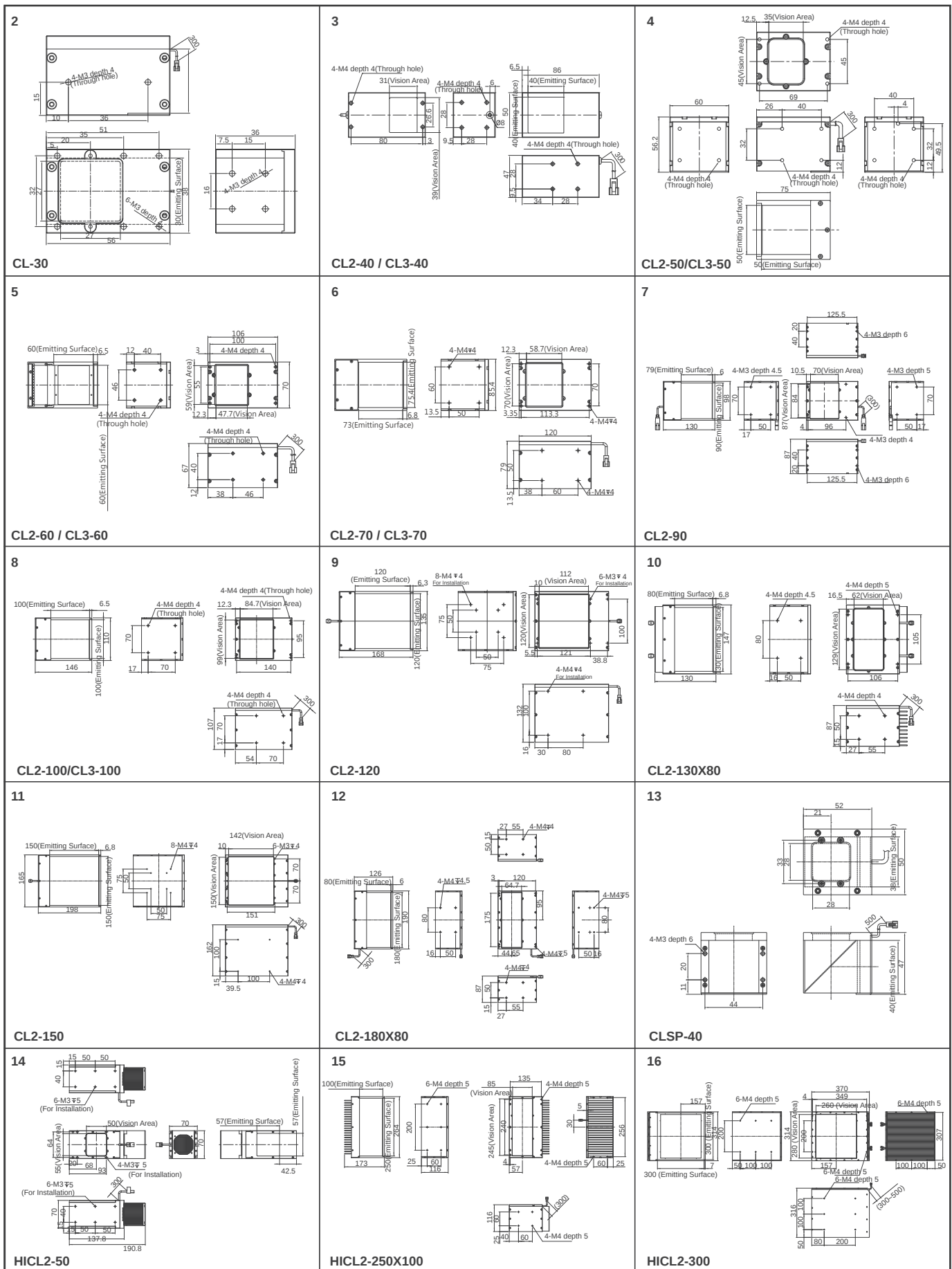


◆ Dimensional Drawing



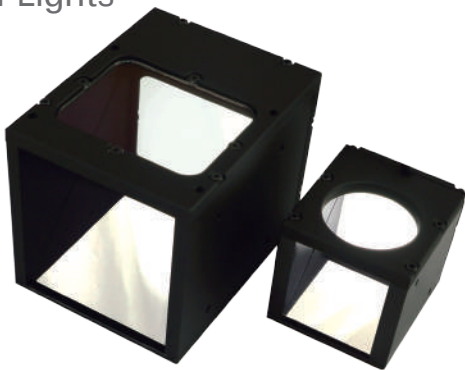
◆ Dimensional Drawing

(mm)



ACL Series

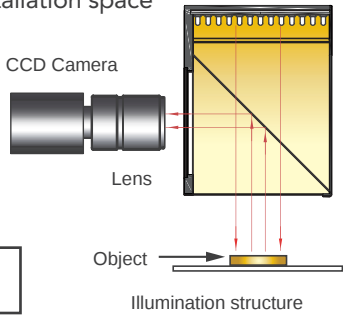
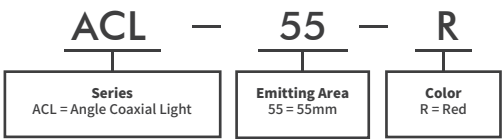
Angle Coaxial Lights



Product Features

- High density SMD LED and high brightness
- Special heat conducting materials for good heat dissipation and high stability
- Compact structure design without cooling fan
- Special coating film to provide high quality optical result
- 90-degree angle design to save the installation space

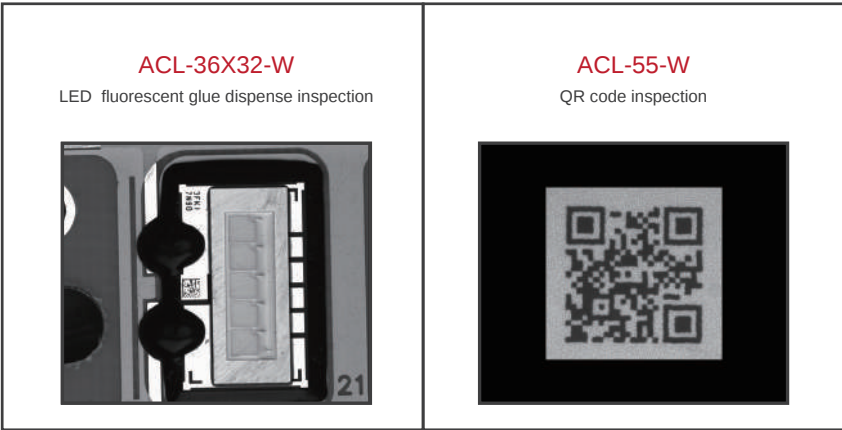
Model Guide



Specification Table

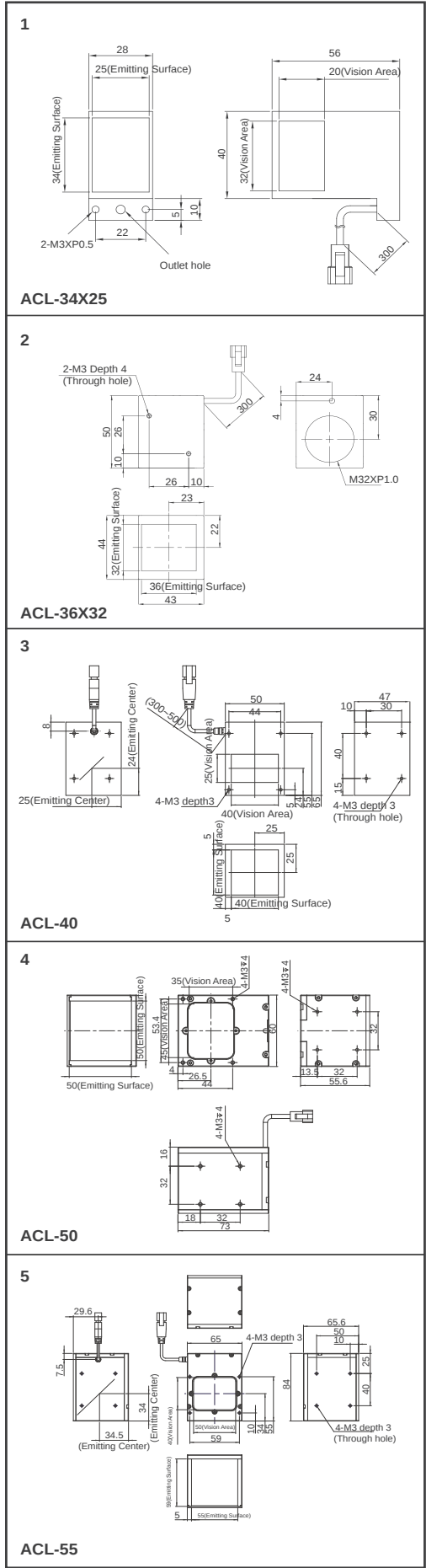
Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	●●●○	Length	Width	Height	
ACL-34X25	24V	● ● ● ○	2	2	56	40	28	1
ACL-36X32	24V	● ● ● ○	2.5	2.5	50	44	43	2
ACL-50X40	24V	● ● ● ○	4	5	65	56	47.5	-
ACL-40	24V	● ● ● ○	2.5	3.8	65	50	47	3
ACL-50	24V	● ● ● ○	3.5	7.2	73	60	55.6	4
ACL-55	24V	● ● ● ○	4.8	7.2	84	65.6	65	5
ACL-90	24V	● ● ● ○	15	16	109	97	87	-

Case Pictures



Dimensional Drawing

(mm)



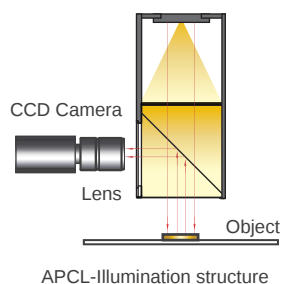
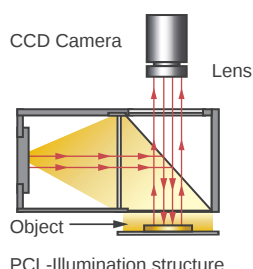
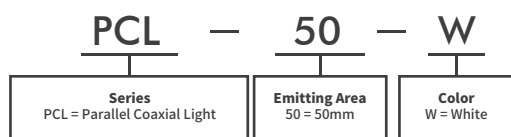
Parallel Coaxial Lights



◆ Product Features

- High density SMD LED and high brightness
- Special heat conducting materials for good heat dissipation and high stability
- Compact structure design without cooling fan
- Suitable for highly reflective surface flatness inspection

◆ Model Guide



◆ Specification Table

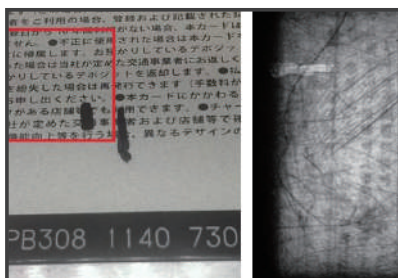
Model	Color	Current / Power		Dimensions (mm)			Diagrams
			  	Length	Width	Height	
PCL-30	   	0.7A / 3W	0.7A / 3W	73	40	29	1
PCL-50	   	1A / 5W	1.5A / 5W	130.8	69	65.8	2
PCL-80	   	1.5A / 5W	1A / 5W	190	95	90	3
APCL-50	   	1.5A / 5W	1.5A / 5W	130.8	69	65.8	-

※ Only operated by constant current LED driver, and please pay attention to rated current

◆ Case Pictures

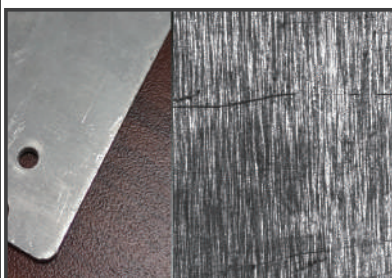
PCL-50-W

Cards surface scratch inspection (don't show characters)



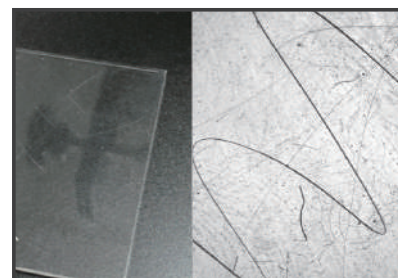
PCL-50-W

Metal surface inspection



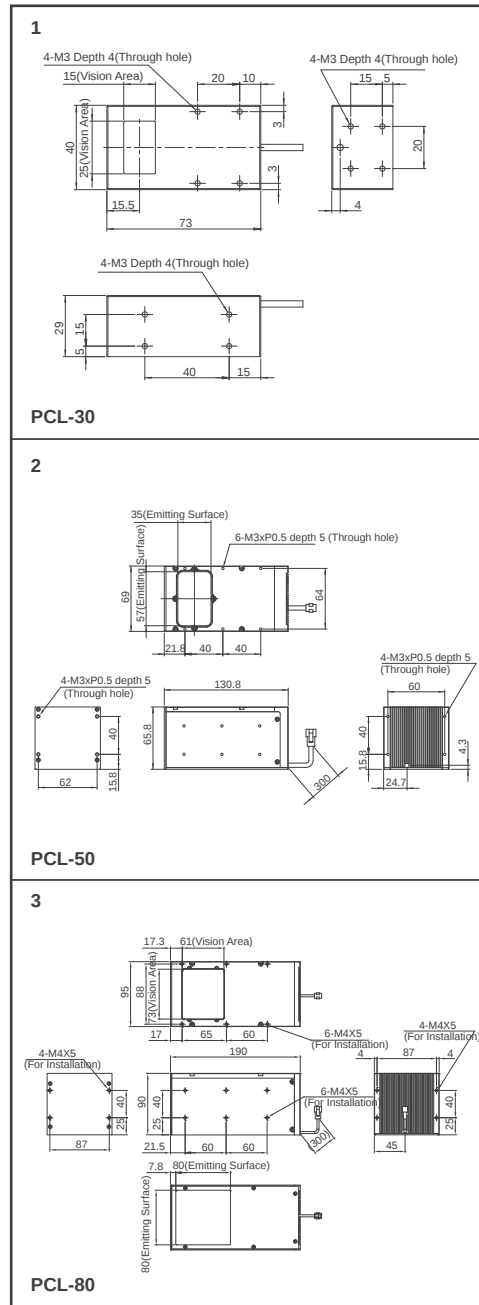
PCL-50-W

Transparent object surface inspection



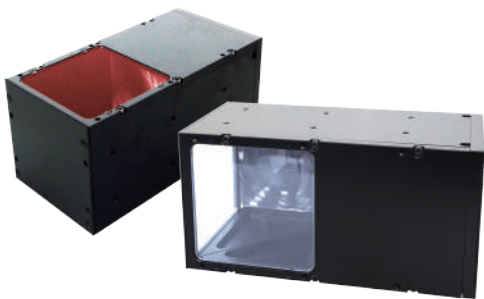
◆ Dimensional Drawing

(mm)



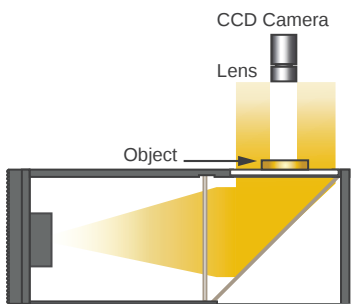
PBCL Series

Parallel Coaxial Backlights



Product Features

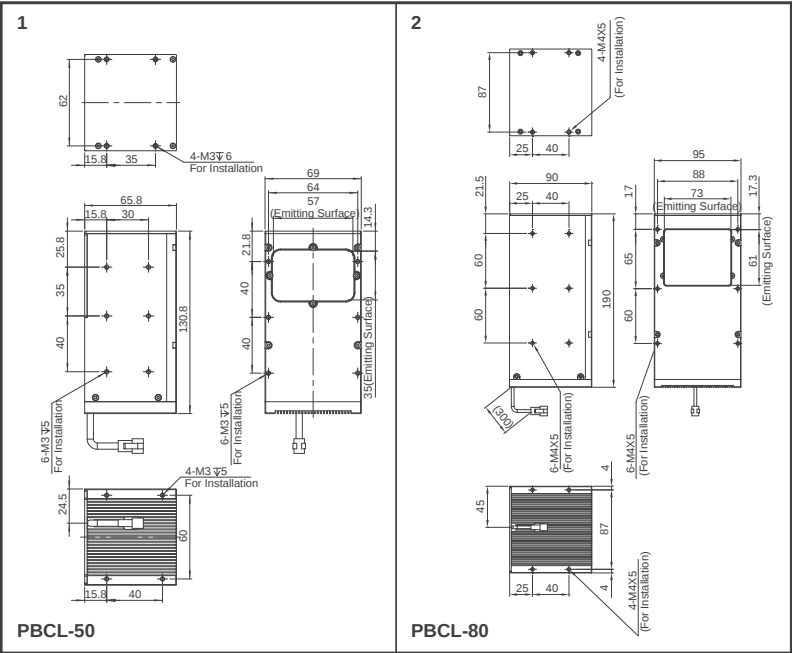
- Provide high level of parallel light beam, divergent angle is less than ± 1 degree
- Easier to take high contrast pictures for contour analysis
- Illumination difference is less than 5% at 200mm working distance



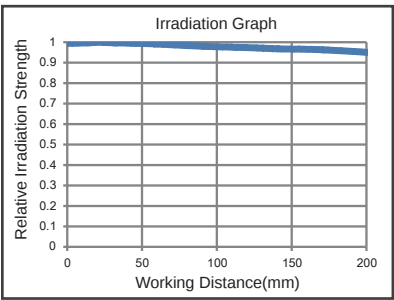
Illumination structure

Dimensional Drawing

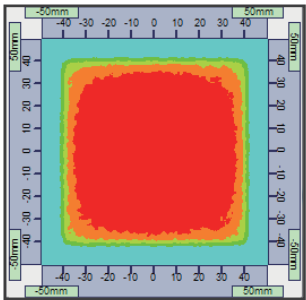
(mm)



Illumination Analysis



Working Distance vs Relative Illumination



Transverse Illumination

Model Guide

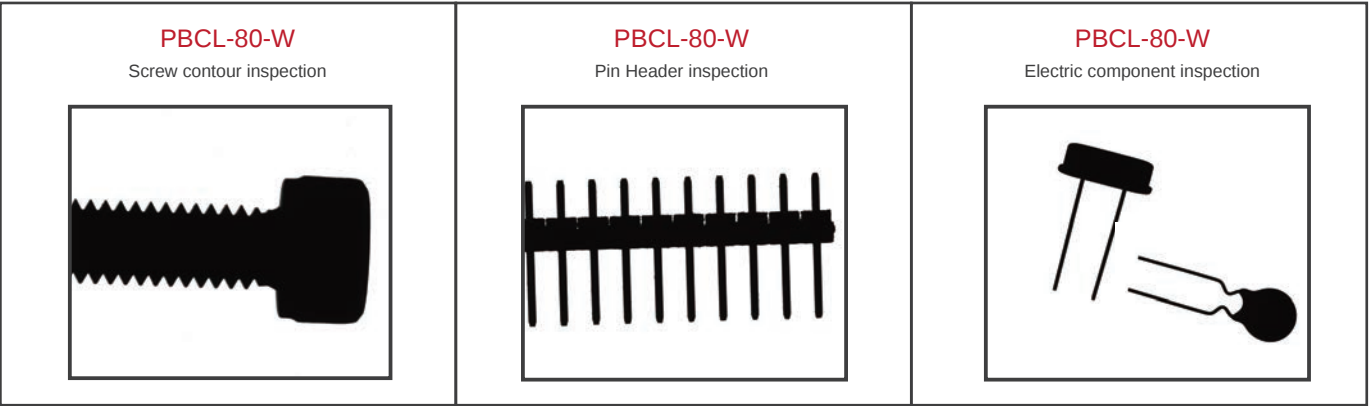
PBCL	—	50	—	W
Series		Emitting Area		Color
PBCL = Parallel Coaxial Backlight		50= 50mm		W = White

Specification Table

Model	Color	Current / Power	Dimensions (mm)			Diagrams
			Length	Width	Height	
PBCL-50	● ● ● ○	0.5A / 6W	130.8	69	65.8	1
PBCL-80	● ● ● ○	1.5A / 5W	190	95	90	2

※ Only operated by constant current LED driver, and please pay attention to rated current

Case Pictures

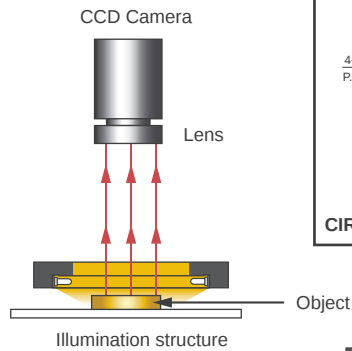


Zero Angle Ring Lights



Product Features

- High performance optical design
- Unprecedented high levels of uniformity in the current market
- Low divergence angle and high directivity
- Effectively highlight the defect characteristics of your inspected objects
- Patented product

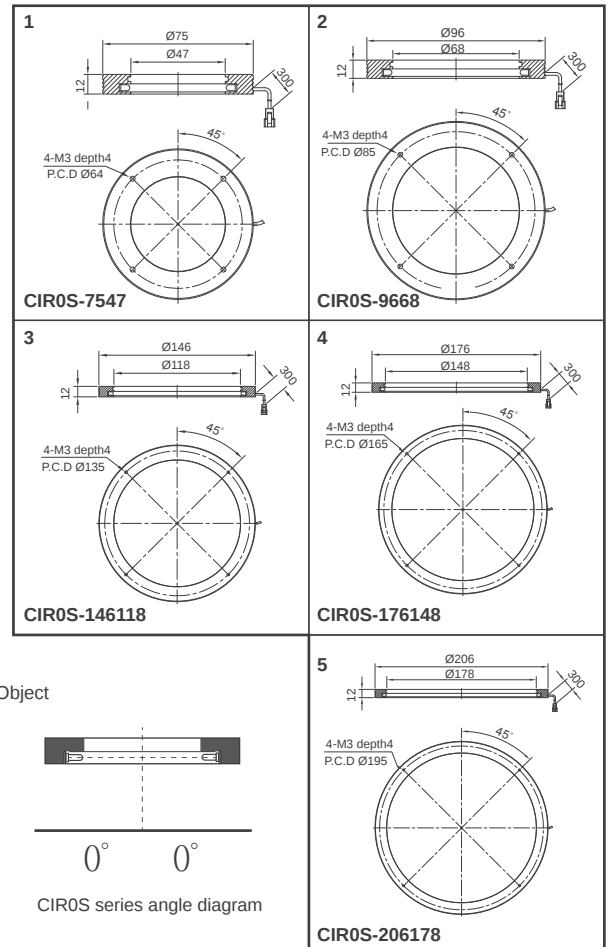


Model Guide

CIR0S	—	146	118	—	B
Series		O.D.	I.D.		Color
CIR0S = Zero Angle Ring Light		146 = 146mm	118 = 118mm		B = Blue

Dimensional Drawing

(mm)



Specification Table

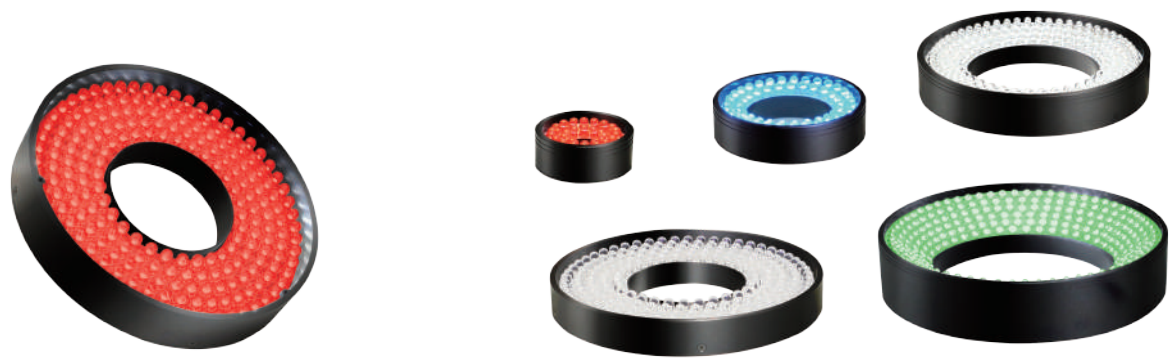
Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	●●○	O.D.	I.D.	Angle	
CIR0S-7547	24V	●●●○	3.6	5	75	47	0	1
CIR0S-9668	24V	●●●○	4.3	6.5	96	68	0	2
CIR0S-146118	24V	●●●○	7.2	10	146	118	0	3
CIR0S-176148	24V	●●●○	8.6	13	176	148	0	4
CIR0S-206178	24V	●●●○	10	15	206	178	0	5

Case Pictures



CIR Series

Ring Lights

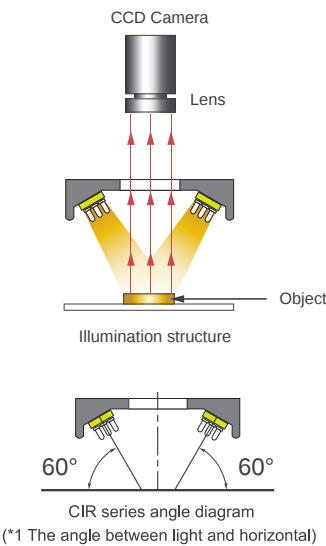


Product Features

- High density LED array, high brightness
- Customized LED beam angle and illumination angle available
- Optional diffuse board to increase the uniformity of lights

Model Guide

CIR	—	32	10	—	70	R
Series		O.D.	I.D.		Angle	Color
CIR = Ring Light		32 = 32mm	10 = 10mm		70 = 70°	R = Red



Specification Table

Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	●●●○	O.D.	I.D.	Angle	
CIR-3210-70	24V	●●●○	1.2	1.5	32	10	70	1
CIR-3514-90	24V	●●●○	1	1.5	35	14	90	2
CIR-4218-65	24V	●●●○	1.5	2	42	18	65	3
CIR-4318-90	24V	●●●○	1.5	2	43	18	90	-
CIR-5024-60	24V	●●●○	1.7	2.5	50	24	60	4
CIR-5025-90	24V	●●●○	2	3.5	50	25	90	5
CIR-5028-75	24V	●●●○	1.7	3	50	28	75	6
CIR-6630-60	24V	●●●○	3.5	5	66	30	60	7
CIR-7035-90	24V	●●●○	4	5.5	70	35	90	8
CIR-7435-60	24V	●●●○	3.5	5	74	35	60	9
CIR-8038-70	24V	●●●○	3.4	4.5	80	38	70	10
CIR-9030-80	24V	●●●○	8	12.8	90	30	80	11
CIR-9050-70	24V	●●●○	6.5	9	90	50	70	12
CIR-11060-60	24V	●●●○	8.5	12	110	60	60	13
CIR-11430-80	24V	●●●○	17.5	24	114	30	80	14
CIR-12060-50	24V	●●●○	15	18	120	60	50	15
CIR-12075-45	24V	●●●○	10.5	11.5	120	75	45	16
CIR-13055-90	24V	●●●○	15.7	21.5	130	55	90	17
CIR-180126-60	24V	●●●○	17.5	24	180	126	60	18

◆ Dimensional Drawing

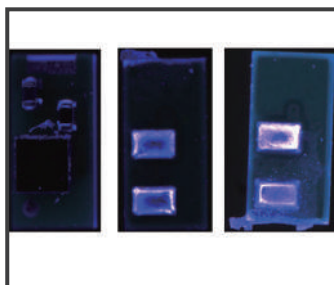
(mm)

1 CIR-3210-70	2 CIR-3514-90	3 CIR-4218-65
4 CIR-5024-60	5 CIR-5025-90	6 CIR-5028-75
7 CIR-6630-60	8 CIR-7035-90	9 CIR-7435-60
10 CIR-8038-70	11 CIR-9030-80	12 CIR-9050-70
13 CIR-11060-60	14 CIR-11430-80	15 CIR-12060-50
16 CIR-12075-45	17 CIR-13055-90	18 CIR-180126-60

◆ Case Pictures

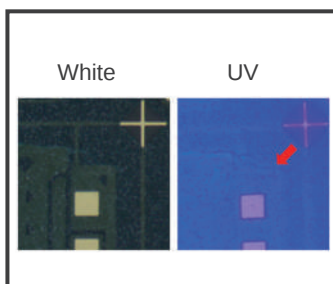
CIR-13055-90-UV

PCB residue inspection



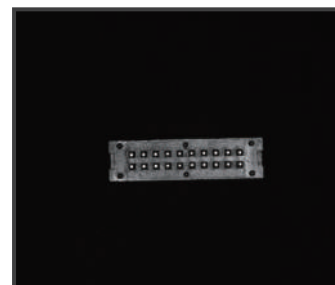
CIR-13055-90-UV

PCB crack inspection



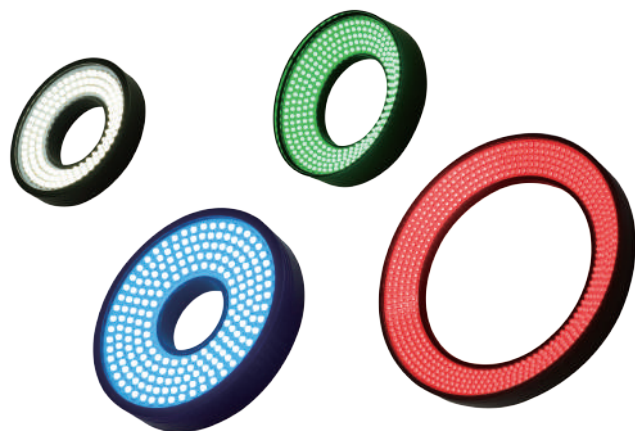
CIR-7435-60W

20 Pin inspection



CIR2 Series

Ring Lights

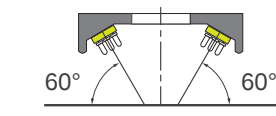
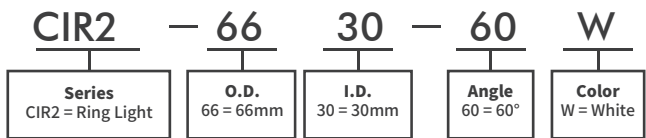


▲ Close look at CIR2 LED

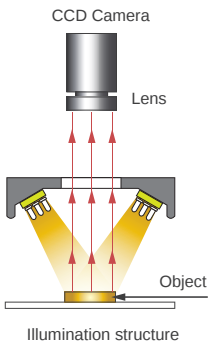
◆ Product Features

- High density LED array, high brightness
- Customized LED beam angle and illumination angle available
- Optional diffuse board to increase the uniformity of lights
- SMT/Reflow technology to assure product quality and production efficiency

◆ Model Guide



CIR2 series angle diagram
(*1 The angle between light and horizontal)



◆ Specification Table

Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	●●●○	O.D.	I.D.	Angle	
CIR2-3210-90	24V	●●●○	1.5	2.5	32	10	90	1
CIR2-3410-70	24V	●●●○	1.4	2	34	10	70	2
CIR2-3514-90	24V	●●●○	1.3	2.7	35	14	90	3
CIR2-4218-65	24V	●●●○	1.8	2.5	42	18	65	4
CIR2-4318-90	24V	●●●○	2	3.2	43	18	90	5
CIR2-5024-60	24V	●●●○	2	3.3	50	24	60	6
CIR2-5025-90	24V	●●●○	2.4	5.5	50	25	90	7
CIR2-5026-75	24V	●●●○	2	3.3	50	26	75	8
CIR2-6040-80	24V	●●●○	4.3	6.5	60	40	80	-
CIR2-6630-60	24V	●●●○	4.3	6.5	66	30	60	9
CIR2-7035-45	24V	●●●○	5.2	7.2	70	35	45	10
CIR2-7035-90	24V	●●●○	5	8.6	70	35	90	11
CIR2-7435-60	24V	●●●○	4.3	6.4	74	35	60	12
CIR2-8038-70	24V	●●●○	6	6.2	80	38	70	13
CIR2-9030-80	24V	●●●○	8.2	13	90	30	80	14
CIR2-9050-70	24V	●●●○	7.5	8.2	90	50	70	15
CIR2-10040-90	24V	●●●○	12	15	100	40	90	-
CIR2-11060-60	24V	●●●○	10	15	110	60	60	16
CIR2-11430-80	24V	●●●○	15	16.5	114	30	80	17
CIR2-12060-50	24V	●●●○	17	19	120	60	50	18
CIR2-12280-45	24V	●●●○	11.5	14	122	80	45	19
CIR2-180126-60			20.4	28	180	126	60	20

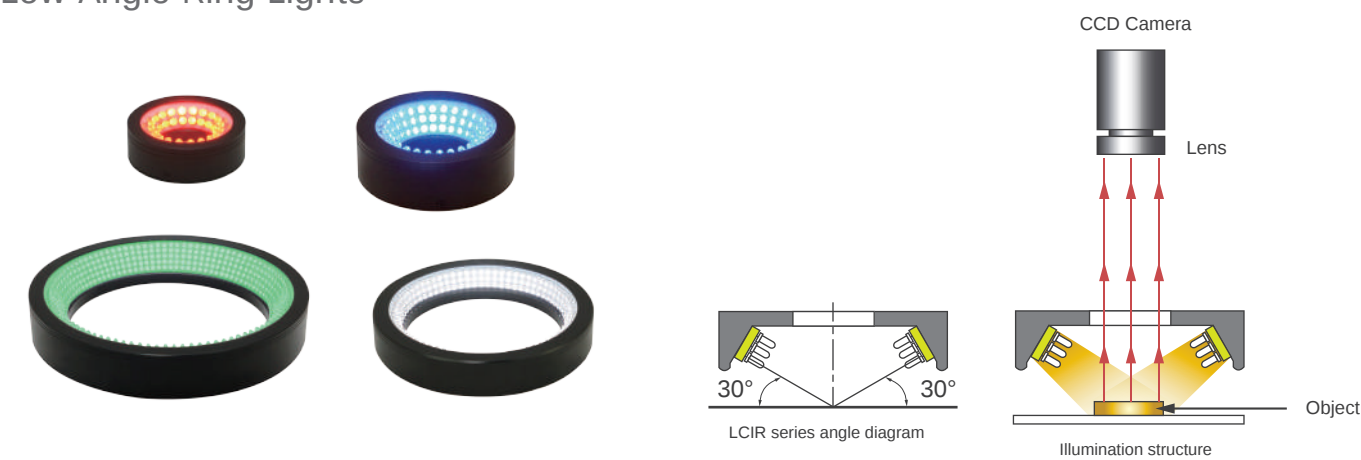
◆ Dimensional Drawing

(mm)

1 CIR2-3210-90	2 CIR2-3410-70	3 CIR2-3514-90	4 CIR2-4218-65
5 CIR2-4318-90	6 CIR2-5024-60	7 CIR2-5025-90	8 CIR2-5026-75
9 CIR2-6630-60	10 CIR2-7035-45	11 CIR2-7035-90	12 CIR2-7435-60
13 CIR2-8038-70	14 CIR2-9030-80	15 CIR2-9050-70	16 CIR2-11060-60
17 CIR2-11430-80	18 CIR2-12060-50	19 CIR2-12280-45	20 CIR2-180126-60

LCIR Series

Low Angle Ring Lights



Product Features

- High density LED array, high brightness
- Customized LED beam angle and illumination angle available
- Compact design to save the installation space

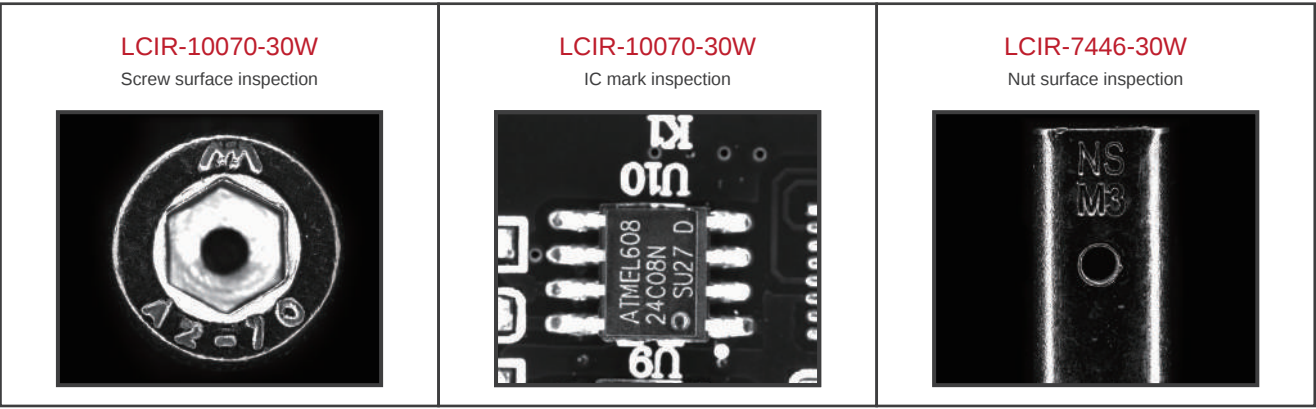
Model Guide

LCIR	—	150	120	—	30	G
Series		O.D.	I.D.		Angle	Color
LCIR = Low Angle Ring Light		150 = 150mm	120 = 120mm		30 = 30°	G = Green

Specification Table

Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	●●●○	O.D.	I.D.	Angle	
LCIR-4318-30	24V	●●●○	2.8	3.6	43	18	30	1
LCIR-4820-30	24V	●●●○	1.5	2.5	48	20	30	2
LCIR-5022-30	24V	●●●○	1.5	2.5	50	22	30	3
LCIR-6630-30	24V	●●●○	3	4.5	66	30	30	4
LCIR-7446-30	24V	●●●○	3.5	4	74	46	30	5
LCIR-10070-30	24V	●●●○	6.5	7	100	70	30	6
LCIR-13296-15	24V	●●●○	7.2	12	132	96	15	7
LCIR-150120-30	24V	●●●○	10	15.3	150	120	30	8
LCIR-170134-20	24V	●●●○	9.5	15.8	170	134	20	9
LCIR-180132-30	24V	●●●○	16.5	23	180	132	30	10
LCIR-208171-25	24V	●●●○	11	16.5	208	171	25	11

Case Pictures



◆ Dimensional Drawing

(mm)

1 LCIR-4318-30	2 LCIR-4820-30	3 LCIR-5022-30
4 LCIR-6630-30	5 LCIR-7446-30	6 LCIR-10070-30
7 LCIR-13296-15	8 LCIR-150120-30	9 LCIR-170134-20
10 LCIR-180132-30	11 LCIR-208171-25	

LCIR2 Series

Low Angle Ring Lights



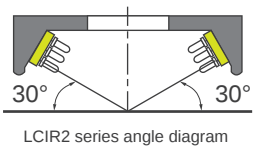
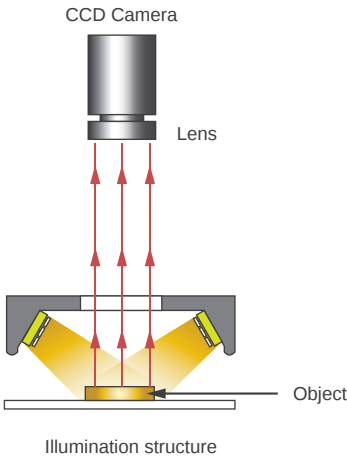
▲ Close look at LCIR2 LED

Product Features

- High density LED array, high brightness
- Customized LED beam angle and illumination angle available
- Compact design to save the installation space
- SMT/Reflow technology to assure product quality and production efficiency

Model Guide

LCIR2	—	180	132	—	30	B
Series		O.D.	I.D.		Angle	Color
LCIR = Low Angle Ring Light		180 = 180mm	132 = 132mm		30 = 30°	B = Blue



Specification Table

Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	●●●○	O.D.	I.D.	Angle	
LCIR2-4318-30	24V	●●●○	2.6	2.6	43	18	30	1
LCIR2-4820-30	24V	●●●○	2.8	3.2	48	20	30	2
LCIR2-5022-30	24V	●●●○	3.1	3.2	50	22	30	3
LCIR2-6630-30	24V	●●●○	5.5	6.5	66	30	30	4
LCIR2-7446-30	24V	●●●○	4.5	5	74	46	30	5
LCIR2-10070-30	24V	●●●○	8.5	9.1	100	70	30	6
LCIR2-13296-15	24V	●●●○	14	16	132	96	15	7
LCIR2-150120-30	24V	●●●○	17	20	150	120	30	8
LCIR2-170134-20	24V	●●●○	20	20	170	134	20	9
LCIR2-180132-30	24V	●●●○	26	30	180	132	30	10
LCIR2-208171-25	24V	●●●○	20	20	208	171	25	11

◆ Dimensional Drawing

(mm)

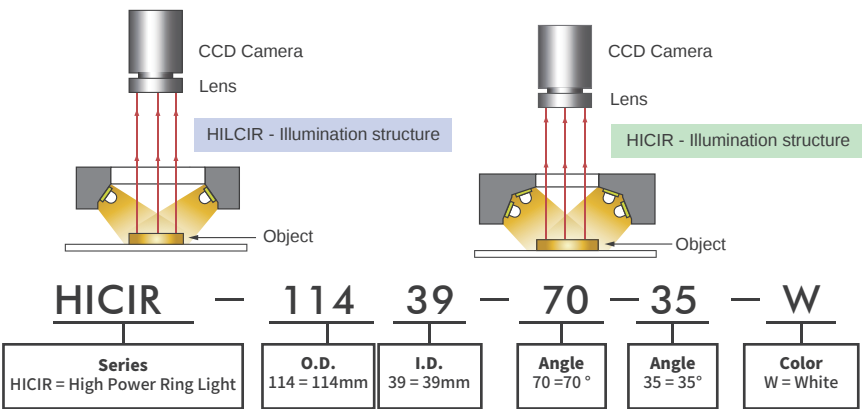
1 LCIR2-4318-30	2 LCIR2-4820-30	3 LCIR2-5022-30
4 LCIR2-6630-30	5 LCIR2-7446-30	6 LCIR2-10070-30
7 LCIR2-13296-15	8 LCIR2-150120-30	9 LCIR2-170134-20
10 LCIR2-180132-30	11 LCIR2-208171-25	

HICIR/HILCIR Series

High Power Ring Lights

Product Features

- Ultra-high brightness and high directivity direct illumination
- Patented module design provides stable and high uniformity illumination performance
- High power LED and high efficient optical design, surpass the brightness of traditional ring lights by more than 20~100X
- Patented product



Model Guide

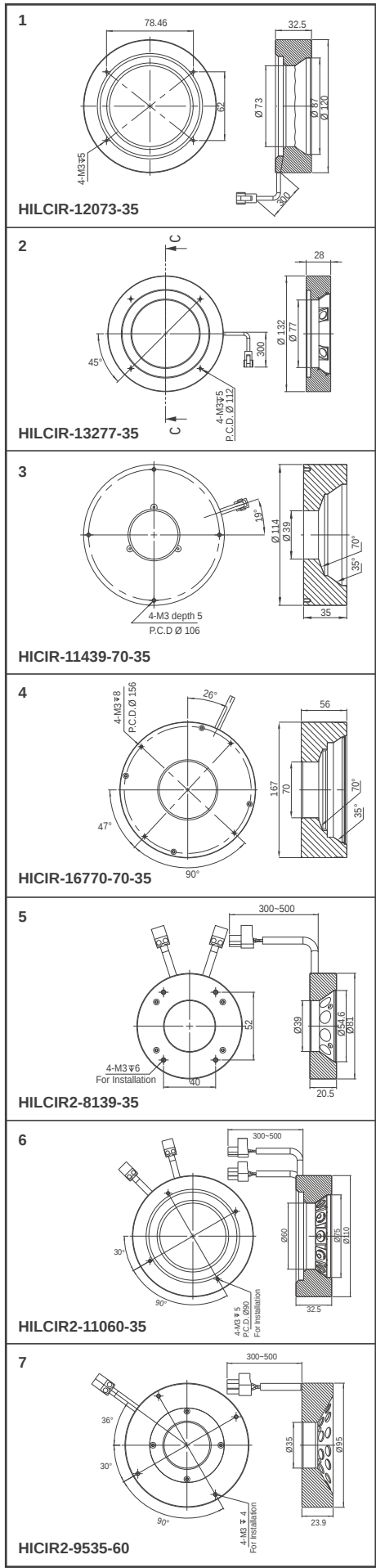
Model	Color	Current / Power	No. of Channel	Dimensions (mm)			Diagrams
				O.D.	I.D.	Angle	
HILCIR-12073-35	● ● ● ○	Continuous: 1A/20W Strobe: 4A/80W	1	120	73	35	1
HILCIR-13277-35	● ● ● ○	Continuous: 0.75A/13W Strobe: 2A/35W	1	132	77	35	2
HICIR-11439-70-35	● ● ● ○	Continuous: 0.35A/22W Strobe: 2A/120W	3	114	39	70/35	3
HICIR-16770-70-35	● ● ● ○	Continuous: 0.35A/36W Strobe: 2A/200W	5	167	70	70/35	4
HILCIR2-8139-35	● ● ● ○	Continuous: 0.35A/36W Strobe: 2A/200W	2	81	39	35	-
HILCIR2-11060-35	● ● ● ○	Continuous: 0.35A/36W Strobe: 2A/200W	2	110	60	35	-
HICIR2-9535-60	● ● ● ○	Continuous: 0.35A/36W Strobe: 2A/200W	1	95	35	60	-

※ Only operated by constant current LED driver, and please pay attention to rated current

Power (W) for Different Drive Mode				
Model	Color	In continuous drive mode	In strobe drive mode	Strobe drive conditions (Ts = Surface temperature)
HILCIR-12073-35-W	○	20W	80W	tp ≤ 100mS; D ≤ 0.25; Ts = 25°C
HILCIR-13277-35-W	○	13W	35W	tp ≤ 100mS; D ≤ 0.37; Ts = 25°C
HICIR-11439-70-W	○	13.6W	280W	tp ≤ 100mS; D ≤ 0.04; Ts = 25°C
HICIR-16770-70-W	○	20W	336W	tp ≤ 100mS; D ≤ 0.05; Ts = 25°C
HILCIR2-8139-35	○	22W	120W	tp ≤ 100mS; D ≤ 0.18; Ts = 25°C
HILCIR2-11060-35	○	36W	200W	tp ≤ 100mS; D ≤ 0.18; Ts = 25°C
HICIR2-9535-60	○	10W	122W	tp ≤ 100mS; D ≤ 0.08; Ts = 25°C

Dimensional Drawing

(mm)



HIREC Series

High Power Bar Lights



Product Features

- High power, high brightness, high uniformity
- High Efficient illumination structure to convey high-directional lightings to the objects
- Customized emitting area, wavelength and color temperature
- Optional diffuse board available

Model Guide

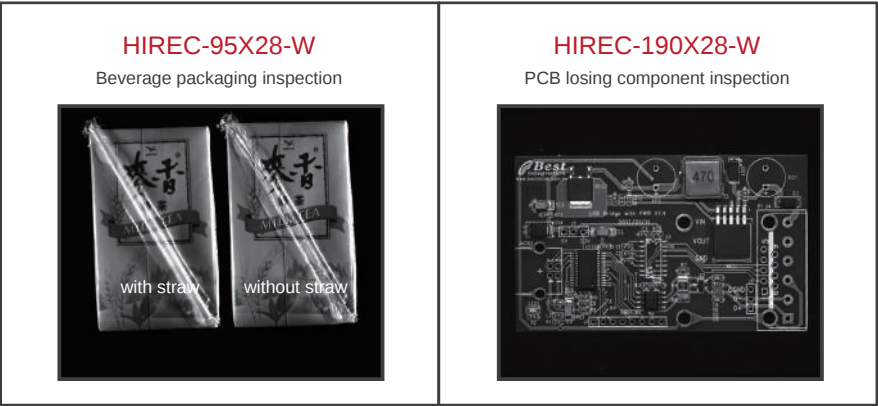
HIREC	—	190	X	28	—	R
Series HIREC = High Power Bar Light		Emitting Length 190 = 190mm		Emitting Width 28 = 28mm		Color R = Red

Specification Table

Model	Color	Current / Power	No. of Channel	Dimensions (mm)			Diagrams
				Length	Width	Height	
HIREC-47X28	● ● ● ○	0.25A / 6W	1	59	36	28	1
HIREC-95X28	● ● ● ○	0.5A / 12W	1	107	36	28	2
HIREC-142X28	● ● ● ○	0.75A / 18W	1	154	36	28	
HIREC-190X28	● ● ● ○	1A / 24W	1	202	36	28	
HIREC-237X28	● ● ● ○	1.25A / 30W	1	249	36	28	
HIREC-285X28	● ● ● ○	1.5A / 36W	1	297	36	28	
HIREC-380X28	● ● ● ○	2A / 48W	1	392	36	28	
HIREC-474X28	● ● ● ○	1.25A / 60W	2	486	36	28	

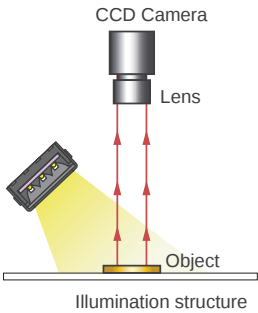
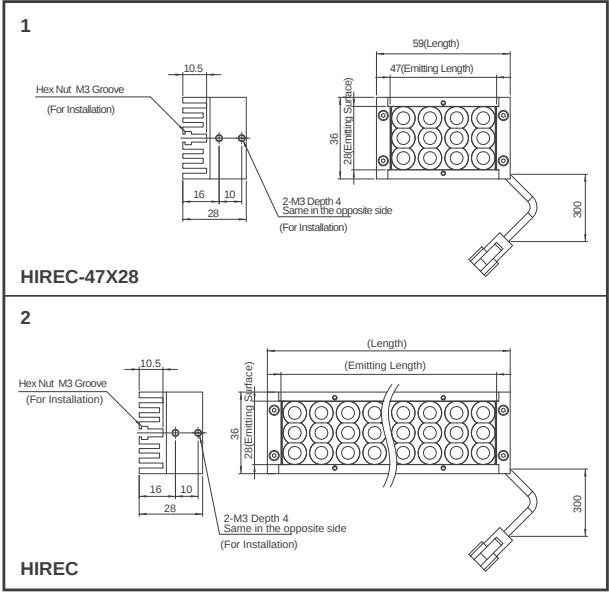
※ 僅限搭配定電流驅動器，並請注意額定電流

Case Pictures

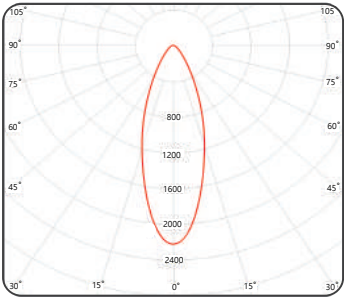


Dimensional Drawing

(mm)



Illumination structure



Illumination Diagrams

REC Series

Bar Lights



▲ REC luminesce width 16 series



▲ REC luminesce width 30 series

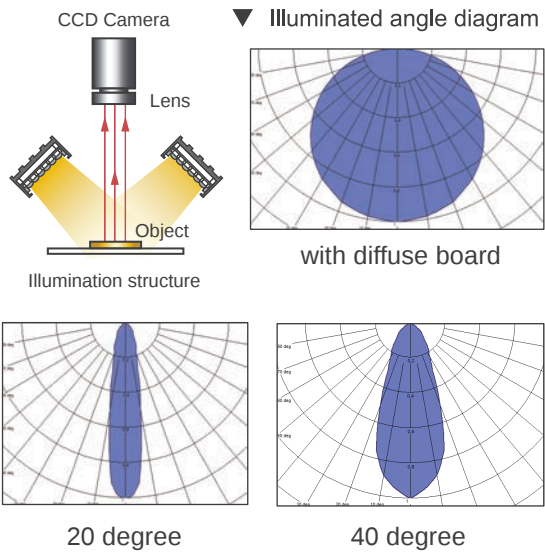
Product Features

- High density SMD LED, high uniformity, high brightness
- Use special optical lens to effectively change LED irradiation angle
- Use standard mold to insure assembly stability and quality
- Customized emitting area, wavelength and color temperature
- Optional diffuse board and lens angle available

Model Guide

REC	—	98	X	30	—	W	—	WD
Series REC = Bar Light	Emitting Length 98 = 98mm	Emitting Width 30 = 30mm	Color W = White	Illuminated Angle WD = 40 degree				

REC	—	146	X	30	—	D	—	B — WD
Series REC = Bar Light	Emitting Length 146 = 146mm	Emitting Width 30 = 30mm	D = Diffuser	Color B = Blue	Illuminated Angle WD = 40 degree			

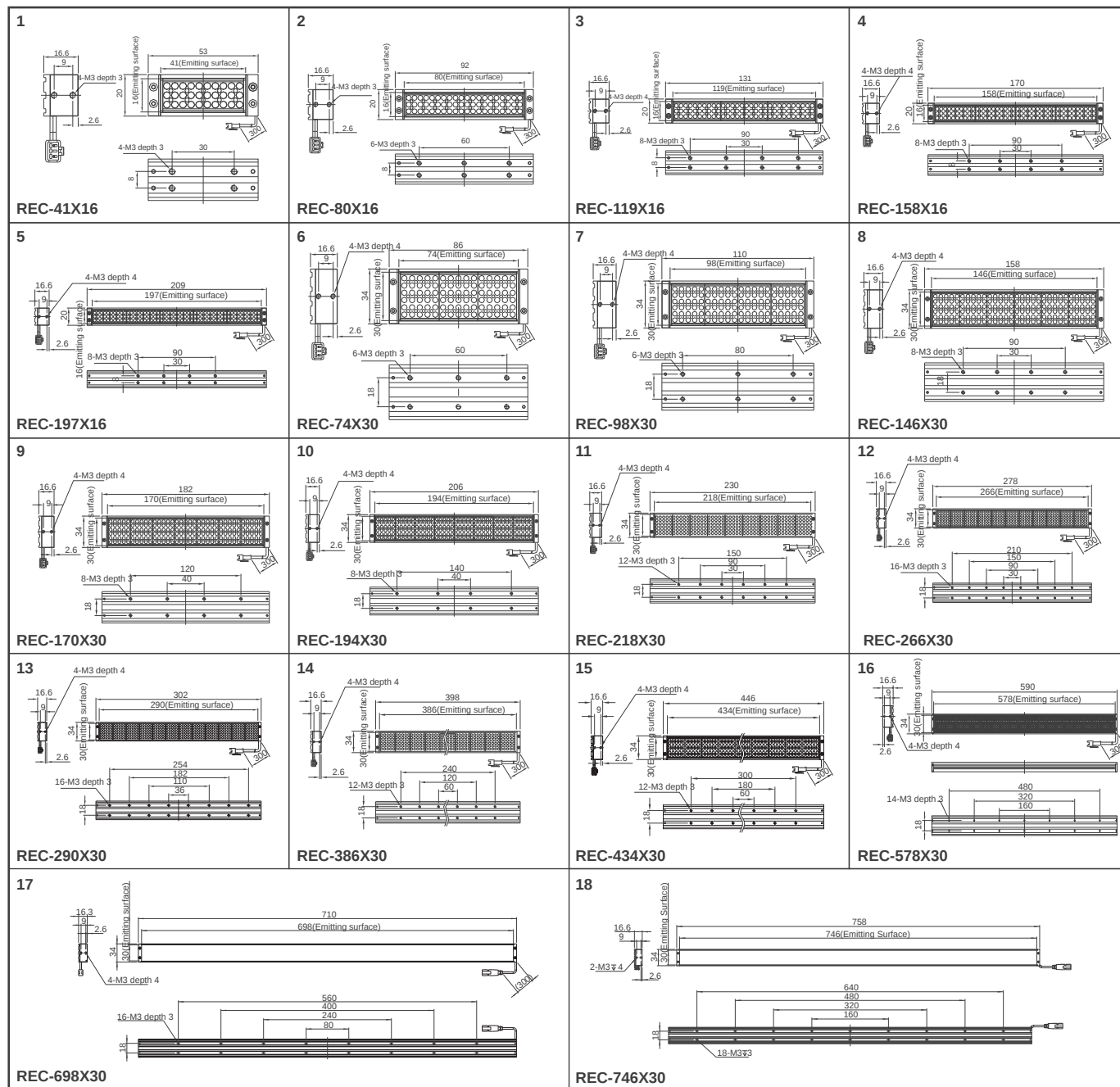


Specification Table

Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	● ● ●	Length	Width	Height	
REC-41X16	24V	● ● ● ○	1	1.5	53	20	16.6	1
REC-80X16	24V	● ● ● ○	2	2.5	92	20	16.6	2
REC-119X16	24V	● ● ● ○	3	4	131	20	16.6	3
REC-158X16	24V	● ● ● ○	4	6	170	20	16.6	4
REC-197X16	24V	● ● ● ○	5	6.5	209	20	16.6	5
REC-74X30	24V	● ● ● ○	3.5	5	86	34	16.6	6
REC-98X30	24V	● ● ● ○	4.8	5.5	110	34	16.6	7
REC-146X30	24V	● ● ● ○	7.2	10	158	34	16.6	8
REC-170X30	24V	● ● ● ○	8.4	11	182	34	16.6	9
REC-194X30	24V	● ● ● ○	9.5	12	206	34	16.6	10
REC-218X30	24V	● ● ● ○	10.7	15	230	34	16.6	11
REC-266X30	24V	● ● ● ○	13	17	278	34	16.6	12
REC-290X30	24V	● ● ● ○	14.2	18	302	34	16.6	13
REC-386X30	24V	● ● ● ○	19.2	24	398	34	16.6	14
REC-434X30	24V	● ● ● ○	21.5	30	446	34	16.6	15
REC-578X30	24V	● ● ● ○	28.8	36	590	34	16.6	16
REC-698X30	24V	● ● ● ○	30	45	710	34	16.3	17
REC-746X30	24V	● ● ● ○	30	50	758	34	16.6	18

◆ Dimensional Drawing

(mm)



◆ Case Pictures



REC2 Series

Bar Lights



▲ Back cooling plate of REC2

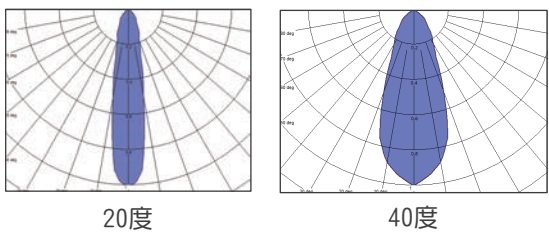
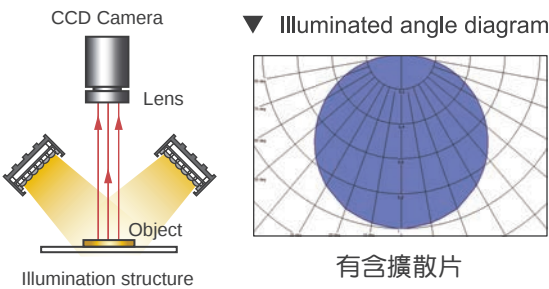
◆ Product Features

- High density SMD LED, high uniformity, high brightness
- Use special optical lens to effectively change LED irradiation angle
- Use standard mold to insure assembly stability and quality
- Customized emitting area, wavelength and color temperature
- Optional diffuse board and lens angle available

◆ Model Guide

REC2	—	74	X	30	—	R	—	WD
Series		Emitting Length		Emitting Width		Color		Illuminated Angle
REC = Bar Light		74 = 74mm		30 = 30mm		R = Red		WD = 40 degree

REC2	—	386	X	30	—	D	—	B	—	WD
Series		Emitting Length		Emitting Width		D = Diffuser		Color		Illuminated Angle
REC = Bar Light		386 = 386mm		30 = 30mm				B = Blue		WD = 40 degree



◆ Specification Table

Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	●●●	Length	Width	Height	
REC2-41X16	24V	●●●○	1	1.5	53	20	19	1
REC2-80X16	24V	●●●○	2	2.5	92	20	19	2
REC2-119X16	24V	●●●○	3	4	131	20	19	3
REC2-158X16	24V	●●●○	4	6	170	20	19	4
REC2-197X16	24V	●●●○	5	6.5	209	20	19	5
REC2-74X30	24V	●●●○	3.5	5	86	34	19	6
REC2-98X30	24V	●●●○	4.8	6	110	34	19	7
REC2-146X30	24V	●●●○	7.2	10	158	34	19	8
REC2-170X30	24V	●●●○	8.4	11	182	34	19	9
REC2-194X30	24V	●●●○	9.5	12	206	34	19	10
REC2-218X30	24V	●●●○	10.7	15	230	34	19	11
REC2-266X30	24V	●●●○	13	17	278	34	19	12
REC2-290X30	24V	●●●○	14.2	18	302	34	19	13
REC2-386X30	24V	●●●○	19.2	24	398	34	19	14
REC2-434X30	24V	●●●○	21.5	30	446	34	19	15
REC2-578X30	24V	●●●○	28.8	36	590	34	19	16

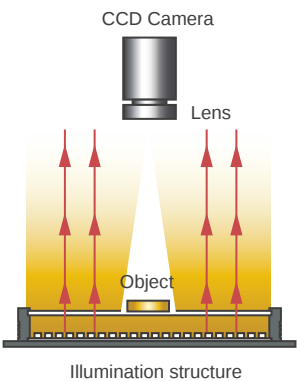
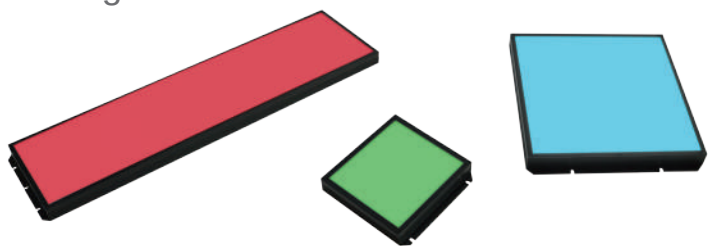
◆ Dimensional Drawing

(mm)

1 Hex Nut M3 Groove For Installation 2-M3x3 Same In The Opposite For Installation REC2-41X16	2 Hex Nut M3 Groove For Installation 2-M3x3 Same In The Opposite For Installation REC2-80X16
3 Hex Nut M3 Groove For Installation 2-M3x3 Same In The Opposite For Installation REC2-119X16	4 Hex Nut M3 Groove For Installation 2-M3x3 Same In The Opposite For Installation REC2-158X16
5 Hex Nut M3 Groove For Installation 2-M3x3 Same In The Opposite For Installation REC2-197X16	6 Hex Nut M3 Groove (For Installation) 4-M3 depth 4 REC2-74X30
7 Hex Nut M3 Groove (For Installation) 4-M3 depth 4 (For Installation) REC2-98X30	8 Hex Nut M3 Groove (For Installation) 4-M3 depth 4 (For Installation) REC2-146X30
9 Hex Nut M3 Groove (For Installation) 4-M3 depth 4 (For Installation) REC2-170X30	10 Hex Nut M3 Groove (For Installation) 4-M3 depth 4 (For Installation) REC2-194X30
11 Hex Nut M3 Groove (For Installation) 4-M3 depth 4 (For Installation) REC2-218X30	12 Hex Nut M3 Groove (For Installation) 4-M3 depth 4 (For Installation) REC2-266X30
13 Hex Nut M3 Groove (For Installation) 4-M3 depth 4 (For Installation) REC2-290X30	14 Hex Nut M3 Groove (For Installation) 4-M3 depth 4 (For Installation) REC2-386X30
15 Hex Nut M3 Groove (For Installation) 4-M3 depth 4 (For Installation) REC2-434X30	16 Hex Nut M3 Groove (For Installation) 4-M3 depth 4 (For Installation) REC2-578X30

BL Series

Bottom Flat Lights



Product Features

- High density SMD LED distributed, high brightness, high uniformity
- Suitable for appearance/outline and projection inspection
- Suitable for transparent object's defect inspection
- Standard mold shell, compact and slim structure to save the installation space
- Customized emitting area, wavelength and color temperature

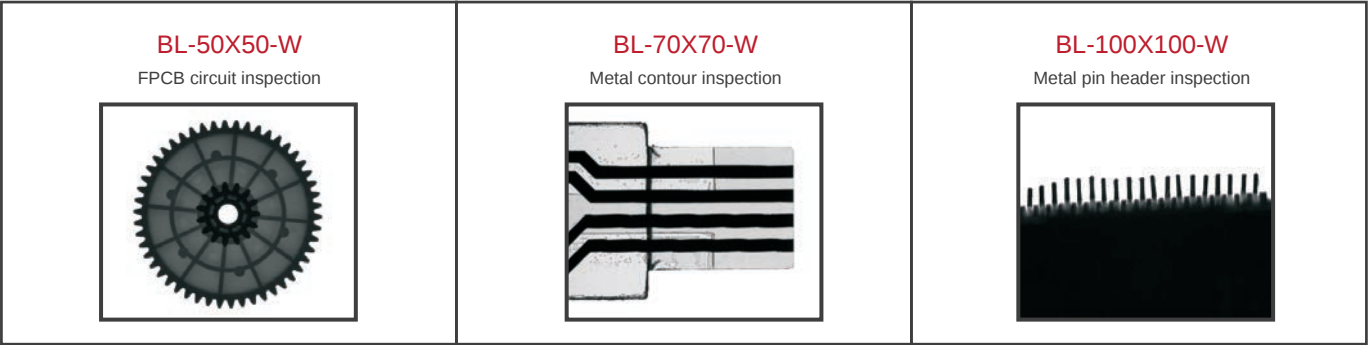
Model Guide

BL	—	100	X	100	—	R
Series		Emitting Length		Emitting Width		Color
BL = Bottom Flat Light		100 = 100mm		100 = 100mm		R = Red

Specification Table

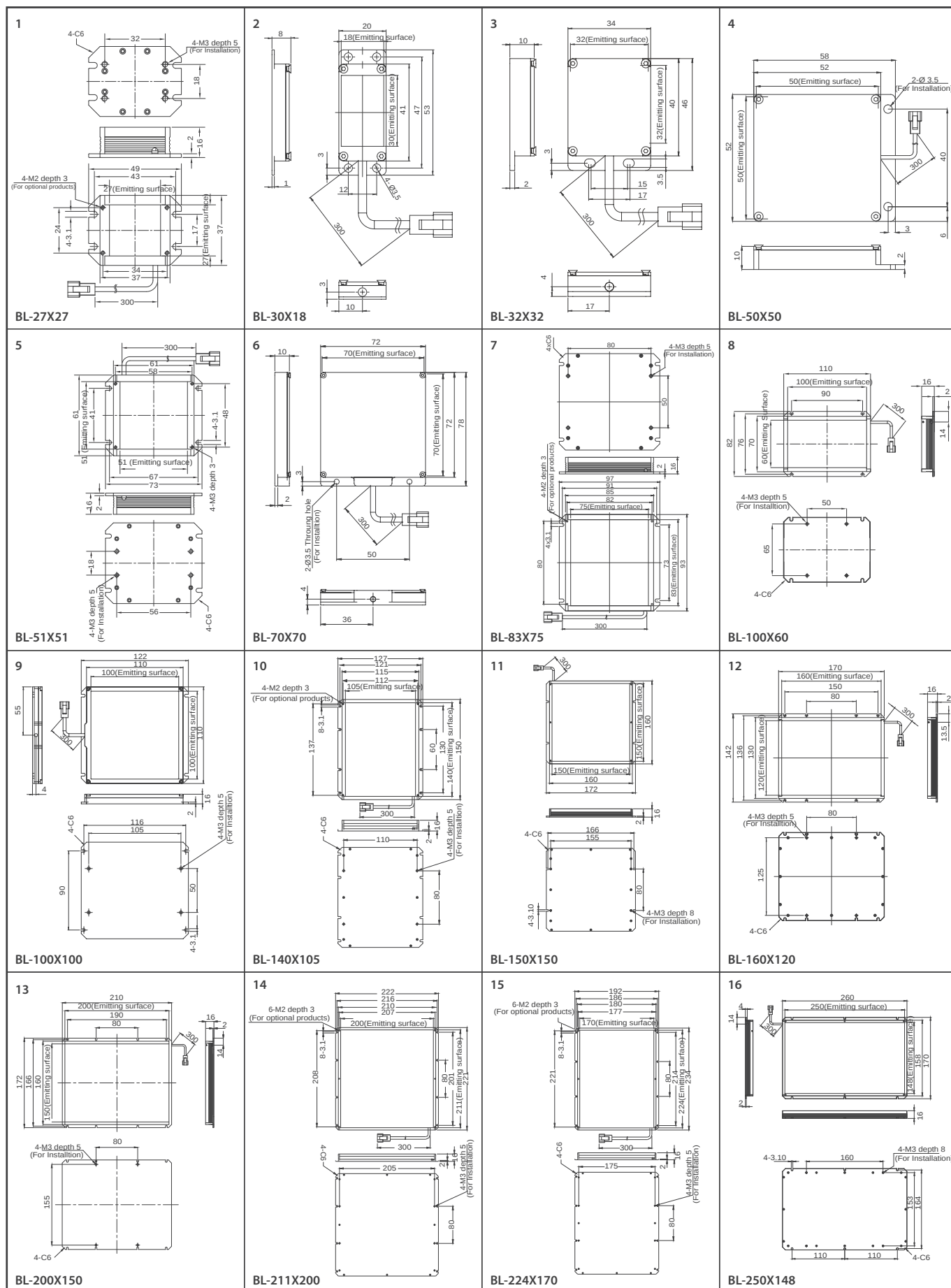
Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	● ● ●	Length	Width	Height	
BL-27X27	24V	● ● ● ●	1	1.5	49	37	16	1
BL-30X18	24V	● ● ● ●	0.7	0.7	53	20	8	2
BL-32X32	24V	● ● ● ●	2	2	46	34	10	3
BL-50X50	24V	● ● ● ●	5	5	58	52	10	4
BL-51X51	24V	● ● ● ●	4	5	73	61	16	5
BL-70X70	24V	● ● ● ●	6.5	6.5	78	72	10	6
BL-83X75	24V	● ● ● ●	6.5	10	97	93	16	7
BL-100X60	24V	● ● ● ●	6.5	10	110	82	16	8
BL-100X100	24V	● ● ● ●	11	11	122	110	16	9
BL-120X120	24V	● ● ● ●	16	20	151	130	16	-
BL-140X105	24V	● ● ● ●	12.5	19	150	127	16	10
BL-150X150	24V	● ● ● ●	20	28	172	160	16	11
BL-160X120	24V	● ● ● ●	15.5	24	170	142	16	12
BL-200X150	24V	● ● ● ●	21.8	30.5	210	172	16	13
BL-211X200	24V	● ● ● ●	23.5	33	222	221	16	14
BL-224X170	24V	● ● ● ●	26.5	35.8	234	192	16	15
BL-250X148	24V	● ● ● ●	21.8	30.5	260	170	16	16
BL-370X250	24V	● ● ● ●	52	65	380	272	17	-
BL-378X95	24V	● ● ● ●	28.8	36	400	105	16	-
BL-378X120	24V	● ● ● ●	36.8	46	400	130	16	-
BL-390X290	24V	● ● ● ●	40	50	410	310	42	-

Case Pictures



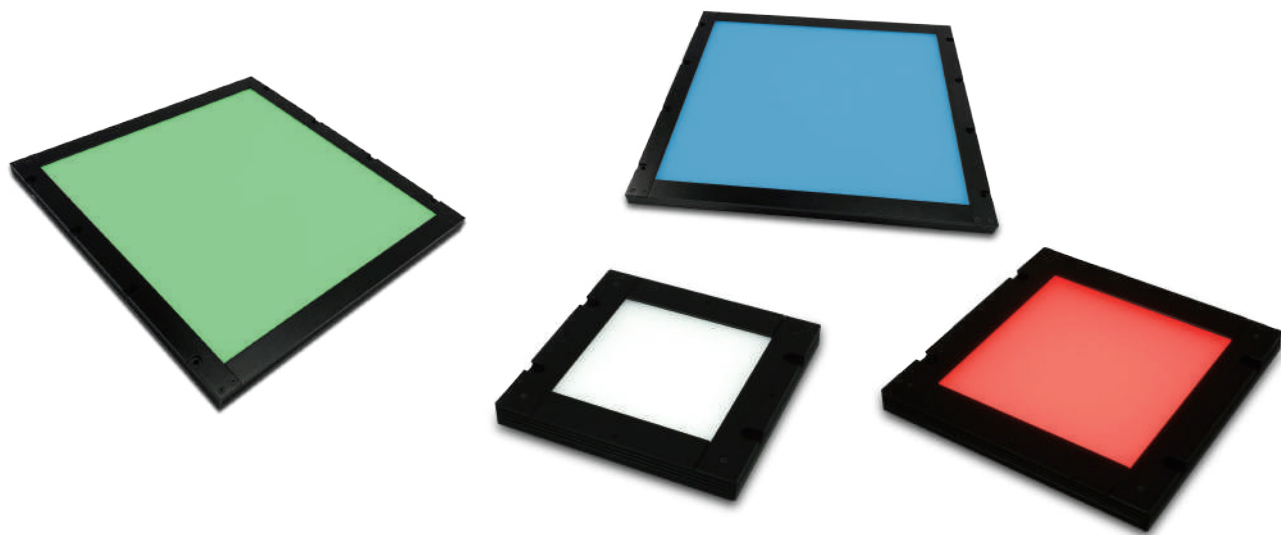
Linear Diagram

(mm)



SBL Series

Side Flat Lights

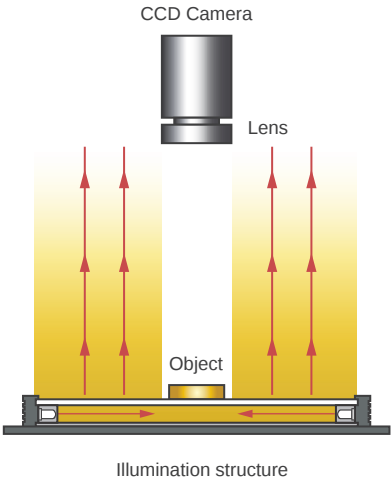


Product Features

- Unique light guide material and multiple scattering of light-emitting to reduce the lights directivity and become uniform lights
- Enhance color contrast and object edge contrast without halation
- Super thin design to save the installing space
- Customized emitting area, wavelength and color temperature

Model Guide

SBL – 200 X 200 – R			
Series	Emitting Length	Emitting Width	Color
SBL = Side Flat Light	200 = 200mm	200 = 200mm	R = Red

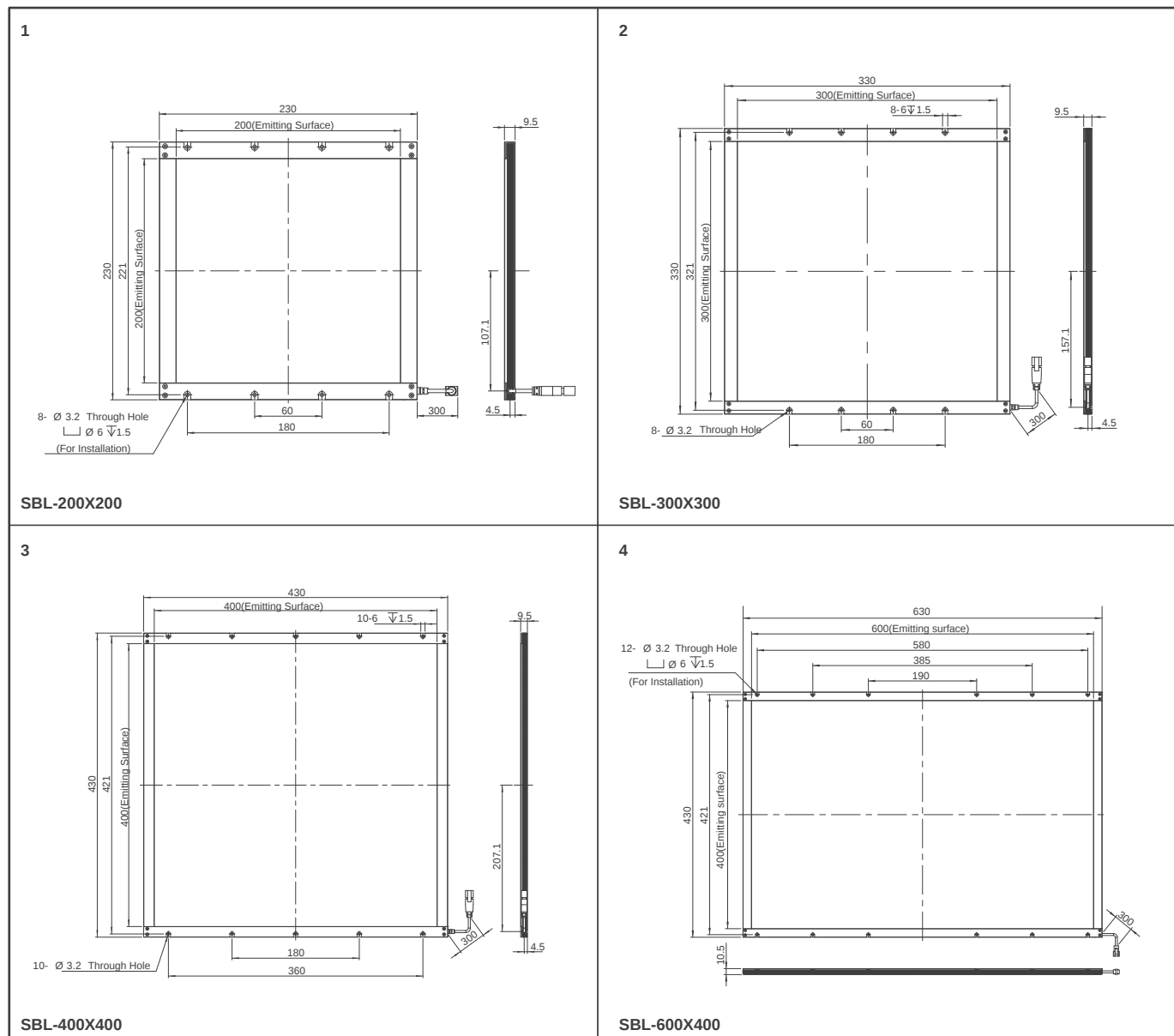


Specification Table

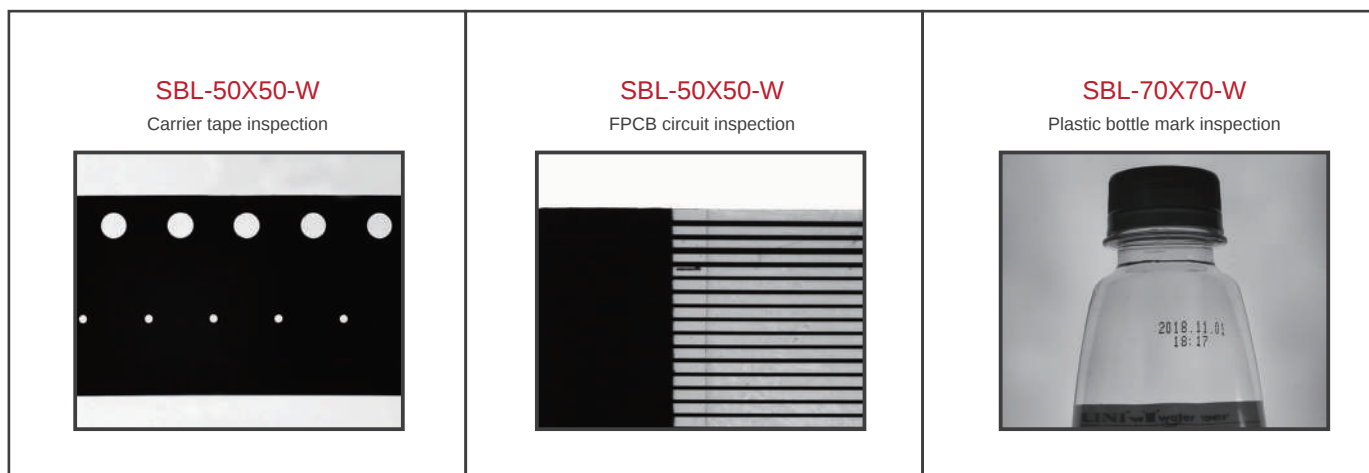
Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	● ● ●	Length	Width	Height	
SBL-200X200	24V	● ● ● ○	12	15	230	230	9.5	1
SBL-300X300	24V	● ● ● ○	16	26	330	330	9.5	2
SBL-400X400	24V	● ● ● ○	20	30	430	430	9.5	3
SBL-600X400	24V	● ● ● ○	24	36	630	430	10.5	4

◆ Linear Diagram

(mm)

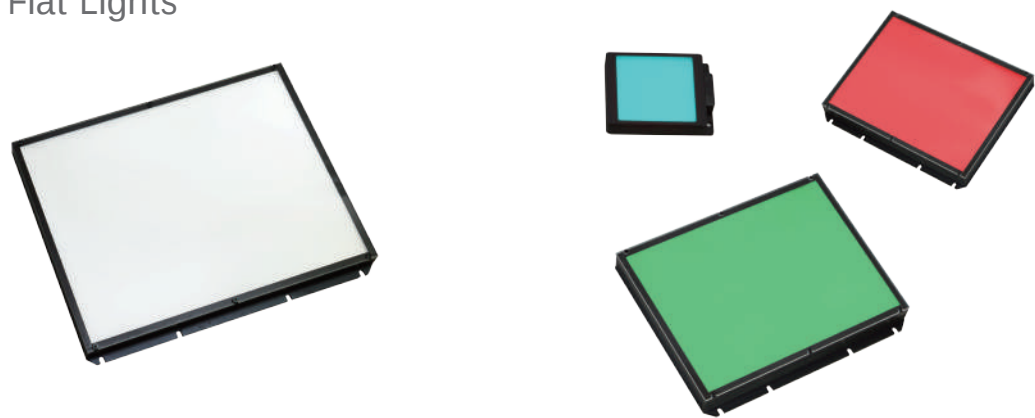


◆ Case Pictures



PBL Series

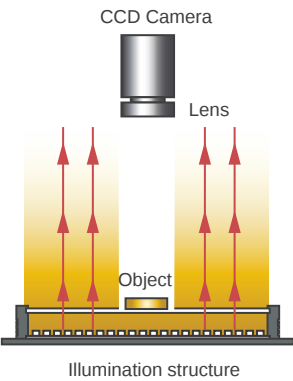
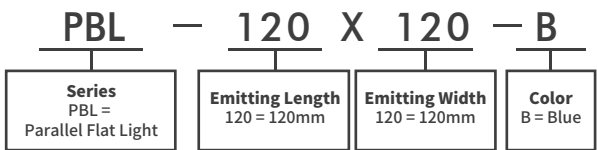
Parallel Flat Lights



Product Features

- Unique light-guiding material to become uniform diffused lights
- Suitable for appearance inspection and size measurement
- Standard mold shell and compact structure to save the installation space
- Customized emitting area, wavelength and color temperature

Model Guide



Specification Table

Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	●●○	Length	Width	Height	
PBL-27X27	24V	●●●○	1	1.5	49	37	18	1
PBL-50x50	24V	●●●○	5	5	70	56	13	2
PBL-83X75	24V	●●●○	6.5	10	97	93	18	3
PBL-120X120	24V	●●●○	16	20	151	130	18	4
PBL-140X105	24V	●●●○	12.5	19	150	127	18	5
PBL-150X150	24V	●●●○	20	28	172	160	18	6
PBL-200X150	24V	●●●○	21.8	32	210	172	18	7
PBL-224X170	24V	●●●○	26.5	35.8	234	192	18	8

Case Pictures

PBL-50X50-W IC contour inspection BL-27X27-W PBL-50X50-W	PBL-50X50-W DIP LED inspection BL-50X50-W PBL-50X50-W	PBL-50X50-W Screw contour inspection BL-50X50-W PBL-50X50-W	PBL-50X50-W Fuse inspection BL-32X32-W PBL-50X50-W
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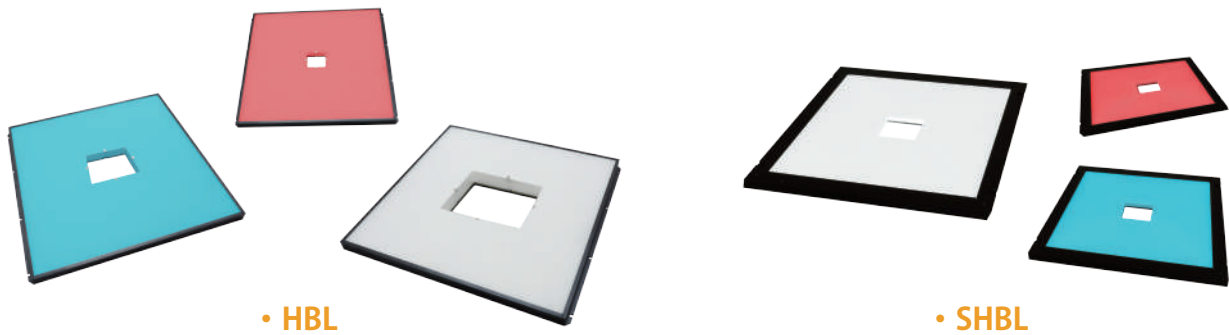
◆ Dimensional Drawing

(mm)

1 PBL-27X27	2 PBL-50X50	3 PBL-83X75
4 PBL-120X120	5 PBL-140X105	6 PBL-150X150
7 PBL-200X150	8 PBL-224X170	

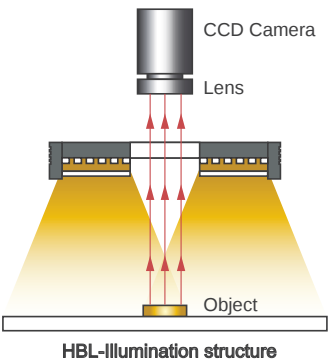
HBL/SHBL Series

Open Hole Flat Lights / Side Open Hole Flat Lights



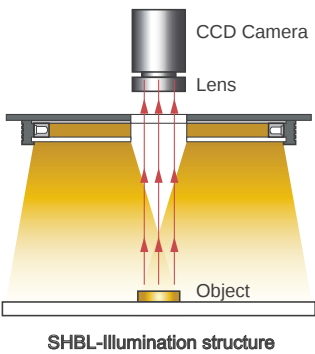
Product Features

- Opening in the center of backlight to let the camera catches image through the hole(For HBL)
- Ultra-thin design with an opening in the center of backlight to let the camera catches image through the hole(For SHBL)
- Suitable for big area lighting demand that requires high uniformity
- Be able to substitute coaxial light and save fitting room for lighting non-reflective objects
- Customized emitting area, size of the opening hole, wavelength and color temperature



Model Guide

HBL	—	300 X 300	—	S	40	—	W
Series HBL = Open Hole Flat Light		Emitting Length 300 = 300mm	Emitting Width 300 = 300mm	Hole Type S = Square	Hole Size 40X40mm		Color W = White
SHBL	—	200 X 200	—	S	40	—	R
Series SHBL = Side Open Hole Flat Light		Emitting Length 200 = 200mm	Emitting Width 200 = 200mm	Hole Type S = Square	Hole Size 40X40mm		Color R = Red



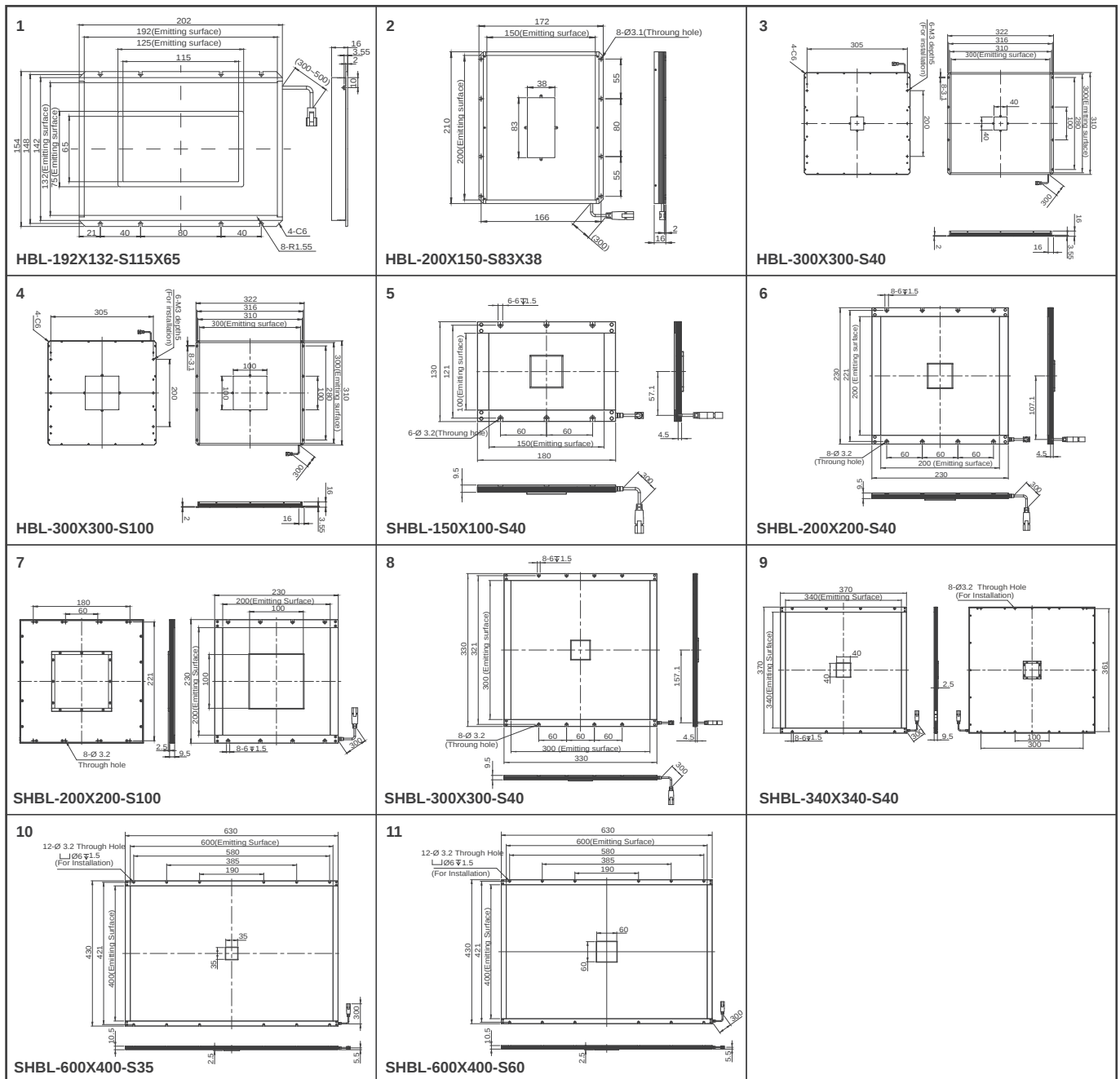
Specification Table

Model	Voltage	Color	Power (W)		Dimensions (mm)			Type	Hole Size (mm)	Diagrams
			●	●●●○	Length	Width	Height			
HBL-192X132-S115X65	24V	●●●○	12.5	12.5	202	154	16	Bottom Type	115X65 Square	1
HBL-200X150-S83X38	24V	●●●○	27	27	210	172	16	Bottom Type	83X38 Square	2
HBL-300X300-S40	24V	●●●○	51	51	322	310	16	Bottom Type	40X40 Square	3
HBL-300X300-S100	24V	●●●○	93	93	322	310	16	Bottom Type	100X100 Square	4

Model	Voltage	Color	Power (W)		Dimensions (mm)			Type	Hole Size (mm)	Diagrams
			●	●●●○	Length	Width	Height			
SHBL-150X100-S40	24V	●●●○	6	6	180	130	9.5	Side Type	40X40 Square	5
SHBL-200X200-S40	24V	●●●○	12	15	230	230	9.5	Side Type	40X40 Square	6
SHBL-200X200-S100	24V	●●●○	15	15	230	230	9.5	Side Type	100X100 Square	7
SHBL-300X300-S40	24V	●●●○	26	26	330	330	9.5	Side Type	40X40 Square	8
SHBL-340X340-S40	24V	●●●○	24	24	370	370	9.5	Side Type	40X40 Square	9
SHBL-600X400-S35	24V	●●●○	36	36	630	430	10.5	Side Type	35X35 Square	10
SHBL-600X400-S60	24V	●●●○	36	36	630	430	10.5	Side Type	60X60 Square	11

◆ Dimensional Drawing

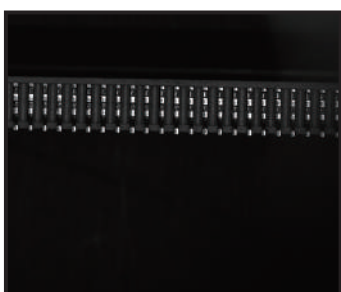
(mm)



◆ Case Pictures

HBL-200X200-S40-W

Connector pin inspection



HBL-200X200-S40-W
IC Tray Inspection



HBL-300X300-S40-W

Label inspection



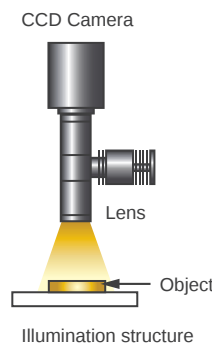
SP/SPL Series

Spot Light/Projection Spot Lights



◆ Product Features

- High output LED with compact design and high intensity
- Efficient cooling design to extend the lifetime
- Replace fiber halogen lights
- Replace coaxial light by working with coaxial lens to inspect small component
- Suitable for the machine vision system with small installing space



◆ Model Guide

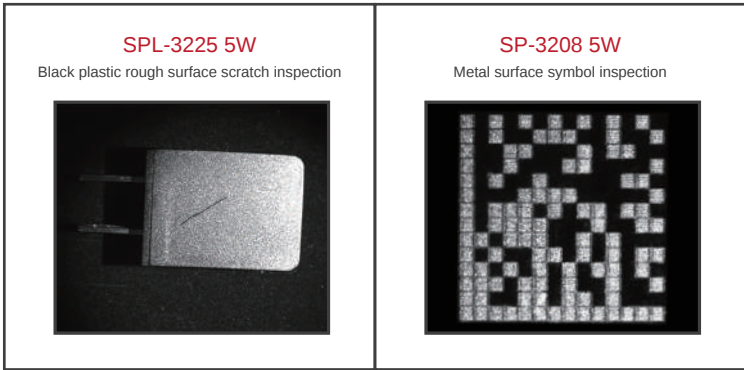
SP	—	21	08	—	3	R
Series		Body Dia.	Interface Dia.		Power	Color
SP = Spot Light SPL = Projection Spot Light		21 = 21mm	08 = 8mm		3 = 3W	R = Red

◆ Specification Table

Model	Color	Current / Power	No. of Channel	Interface Diameter	Diagrams
SP-2108-1	Red Green Blue White	0.35A / 1W	1	8mm	1
SP-2108-3	Red Green Blue White	0.7A / 3W	1	8mm	2
SP-3208-5	Red Green Blue White	1.5A / 5W	1	8mm	3
SP-3208-5	Color	0.5A / 5W	4	8mm	4
SP-3208-6	Red Green Blue White	0.5A / 6W	1	8mm	5
SPL-2114-3	Red Green Blue White	0.7A / 3W	1	14mm	6
SPL-3225-5	Red Green Blue White	1.5A / 5W	1	32mm	7

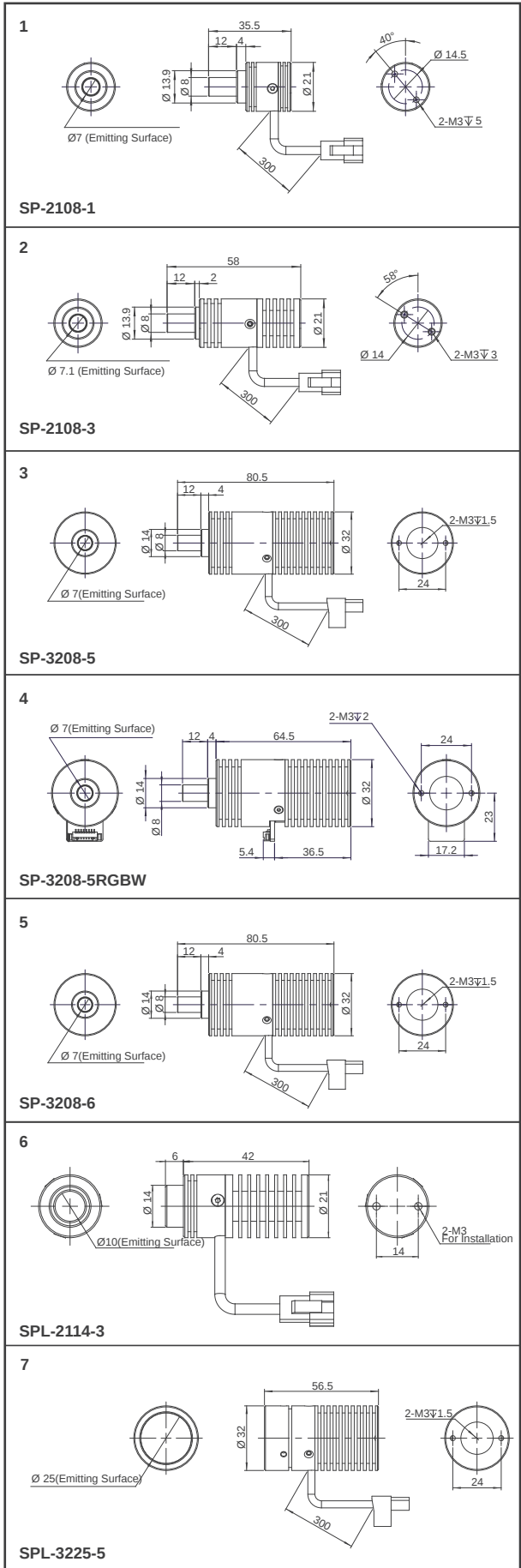
※ Only operated by constant current LED driver, and please pay attention to rated current

◆ Case Pictures



◆ Linear Diagram

(mm)



HISP Series

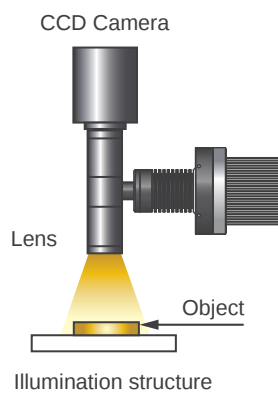
HISP Series

High Power Spot Lights



Product Features

- High power LED, high brightness
- Efficient heat dissipation design to extend LED lifetime
- Able to replace halogen fiber light source
- Able to replace coaxial light source with coaxial camera lens, convenient for inspecting small components
- Available in 7mm and 12mm lumination diameter



Model Guide

HISP	150	W	8
Series HISP = High Power Spot Light	Power 150 = 150W	Color W = White	Interface Diameter 8 = 8mm

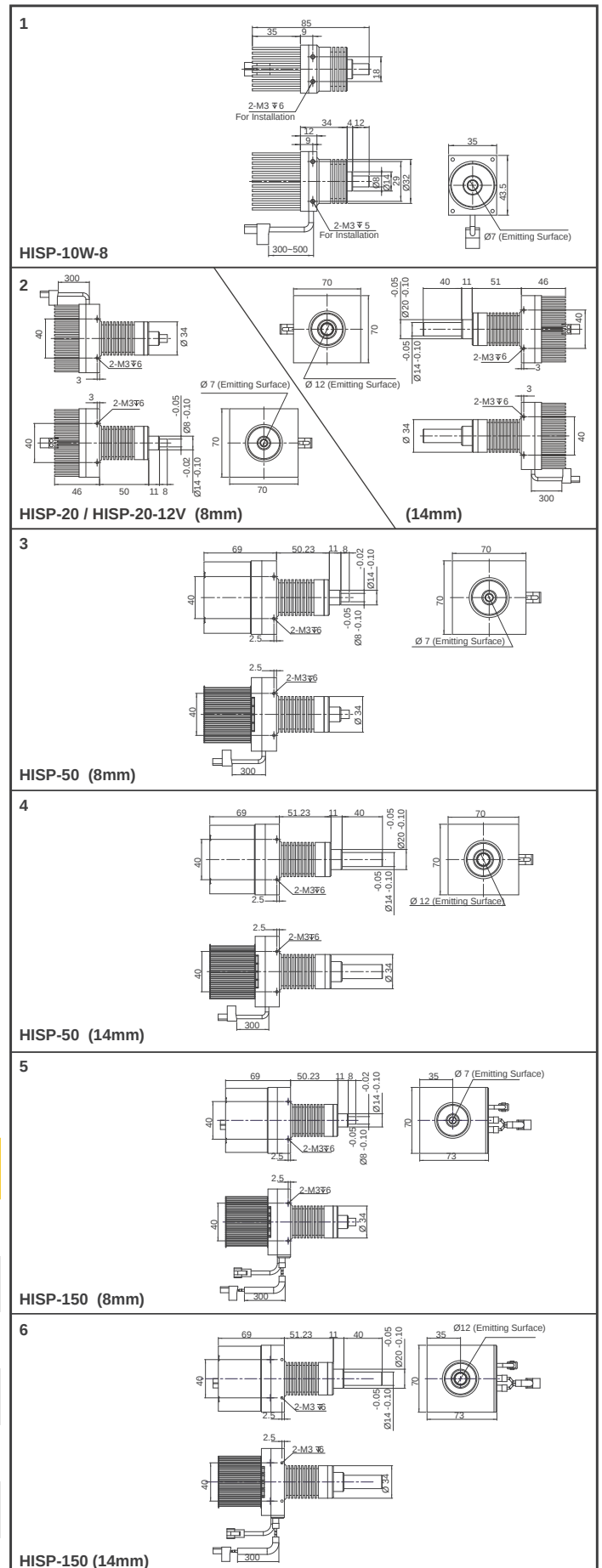
Specification Table

Model	Color	Current / Power	Interface Diameter	Diagrams
HISP-10	● ● ● ● ●	0.75A / 10W	8mm	1
HISP-20	● ● ● ● ●	5A / 20W	8mm / 14mm	2
HISP-20-12V	● ● ● ● ●	1.5A / 20W	8mm / 14mm	2
HISP-50	○	Continuous: 1A / 20W Strobe: 2A / 50W	8mm / 14mm	3 / 4
HISP-50	● ● ● ● ●	Continuous: 4A / 20W Strobe: 10A / 50W	8mm / 14mm	3 / 4
HISP-150	● ● ● ● ●	Continuous: 8A / 40W Strobe: 30A / 150W	8mm / 14mm	5 / 6

※ Only operated by constant current LED driver, and please pay attention to rated current

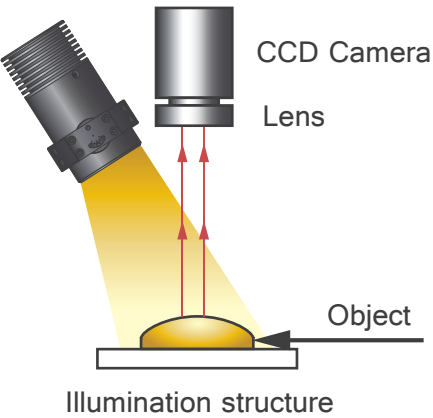
Linear Diagram

(mm)



PJTRS/PJTA/PJTD Series

Structured Light Projectors



Product Features

- Scheimpflug tilt adjustment compatible with C-mount lens.
- Light pattern can be customized according to the application.
- Higher LED power from 3W/5W/20W continuous to 150W strobe options.

Model Guide

PJTRS	150	W	R01
Series PJTRS = Structured Light Projector with Precision Mask Rotary Stage	Power 150 = 150W	Color W = White	Mask Format R01 = RandomSize : $\varnothing 50\mu\text{m}$ Density : 19.80 %

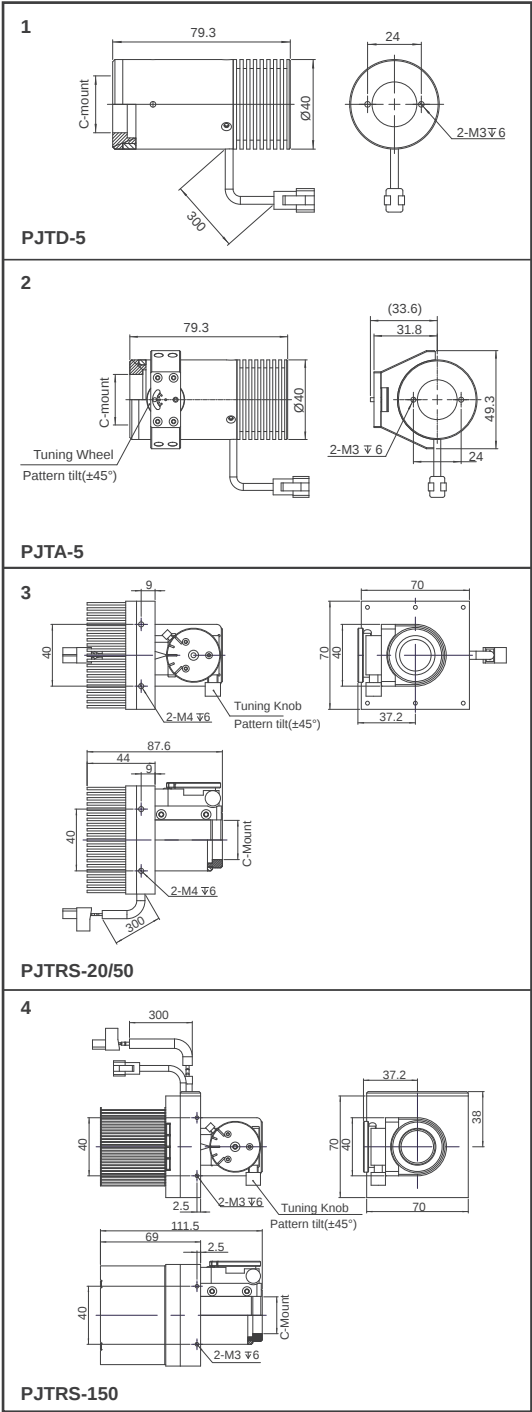
Specification Table

Model	Color	Current / Power	Interface Diameter	Diagrams
PJTD-5	● ● ● ●	1.5A / 5W	C mount	1
PJTA-5	● ● ● ●	1.5A / 5W	C mount	2
PJTRS-20	● ● ● ●	Continuous : 4A/20W Strobe : 10A/50W	C mount	3
PJTRS-150(pulse)	● ● ● ●	Continuous : 8A/40W Strobe : 30A/150W	C mount	4

※ Only operated by constant current LED driver, and please pay attention to rated current

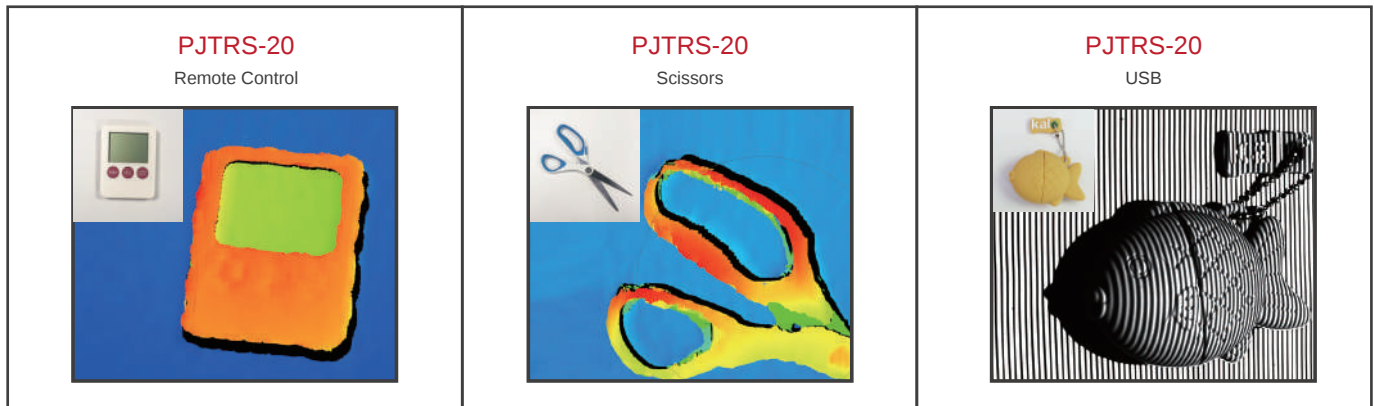
Linear Diagram

(mm)



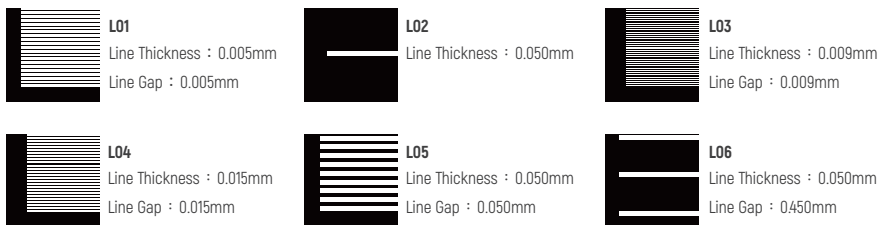
▲ 鏡頭不包括圖片當中

◆ Case Pictures



◆ Mask Format

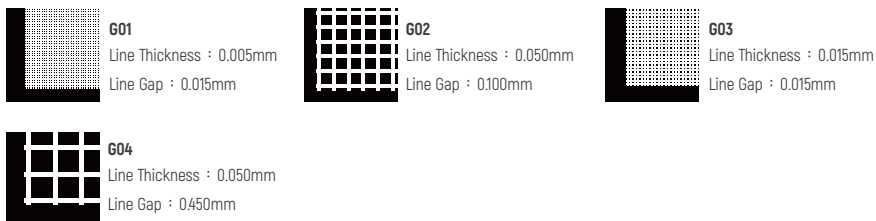
Line & Stripes



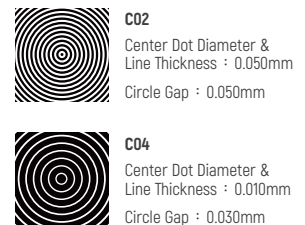
Cross



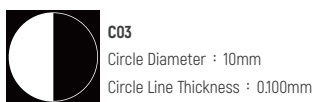
Grids



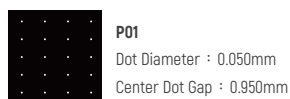
Concentric Circle



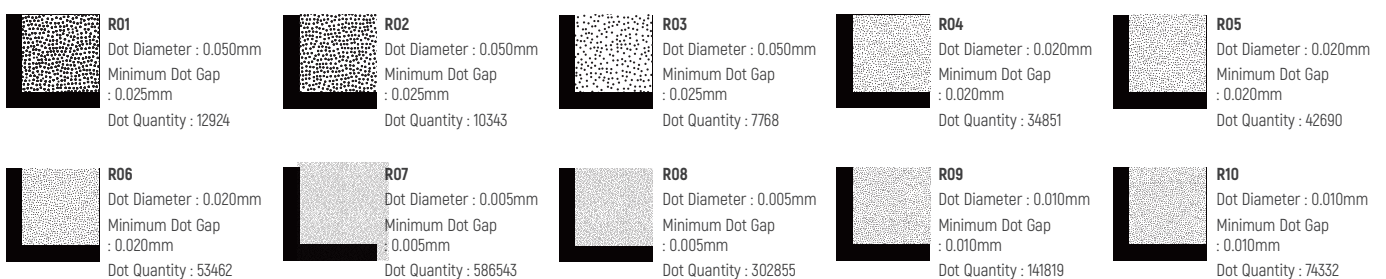
Edge



Point Array



Random Dots



DO Series

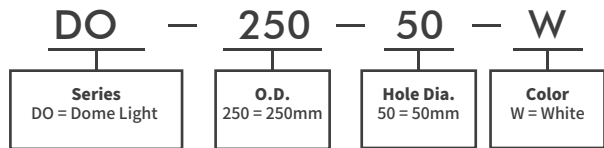
Dome Lights



Product Features

- Diffused light source with high brightness and high uniformity
- Provide large illumination area and excellent shadow less result
- Suitable for uneven and highly reflective surface inspection
- Customized no hole type available

Model Guide



Specification Table

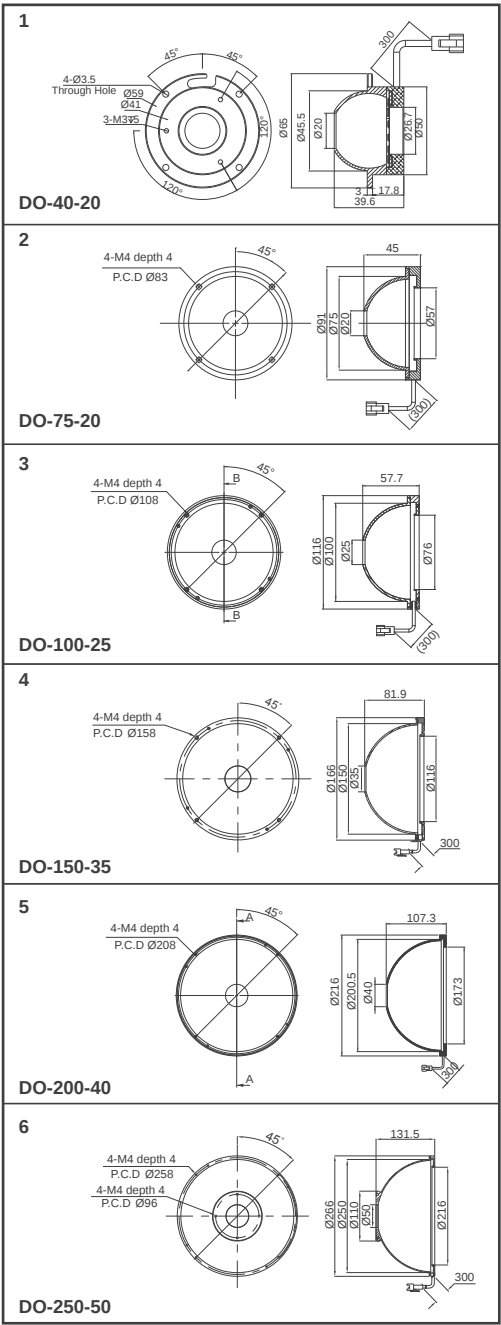
Model	Voltage	Color	Power (W)		Dimensions (mm)			Diagrams
			●	○●●	O.D.	Hole Dia.	Height	
DO-40-20	24V	●○●●	4.5	4	45.5	20	39.6	1
DO-75-20	24V	●○●●	3.5	5	75	20	45	2
DO-100-25	24V	●○●●	9	14	100	25	57.7	3
DO-150-35	24V	●○●●	16	20	150	35	81.9	4
DO-200-40	24V	●○●●	22	27	200.5	40	107.3	5
DO-250-50	24V	●○●●	25	37	250	50	131.5	6

Case Pictures



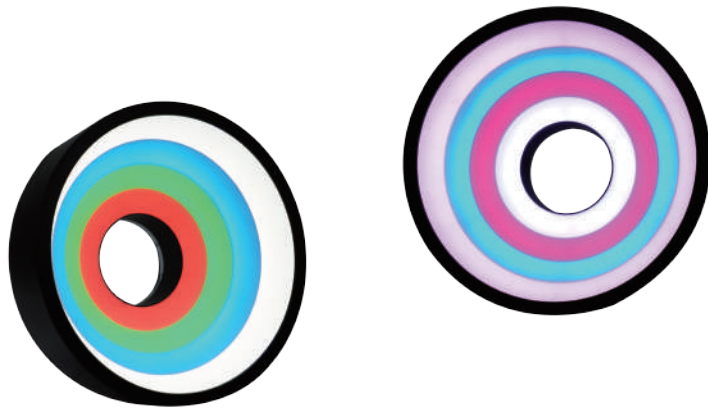
Linear Diagram

(mm)



AOI Series

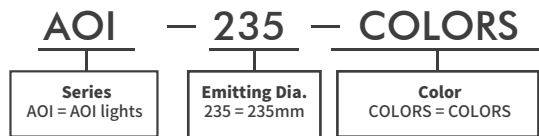
AOI Lights



Product Features

- Illuminating in multiple colors from multiple angles, highlighting level details of product surface
- Can be applied to inspecting missing/wrong/inclined parts, insufficient/excessive/no soldering, and other defects in PCB industry
- Using LED Driver can adjust the RGBW lights intensity individually (mixing colors possible) and can apply strobe control
- Application : PCB soldering inspection 、 Surface defects inspection for multiple layers

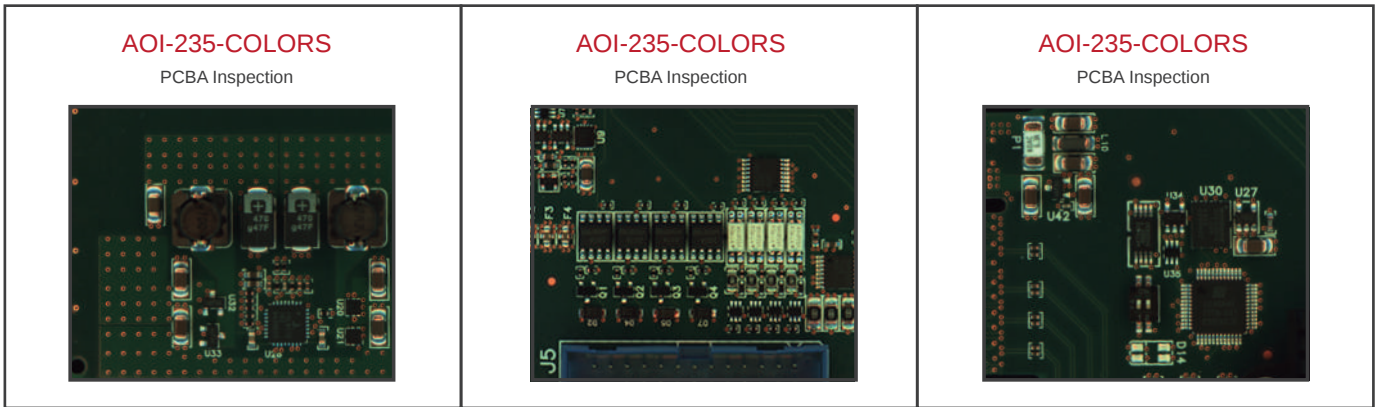
Model Guide



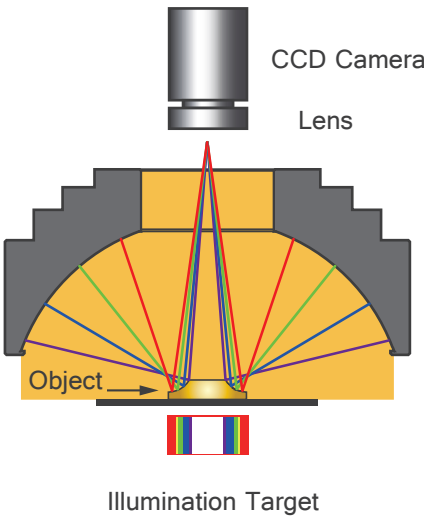
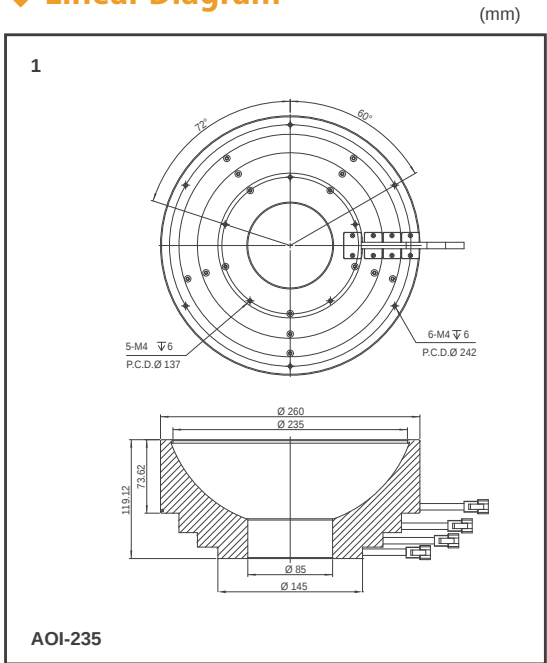
Specification Table

Model	Power (W)	No. of Channel	Dimensions (mm)			Diagrams
			O.D.	I.D.	Height	
AOI-235-COLORS	55	16	260	85	119	1

Case Pictures



Linear Diagram



LEC Series

Lighting Extension Cords



◆ Wiring Detail

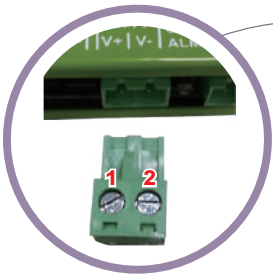
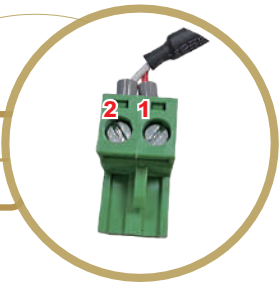
● 3 pin LED lighting connector

Positive	Negative	Apply to LED lighting series
Pin No.1	Pin No.2	SP-2108、PCL、PBCL、SPL
Pin No.1	Pin No.3	CIR、LCIR、CIR0、LCNS、HNS、CNS、QNS REC、BL、SBL、PBL、HBL、HPBL、ACL、CLSP、CL、CL2、DO、AOI



● 2 pin LED lighting connector

Positive	Negative	Apply to LED lighting series
Pin No.1	Pin No.2	SP-3208



● LED Euroblock connector

Connecting to LED DRIVER Euroblock connector :
pin No.1 connects to positive, pin No.2 connects to negative

◆ Model Guide

LEC	—	2M	—	□
Model Name LEC=Lighting Extension Cords		Length 2M = 2 meter		Reserved Identify code

◆ Specification Table

Model	Length	Specification	Application
LEC	Standard: 1~5 meter Custom length available	SM connector 3pin female / Euroblock connector 2pin female	For 24V Lightings
LEC-5			For 5V Lightings
LEC-ANTI		SM connector 3pin female / Euroblock connector 2pin female /with High Flex Cable	For 24V Lightings
LEC-5-ANTI			For 5V Lightings
LEC-PC-24		SM connector 3pin femaleX2 / Euroblock connector 2pin femaleX1 /Quantity of cables: 2pcs	For 24V parallel lightings
LEC-PC-5			For 5V parallel lightings
LEC-SP		Euroblock connector 2pin male + female	For lighting SP-3208 series

12CH Fan Supervisor

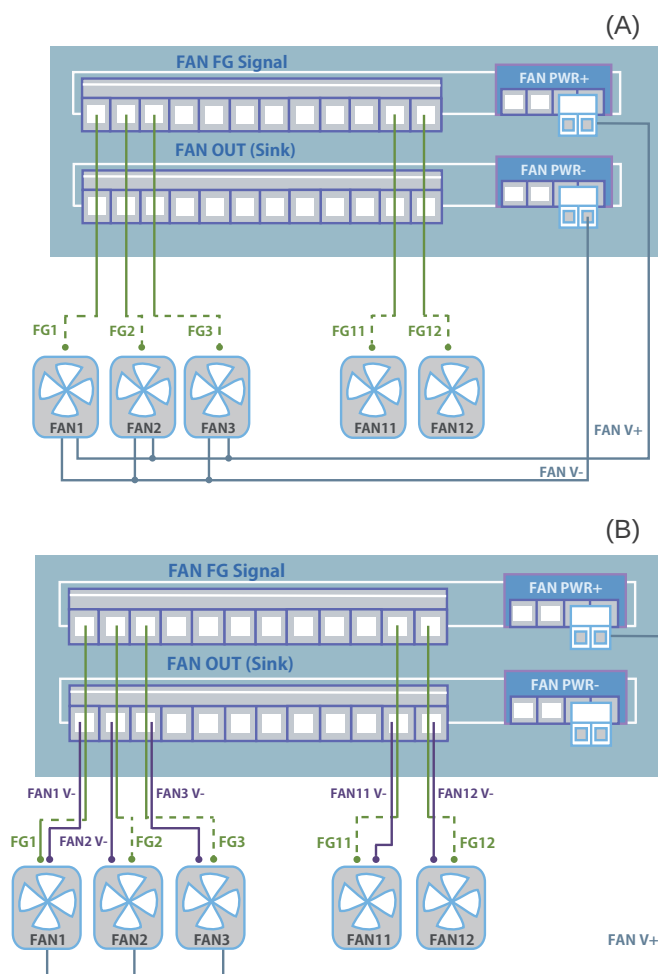
Fan Supervisor



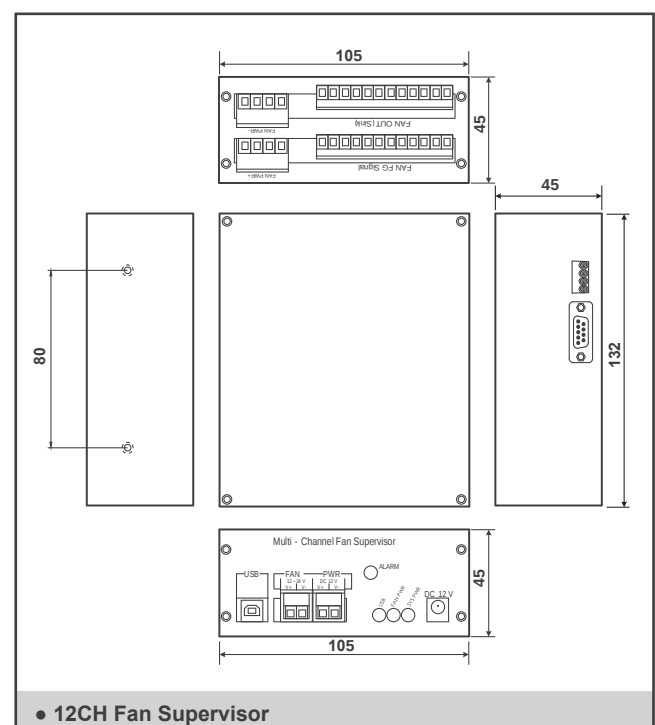
◆ Product Features

- Multiple communication interfaces : USB/RS-232/RS-485 (optional)
- Multiple fan driving circuits : Be able to drive 12-sets of fan, and to control On/Off individually
- Multiple Fan monitoring : Be able to monitor 12-sets of fan rotating speed, and to set alarm output individually
- Fan power monitoring : Be able to alarm when the power is abnormal

◆ Product Application Example



◆ Dimensional Drawing



LSU Selection Guide Selection Guide

Ultra-high Brightness up to 8M Lux.
Superior Strobe Control frequency reaches to 100KHz.

Image	Series	Description	Available Color Wavelength (nm)	Max. Output Power (W)	Input Voltage (V)	Recommend Light Guide Diameter (mm)	Available Light Guide Adaptor	Drive mode
	LSU-10	Light Source Unit	R/G/B/W/A IR 730/850/940 UV 365/385/405	10	DC24V	6~8	Bestintech / Moritex / Sumita / Hayashi / Customized available	Continuous / Pulse 0~30KHz (Periodic or Non-periodic)
	LSU-20		White	20		6~10		
	LSU-30			30		8~10		
	LSU2-10		R/G/B/W/A	10		6~12		
	LSU2-20		R/G/B/A	20		12~14		
	LSU2-30		White	30		6~12		
	LSU2-50		G/B/W/ UV 385/405	50		8~14		

Compatible with major light guide manufacturers
Full line-up models for your various requirements
Precise current adjustment resolution

Image	Series	Description	Available Color Wavelength (nm)	Max. Output Power (W)	Input Voltage (V)	Recommend Light Guide Diameter (mm)	Available Light Guide Adaptor	Drive mode
	LSU-80	Color Light Source Unit	Color (RGBW)	80	AC100V ~ 240V	8~14	Bestintech / Moritex / Sumita / Hayashi / Customized available	Continuous / Pulse Periodic : 0~100KHz Non-periodic : 0~100Hz
	LSU2-100	High Power Light Source Unit	IR 730/850/940 UV 365/385/405	100		6~14		Continuous / Pulse 0~30KHz (Periodic or Non-periodic)
	LSU2-180		R/G/B/W/Y	180				
	LSU2-160H		W	160				Continuous / Pulse 0~100KHz (Periodic or Non-periodic)
	LSU2-200H		R/B/Y	200				
	LSU2-250H		R/B/Y	250		8~14		
	LSU2-VAR		Variable	250		6~14		Continuous / Pulse 0~30KHz (Periodic or Non-periodic)

LSU/LSU2-10/20/30/50 Series

Light Source Unit



◆ Product Features

- Digital knob to adjust output current; 7-segment display indicator and store function
- USB communication interface with electrical isolation; ultra-high speed strobe optical receiver
- Alarm and protection: abnormal input power, system over-current, system overheats
- LED condition monitoring: luminous decay and abnormal alarm
- LED open-loop detection and short-circuit protection: automatically stop output current when no-load or short-circuit
- The average lifetime of LED is above 30,000 hours, no replacement of emitting component consumables
- High power LED and highly efficiency optical structure to provide up to 300K Lux in average (Ø10mm fiber measured at 50mm distance)
- Precision current adjustment resolution: digital knob provides 256 adjusting current levels; USB interface provides 4096 adjusting current levels
- External pulse switch control: provides periodic external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 10us; the maximum frequency of strobe input reaches to 100kHz
- Provides 256 sets of programmable and non-volatile LUT units to allow users to correspond different current and brightness characteristic of LED lightings
- Compact design with optional track fixtures at the bottom for convenient installation in standard guideway

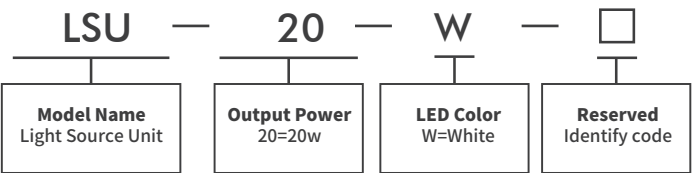


• LSU



• LSU2

◆ Model Guide

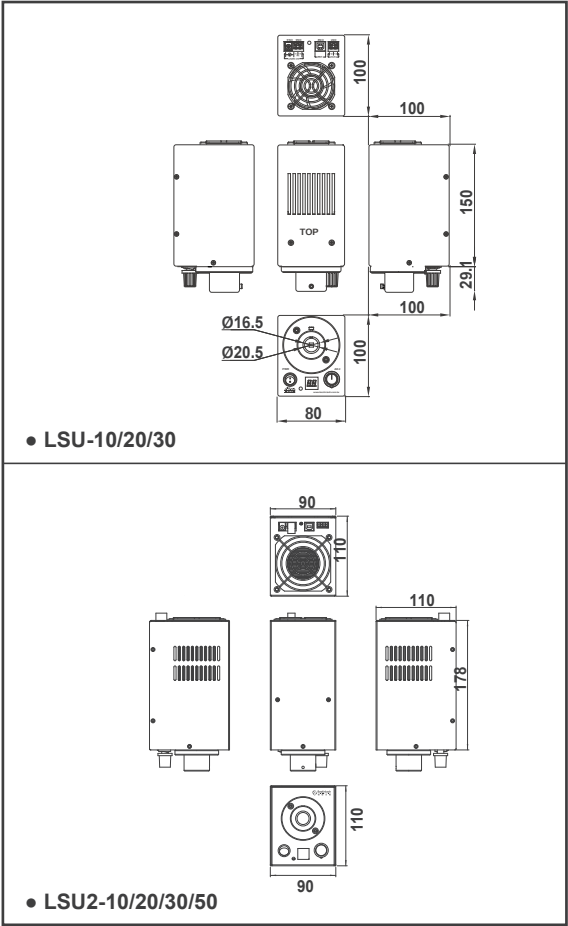


◆ Specification Table

Series	Model	Color	Input Voltage	Power (W)
LSU	LSU-10	R/G/B/W/A IR 730/850/940 UV 365/385/405	DC24V	10
	LSU-20	White		20
	LSU-30	White		30
LSU2	LSU2-10	R/G/B/W/A		10
	LSU2-20	R/G/B/A		20
	LSU2-30	White		30
	LSU2-50	G/B/W UV 385/405		50

※ Customized output voltage/current available

◆ Dimensional Drawing



LSU/MLSP Series

LSU Series

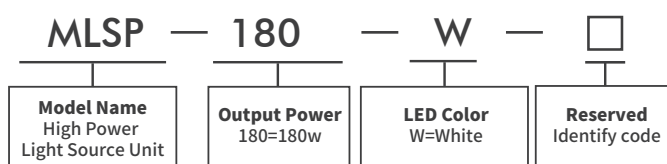
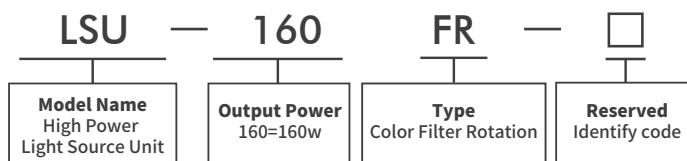
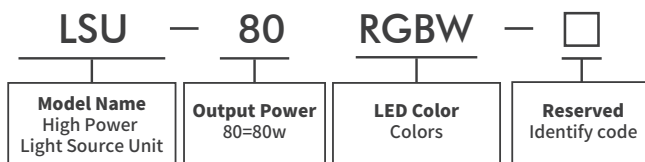
High Power Light Source Unit



◆ Product Features

- Digital knob to adjust output current with 7-segment display indicator; channels can be adjusted and stored individually
- USB interface for electrical isolation; ultra-high speed strobe optical receiver
- External input voltage : AC100V~240V (5A max)
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short-circuit
- Alarm and protection : abnormal input power 、 system over-current 、 system overheats
- LED decay & abnormal alarm function
- LSU-160 external pulse switch control : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 10us; the maximum frequency of strobe output reaches to 100kHz
- Precision current adjustment resolution : digital knob provides 256 adjusting current levels, USB interface provides 4096 adjusting current levels
- Each channel provides 256 sets of programmable and non-volatile LUT units to help users quickly correspond different currents and various brightness & characteristic of LED lights
- High power LED and highly efficiency optical structure to provide up to 2M Lux. in average (Ø10mm fiber measured at 50mm distance)
- The average lifetime of LED is above 30,000 hours, no replacement of emitting component consumables
- Collocates the color of filter according to customers' requirements (For LSU-160FR)
- High uniformity in each color LED to have better proformance in color mixing characteristics (For LSU-80 COLORS)

◆ Model Guide



• LSU-80 COLORS



• LSU-160FR

◆ Specification Table

Series	Model	Color	Input Voltage	Power (W)
LSU	LSU-80	Colors	AC100V ~240V	80
	LSU-160FR	Color Filter Rotation		160
MLSP	MLSP-160	White		160
	MLSP-180	R/G/B/W		180

※ Customized output voltage/current available
 ※ LSU-160FR-Customized color filter available



• MLSP-160/180

PSU-200

LSU2 Series

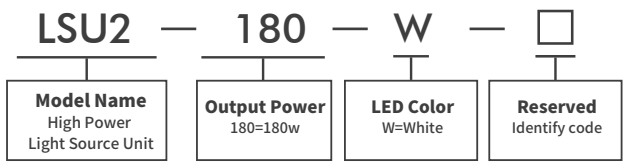
High Power Light Source Unit



◆ Product Features

- Digital knob to adjust output current with 7-segment display indicator; channels can be adjusted and stored individually
- USB interface for electrical isolation; ultra-high speed strobe optical receiver
- External input voltage : AC100V~240V (5A max)
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short-circuit
- Alarm and protection : abnormal input power 、 system over-current 、 system overheats
- LED decay & abnormal alarm function
- LSU2-100/180 external pulse switch control : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 30us; the maximum frequency of strobe output reaches to 33kHz (periodic)
- LSU2-200H/250H external pulse switch control : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 10us; the maximum frequency of strobe output reaches to 100kHz
- Precision current adjustment resolution : digital knob provides 256 adjusting current levels, USB interface provides 4096 adjusting current levels
- Each channel provides 256 sets of programmable and non-volatile LUT units to help users quickly correspond different currents and various brightness & characteristic of LED lights
- The average lifetime of LED is above 30,000 hours, no replacement of emitting component consumables
- Collocates the color of filter according to customers' requirements (For LSU2-180FR)
- High power LED and highly efficiency optical structure to provide up to 6M Lux. in average (Ø10mm fiber measured at 50mm distance)

◆ Model Guide



• LSU2 Series

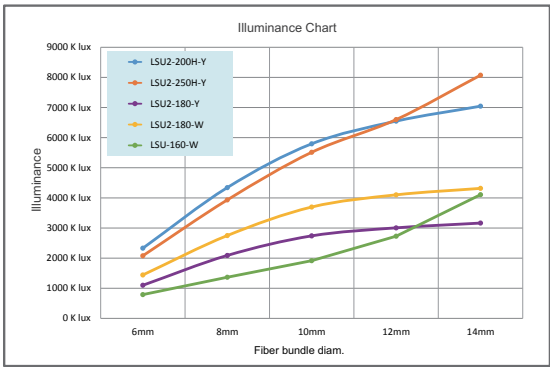
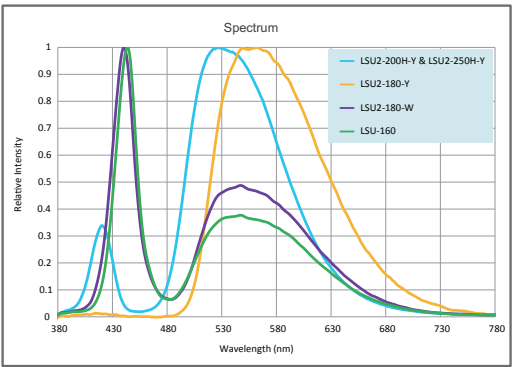
◆ Specification Table

Series	Model	Color	Input Voltage	Power (W)
LSU2	LSU2-100	IR 730/850/940 UV 365/385/405	AC100V ~240V	100
	LSU2-180	R/G/B/W/Y		180
	LSU2-160H	White		160
	LSU2-200H	R/B/Y		200
	LSU2-250H	R/B/Y		250
	LSU2-180FR	Color Filter Rotation		180

※ Customized LED Power and wavelength available
※ LSU2-180FR:Customized color filter available

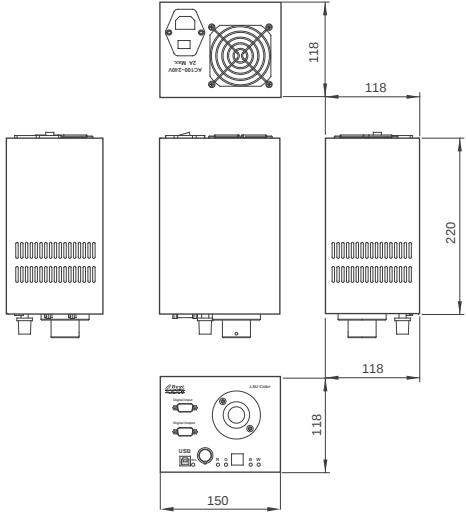
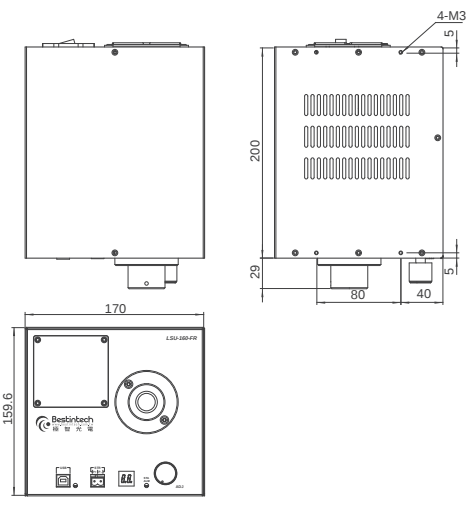
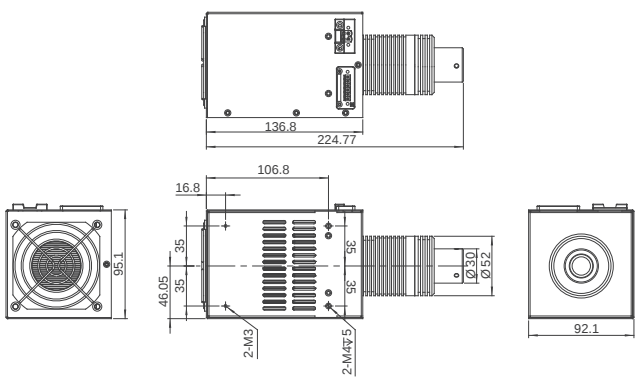
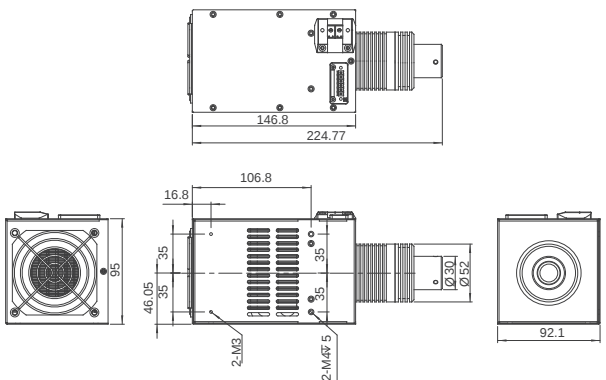
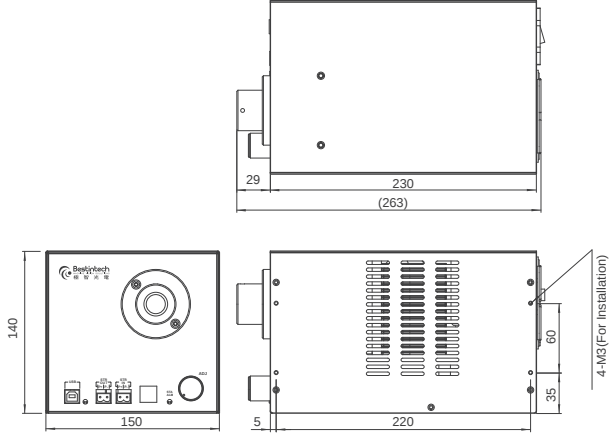
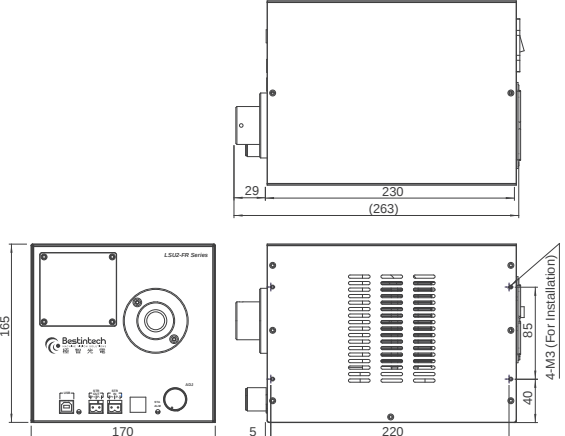


• LSU2-180FR Series



◆ Dimensional Drawing

(mm)

 LSU-80	 LSU-160FR
 MLSP-160	 MLSP-180
 LSU2 Series	 LSU2-180FR

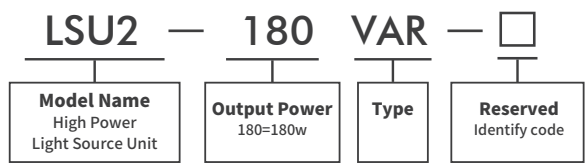
LSU2-VAR Series

High Power Light Source Unit

◆ Product Features

- Digital knob to adjust output current with 7-segment display indicator; channels can be adjusted and stored individually
- USB interface for electrical isolation; ultra-high speed strobe optical receiver
- External input voltage : AC100V~240V (5A max)
- LED open-loop detection and short-circuit protection : automatically stop output current when no-load or short-circuit
- Alarm and protection : abnormal input power 、 system over-current 、 system overheats
- LED decay & abnormal alarm function
- External pulse switch control : provides external trigger switch signal to synchronize LED strobe; the minimum width of LED output reaches to 33us; the maximum frequency of strobe output reaches to 30kHz
- Precision current adjustment resolution : digital knob provides 256 adjusting current levels, USB interface provides 4096 adjusting current levels
- Each channel provides 256 sets of programmable and non-volatile LUT units to help users quickly correspond different currents and various brightness & characteristic of LED lights
- The average lifetime of LED is above 30,000 hours, no replacement of emitting component consumables
- Collocates the color of filter according to customers' requirements

◆ Model Guide



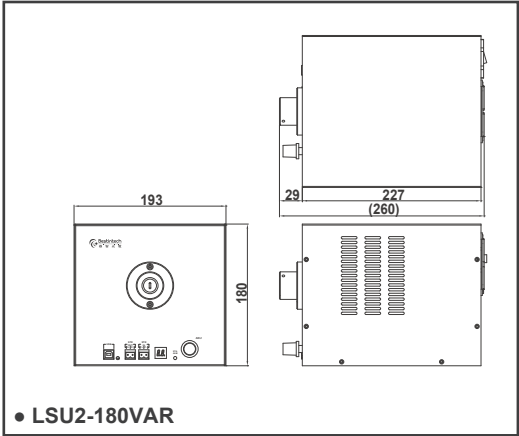
◆ Specification Table

Specifications	
Spectral Range	425nm ~ 780nm (Peak Wavelength)
Spectral Bandwidth (FWHM)	10nm ~ 15nm
Spectral Resolution	5nm per step
Spectral Accuracy	±1nm (Peak Wavelength)
Full Beam Angle	~7° (±3.5 °)
Luminance	Up to 15000 lx at 555nm (spectrum dependent) @ light source outlet
Light Output Intensity Range	4096 steps
Scan Speed	100nm / sec.
Lamp Lifetime	> 50000 hours (LM-80 : L70/B50)
Available Light Guide Adaptor	Bestintech / Moritex / Sumita / Hayashi / Customized available
Interface Connectors	USB 2.0 (Virtual COM Port)
Input Voltage and Power	90 to 264 VAC at 47-63Hz, 300W max.
Dimensions	193(W. max.) x 260(L. max.) x 180(H. max.) mm



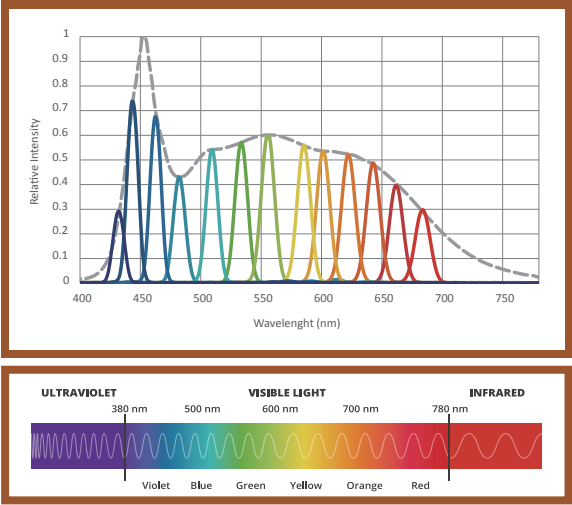
• LSU2-VAR

◆ Dimensional Drawing



• LSU2-180VAR

◆ Spectrum



Fiber Light Guide



• BGF Series



• BGF-C Series



• BGF-L Series

◆ Model Guide

BGF — C	31	D8	1M	□
Model Name BGF = Fiber Light Guide BGF-C = Fiber Ring Light Guide BGF-L = Line Fiber Ring Light Guide	Dimension 31 = 31mm	Dimension D8 = 8mm	Length 1M = 1 meter	Reserved Identify code

◆ Specification Table

Series	Model	Fiber Diameter (mm)	Ring Diameter (mm)	Fiber Width (mm)	Fiber Length (meter)
BGF	BGF-D2.5-1M	Ø2.5	-	-	1
	BGF-D3-1.5M	Ø3	-	-	1.5
	BGF-D4-1M	Ø4	-	-	1
	BGF-D6-1M	Ø6	-	-	1
	BGF-D8-2M	Ø8	-	-	2
	BGF-D10-2M	Ø10	-	-	2
BGF-C	BGF-C12-D3.6-1.5M	Ø3.6	12	-	1.5
	BGF-C18-D4.1-1.5M	Ø4.1	18	-	1.5
	BGF-C25-D5.6-1.5M	Ø5.6	25	-	1.5
	BGF-C33-D5.6-2M	Ø5.6	33	-	2
	BGF-C31-D8-1M	Ø8	31	-	1
	BGF-C35-D5.6-2M	Ø5.6	35	-	2
	BGF-C50-D10.5-1M	Ø10.5	50	-	1
BGF-L	BGF-L50-D8-1.5M	Ø8	-	50	1.5
	BGF-L100-D8-1M	Ø8	-	100	1
	BGF-L200-D9-1M	Ø9	-	200	1
	BGF-L180-D10.7-1.5M	Ø10.7	-	180	1.5

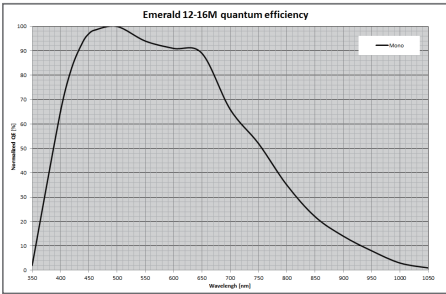
※可訂製 Fiber Diameter、Ring Diameter (For BGF-C)、Fiber Width (For BGF-L)、Fiber Length 與分支數量

SkyCAM 16M/12M Series

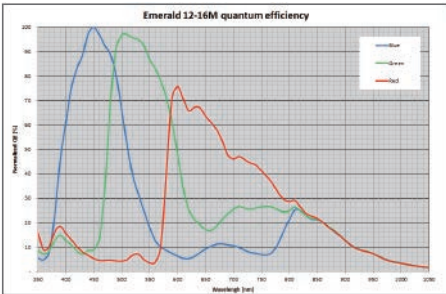
SkyCAM Area Scan Camera



◆ Quantum Efficiency



EV2S16M - Quantum Efficiency for Mono Version



EV2S16M - Quantum Efficiency for Color Version

◆ Product Features

- 16MP/12MP CMOS Sensor
- Compact C/CS-Mount for Cost-effectiveness
- Electronic Global Shutter with precise exposure control
- Support CameraLink Base and Full configuration
- Compatible USB3 Vision & GenICam
- Provide DK for Camera control / image acquisition
- Support pixel based flat field correction (FFC)

◆ Specification Table

Features / Model	SkyCAM AMCL-EV16M40	SkyCAM AMCL-EV16M23	SkyCAM ACCL-EV16M10	SkyCAM AMCL-EV12M31	SkyCAM ACCL-EV12M14
CMOS Sensor	Teledyne e2v Emerakd 16M High Speed	Teledyne e2v Emerakd 16M Standard Speed		Teledyne e2v Emerakd 12M Standard Speed	
Resolution (H xV)	4096 x 4096			4096 x 3072	
Pixel Size	2.8μm square pixels with shifted micro-lens				
Sensor Technology/shutter	CMOS / Global Shutter				
Sensor Size (optical)	1 Inch				
Frame Rate	40 fps	23 fps	10 fps	31 fps	14 fps
Mono / Color	Monochrome	Monochrome	Color	Monochrome	Color
Video Output Format	Mono 8-bit	Mono 8-bit	Color 24-bit	Mono 8-bit	Color 24-bit
Output Interface	CameraLink SDR-26 x 2				
Output Standard	Mono Full 8 Taps @ 85MHz Mono Base 2 Taps @ 85MHz		RGB Medium 2 Taps @ 85MHz RGB Base 1 Tap @ 85MHz	Mono Full 8 Taps @ 85MHz Mono Base 2 Taps @ 85MHz	RGB Medium 2 Taps @ 85MHz RGB Base 1 Tap @ 85MHz
Analog Gain	1 / 1.5 / 2 / 3 / 4 / 6 / 8x				
Digital Gain	0.01~16x				
Signal to Noise Ration	>39 dB				
Dynamic Range	> 55 dB @ 8-bit				
Synchronization	External Trigger / Software Trigger / Free Run				
Exposure Control	Programmable - 10.4μS ~ 10S	Programmable - 20.8μS ~ 10S			
Dimensions (L x W x H)	60 x 60 x 42.5mm (without lens adapter and connectors)				
Lens Mount	C-Mount / CS-Mount / M42-Mount				
Digital Input / Output	2 Opto-isolated Input / 2 Opto-isolated Output				
Power & I / O Connector	Hirose ix Industrial - IX80G-B-10P				
Power Consumption (typical)	6.3W @ DC 24V Input				
Weight (typical)	242 g				
Operating Temperature	-20 to +60°C (housing temperature)				
Power Input	DC 9V~26V				

Model Guide

SkyCAM	—	AM	CL	—	EV	16M	40
Series SkyCAM=SkyCAM Series Highspeed Camera		Line/Area & Mono/Color AM = Area Scan Mono AC = Area Scan Color	Interface CL = Camera Link U3 = USB3		Sensor Brand EV = e2V	Pixel 16M = 16MP	Frame Rate 40 = 40fps

Dimensional Drawing

4-M3 ∇ 4 For Installation 4-M3 ∇ 6 For Installation 1-32 UNF For C/CS-Mount Lens Installation Power & I/O CameraLink 60 50 40 60 (45.1) 42.5	2-M3 ∇ 6 For Installation 1-32 UNF For C/CS Mount Lens Installation Power & I/O USB3.0 46 49 26 42.54 5 13.5
• SkyCAM AMCL - EV16M40 / EV16M23 / EV12M31 - ACCL - EV16M10 / EV12M14	• SkyCAM AMU3 - EV16M22B / EV12M29B - ACU3 - EV16M22B / EV12M29B

Features / Model	SkyCAM AMU3-EV16M22B	SkyCAM ACU3-EV16M22B	SkyCAM AMU3-EV12M29B	SkyCAM ACU3-EV12M29B
CMOS Sensor	Teledyne e2v Emerakd 16M Standard Speed		Teledyne e2v Emerakd 12M Standard Speed	
Resolution (H xV)	4096 x 4096		4096 x 3072	
Pixel Size	2.8μm square pixels with shifted micro-lens			
Sensor Technology/shutter	CMOS / Global Shutter			
Sensor Size (optical)	1 Inch			
Frame Rate	22 fps	22 fps	29 fps	29 fps
Mono / Color	Monochrome	Color	Monochrome	Color
Video Output Format	Mono 8/10	Bayer 8/10	Mono 8/10	Bayer 8/10
Output Interface	Micro-B with Lock			
Output Standard	USB3 Vision			
Analog Gain	1 / 1.5 / 2 / 3 / 4 / 6 / 8x			
Digital Gain	0.01~16x			
Signal to Noise Ration	>39 dB			
Dynamic Range	> 55 dB @ 8-bit			
Synchronization	External Trigger / Software Trigger / Free Run			
Exposure Control	Programmable - 20.8μS ~ 10S			
Dimensions (L x W x H)	49 x 46 x 42.5mm (without lens adapter and connectors)			
Lens Mount	C-Mount / CS-Mount			
Digital Input / Output	2 Opto-isolated Input / 2 Opto-isolated Output			
Power & I / O Connector	Hirose ix Industrial - IX80G-B-10P			
Power Consumption (typical)	4.5W @ DC 24V Input, 3.9W @ USB 5V			
Weight (typical)	150g			
Operating Temperature	-20 to +60°C (housing temperature)			
Power Input	DC 9V~26V			

SkyCAM USB3 Series

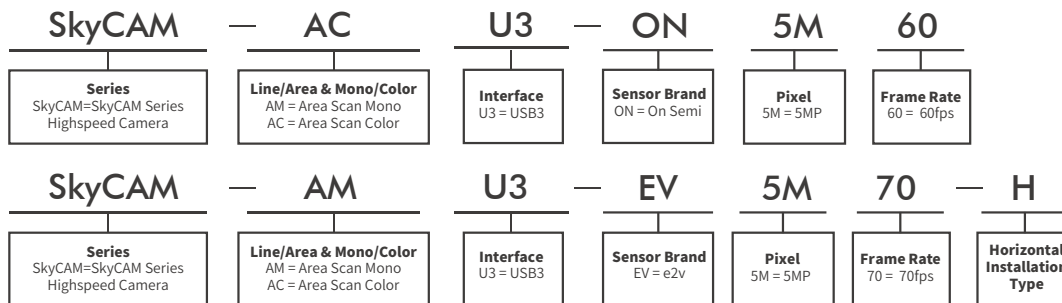
SkyCAM Area Scan Camera

◆ Product Features

- Newest Global & Rolling Shutter CMOS Image Sensor
- Cost-effective due to the ultra-small optical format
- Ultra-compact camera size with screw lock USB connector
- Support USB 3.0 bus powered without external power
- Additional external power supply can be used when using a longer cable or AOC cable
- USB3 Vision & GenICam conformity
- Camera control / image acquisition by Bestintech SDK



◆ Model Guide



◆ Specification Table

Features / Model	SkyCAM AMU3-EV5M70	SkyCAM AMU3-CA5M60	SkyCAM AMU3-CA5M70	SkyCAM AMU3-ON5M70	SkyCAM ACU3-ON5M70
CMOS Sensor	Teledyne e2v Lince5M	Canon 3U5MGX	Canon LI5040	On Semi. XGS5000	
Resolution (HxV)	2560 x 2048	2592 x 2048		2592 x 2048	
Pixel Size	5µm	3.4µm		3.2µm	
Sensor Technology / shutter	Global Shutter	Global Shutter		Global Shutter	
Sensor Size (optical)	1 Inch	2/3 Inch		2/3 Inch	
Frame Rate	70 fps	60 fps	70 fps	70 fps	
Mono / Color	Monochrome	Monochrome		Monochrome	Color
Video Output Format	Mono 8/10	Mono 8/10		Mono 8/10/12	Bayer 8/10
Analog Gain	1/2/4x	1/2/4/8/16x		1/2/4x	
Digital Gain	0.01 ~ 16x				
Flat Field Correction	Pixel Based				
Output Interface	Micro-B with Screw Locking				
Output Standard	USB3 Vision				
Signal to Noise Ration	42 dB	40 dB		40 dB	
Synchronization	External Trigger / Software Trigger / Free Run				
Exposure Control	Programmable 1uS ~ 10S	Programmable 12uS ~ 4S		Programmable 12uS ~ 10S	
Dimensions (L x W x H)	32 x 29 x 43.6 mm H : 32 x 32 x 48 mm (without lens adapter and connectors)				
Lens Mount	C-Mount / CS-Mount				
Digital Input / Output	2 Opto-isolated Input / 2 Opto-isolated Output				
Power & I / O Connector	Screwless & Pluggable Terminal Block				
Power Consumption (typical)	4.5W @ USB 5V	3.3W @ USB 5V		3.65W @ USB 5V	
Weight(typical)	62g / H : 70g (Horizontal Installation)				
Operating Temperature	-20 to +60°C (housing temperature)				
Power Input	USB 3.0 Bus Powered or External DC 9V~26V				

◆ Dimensional Drawing

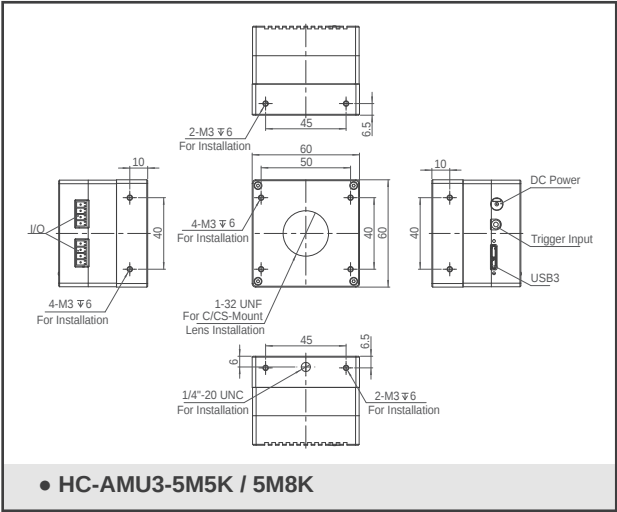
• SkyCAM AMU3 - EV5M70 / CA5M60 / ON5M70 / ON2M140 ACU3 - ON5M70	• SkyCAM AMU3 - ON5M67 / ON1M254 ACU3 - ON5M67
• SkyCAM AMU3 - EV5M70H / CA5M60H / ON5M70H / ON2M140H ACU3 - ON5M70H	• SkyCAM AMU3 - ON5M67H / ON1M254H ACU3 - ON5M67H

Features / Model	SkyCAM AMU3-ON2M140	SkyCAM AMU3-ON5M67	SkyCAM ACU3-ON5M67	SkyCAM AMU3-ON1M254
CMOS Sensor	On Semi. XGS2000	On Semi. AR0521 On Semi. AR0522 (NIR+)		On Semi. AR0134
Resolution (HxV)	1920x 1200	2560 x 1944		1280 x 960
Pixel Size	3.2μm	2.2μm		3.75μm
Sensor Technology / shutter	Global Shutter	Rolling Shutter		Global Shutter
Sensor Size (optical)	1 / 1.25 Inch	1 / 2.5 Inch		1 / 3 Inch
Frame Rate	140 fps	67 fps		54 fps @ Free Run 50 fps @ Ext. Trigger
Mono / Color	Monochrome	Monochrome	Color	Monochrome
Video Output Format	Mono 8/10/12	Mono 8/10	Bayer 8/10	Mono 8/10/12
Analog Gain	1/2/4x	1 ~ 12x		1/2/4/8x
Digital Gain	0.01 ~ 16x			
Flat Field Correction	Pixel Based			N/A
Output Interface	Micro-B with Screw Locking			
Output Standard	USB3 Vision			
Signal to Noise Ration	40 dB	40 dB		38dB
Synchronization	External Trigger / Software Trigger / Free Run			
Exposure Control	Programmable 12uS ~ 10S	Programmable 8uS ~ 10S		Programmable 19uS ~ 10S
Dimensions (L x W x H)	32 x 29 x 43.6 mm H : 32 x 32 x 48 mm (without lens adapter and connectors)	32 x 29 x 42.9 mm (without lens adapter and connectors) H : 32 x 31.34 x 48 mm		
Lens Mount	C-Mount / CS-Mount			
Digital Input / Output	2 Opto-isolated Input / 2 Opto-isolated Output			
Power & I / O Connector	Screwless & Pluggable Terminal Block			
Power Consumption (typical)	3.6W @ USB 5V	3W @ USB 5V		2.8W @ USB 5V
Weight(typical)	62g / H : 70g (Horizontal Installation Type)			
Operating Temperature	-20 to +60°C (housing temperature)			
Power Input	USB 3.0 Bus Powered or External DC 9V~26V			

High Speed Camera

High Speed Camera

◆ Dimensional Drawing



◆ Product Features

- First affordable professional high speed camera in the market
- Global shutter with no image delay, maximum frame rate reaches 8,960fps
- Resolution 2,560 x 2,048 max. for acquiring high resolution images
- Plug and play USB3 interface cooperate with software that can record, play and file convert
- Remote control cable available, RS-422/TTL external trigger allows synchronizing multi-cameras

◆ Model Guide

HC	—	AM	—	U3	—	5M	5K
Series HC=Highspeed Camera		Area & Mono AM = Area Scan Mono		Interface U3 = USB3		Pixel 5M = 5MP	Frame Rate 5K = 5000fps 8K = 8000fps



2500 FPS



3000 FPS



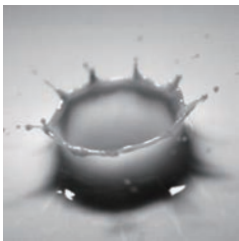
950 FPS



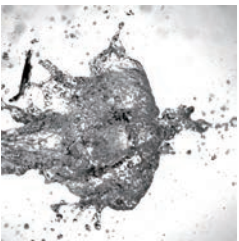
500 FPS



200 FPS



5000 FPS



1000 FPS



3000 FPS

◆ Specification Table

Features / Model	HC-AMU3-5M5K / HC-AMU3-5M8K		
Sensor	5 Mega-pixel, 1-inch Optical Format Global Shutter CMOS Sensor		
Maximum Resolution(H xV)	2560 x 2048		
Maximum FPS	4555 FPS (5M5K model) 8960 FPS (5M8K model)		
Resolution vs FPS	Ratio		
	5:4	16:9	5:2
	2560 x 2048 @ 70 FPS 1920 x 1536 @ 120 FPS 1280 x 1024 @ 280 FPS 800 x 640 @ 715 FPS 640 x 512 @ 1120 FPS 320 x 256 @ 2480 FPS	2560 x 1440 @ 99 FPS 1920 x 1080 @ 175 FPS 1280 x 720 @ 395 FPS 800 x 450 @ 1010 FPS 640 x 360 @ 1590 FPS 320 x 180 @ 3398 FPS	2560 x 1024 @ 140 FPS 1920 x 768 @ 245 FPS 1280 x 512 @ 560 FPS 800 x 320 @ 1432 FPS 640 x 256 @ 2240 FPS 320 x 128 @ 4555 FPS
	320 x 256 @ 4480 FPS (5M8K model only)	320 x 180 @ 6370 FPS (5M8K model only)	320 x 128 @ 8960 FPS (5M8K model only)
Minimum shutter	1μS		
Analog Gain Control (Light Sensitivity)	1x / 2x / 4x / 8x / 16x / 32x / 64x for ISO100~6400		
Digital Gain Control	0.01 ~16x		
Pixel Size	5μm square pixels		
Standard Memory	Video stored on host PC		
PC Software	HiBestViewer - Capture images, view and play back a series of stored images.		
Compatible PC	-Above i3 CPU, 8GB RAM, USB 3.0 (USB 3.1/3.2 Gen1) -Win7, Win8, Win10 & Win11		
Video Output	MPEG2(*.mpg) / H.264(*.mp4)		
Image Outout	Bitmap(*.bmp) / JPEG(*.jpg) / PNG(*.png)		
Upgradable	USB 3.0 (USB 3.1/3.2 Gen1) field upgradable		
Power Input	External DC 9V~24V		
Camera Control	USB 3.0 (USB 3.1/3.2 Gen1) Super Speed		
Trigger Input	Remote Trigger Cable IN1: TTL/RS-422 from expansion I/O connector		
Trigger Output	OUT1: Trigger IN1 bypass for multi-camera trigger synchronization OUT2: Exposure indicator signal for lighting strobe control		
Display or LED	Dual Color LED		
Compatible Lens	C-Mount / CS-Mount		
Housing	Aluminum		
Size	60(L) X 60(W) X 50(H) mm		
Weight	258g exclusive of lens		
Operating Temperature	0~40°C (non-freezing)		
Operating RH%	20~80% RH (non-condensing)		
Storage Temperature	-20~60°C(non-freezing)		
Storage RH%	20~95% RH (non-condensing)		

USB3 Active Optical Cable

USB3 Active Optical Cables



◆ Product Features

- USB3.2 Micro B AOC - Full Bandwidth of 10Gbps
- Backward Compatible USB3.0 5Gbps
- Maximum Cable Length up to 40 meter
- Minimum Bending Radius – 25 mm
- Cable Outer Diameter - 4.8 +/- 0.2 mm
- Drag Chain Test - 5 Million Times
- EMI/ESD Protection, Black PVC Jacket
- RoHS , REACH Compatible

◆ Model Guide

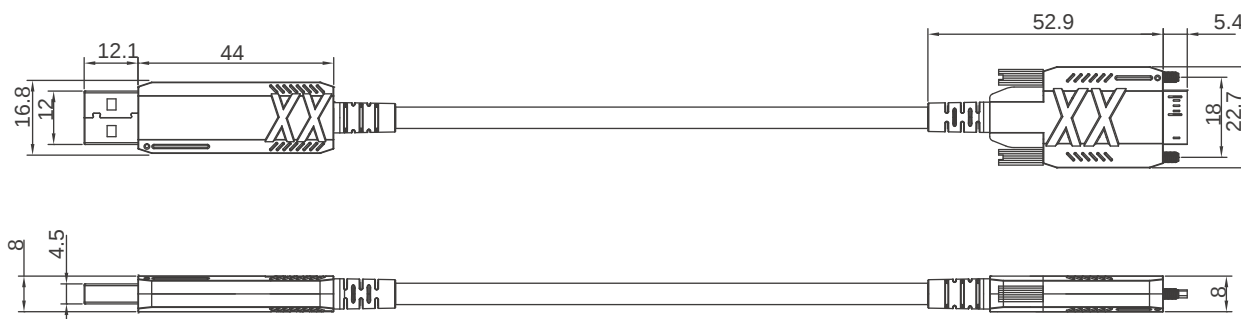
BES	—	P32AMBL	—	5M	—	UP	—	AOC		☐
Model Name BES = High Flex Cable		Specification P32AMBL = USB3.2 Type-A to Micro-B with Lock		Lenght 5M = 5 meter		Angle UP = UP		AOC = Active Optical Cable		Reserved Identify code

◆ Specification Table

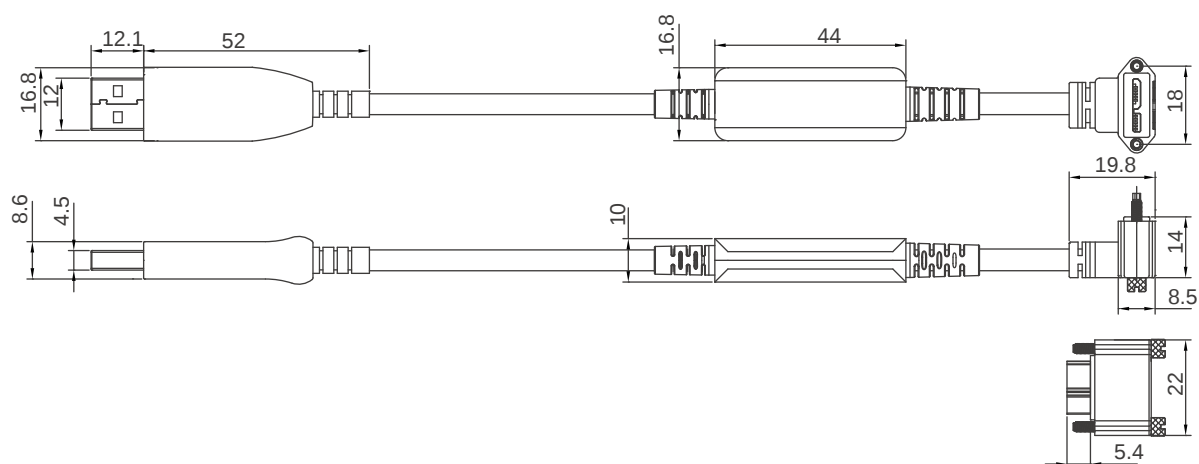
Model	Description
BES-P32AMBL-xM-AOC	USB3 A-Micro B with Locking AOC
BES-P32AMBL-xM-UP-AOC	USB3 A-Micro B Up Angle with Locking AOC
BES-P32AMBL-xM-DN-AOC	USB3 A-Micro B Down Angle with Locking AOC
BES-P32AMBL-xM-L-AOC	USB3 A-Micro B Left Angle with Locking AOC
BES-P32AMBL-xM-R-AOC	USB3 A-Micro B Right Angle with Locking AOC

◆ Dimensional Drawing

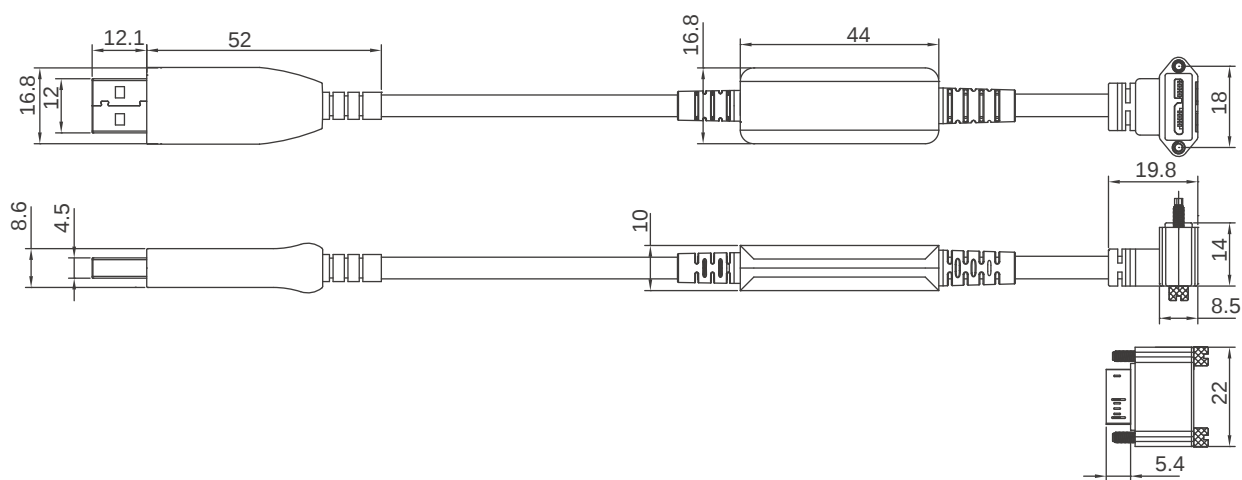
(mm)



● BES-P32AMBL-xM-AOC



● BES-P32AMBL-xM-UP-AOC



● BES-P32AMBL-xM-DN-AOC

MDLV2/MDHV

Closed-loop Stepping System



• MDLV2

• MDHV

◆ Product Features

- Two communication interface available : USB2.0/RS-485
- Programmable motion instructions : Be able to work without PC or PLC
- Build-in acceleration and deceleration curves : Parameterized S-curve and T-curve
- Closed-loop control :
 - ▲ MDLV2 : 2048/2500PPR Encoder, up to 8192/10000 resolution
 - ▲ MDHV : 2500PPR Encoder, up to 10000 resolution
- Dynamic compensating mechanism : Compensation adjustment of position and current, accurate high-speed positioning and no miss-stepping
- Stepping motor system : Using 3-phase stepping motor that is more stable and fully compatible with Servo (MDLV2) or AC-Servo (MDHV)
- Protection and alarming mechanism : Emergency-stop, over-loading, overshoot, over-heat protection and ALM output
- Supports 10-point (MDLV2)/4-Point (MDHV) programmable output : Be able to complete ALM, INP and external I/O control
- Supports 8-point (MDLV2)/7-point (MDHV) programmable input : Be able to complete home(origin) return, limit+ and limit- protection, emergency-stop, normal-stop, driver enable, and in-position slowdown command
- Compatibility of pulse input : Supports differential pulse input (open-loop only)
- Programmable differential pulse output : Encoder pulse output (can be applied to position feedback and position synchronization of image capture system) : 1~256 levels of frequency divider ratio that apply to every resolutions.

◆ Specification Table

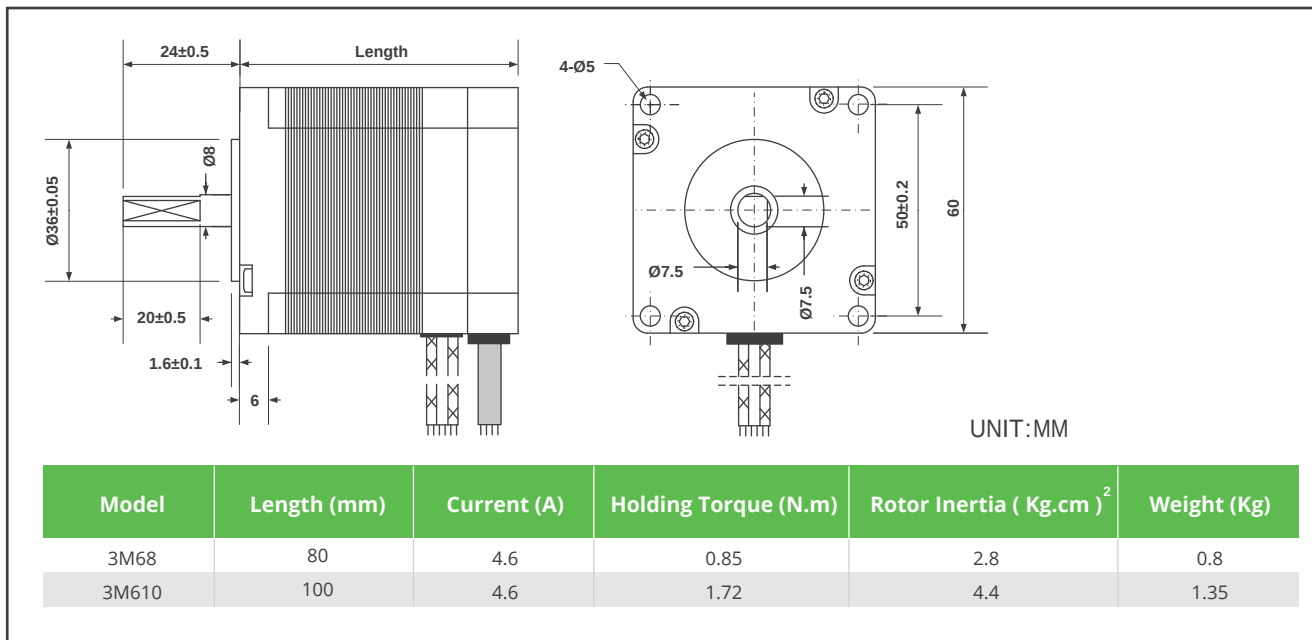
Model	Weight (kg)	Dimension (max. mm)	Model Type	Motor Type	Encoder Type
MDLV2	0.33	142(W) x 86(L) x 37(H) without expansion connectors	MDLV2-3M68-2048	3M68	2048PPR / 8192 rev.
			MDLV2-3M610-2048	M610	2048PPR / 8192 rev.
			MDLV2-3M68-2500	3M68	2500PPR / 10000 rev.
			MDLV2-3M610-2500	3M610	2500PPR / 10000 rev.
MDHV	1.2	150(W) x 135(L) x 65(H) without expansion connectors	MDHV-3M99-2500	3M99	2500PPR / 10000 rev.
			MDHV-3M912-2500	3M912	2500PPR / 10000 rev.
			MDHV-3M912T-2500	3M912T	2500PPR / 10000 rev.
			MDHV-3M915-2500	3M915	2500PPR / 10000 rev.
			MDHV-3M915T-2500	3M915T	2500PPR / 10000 rev.

◆ Model Guide

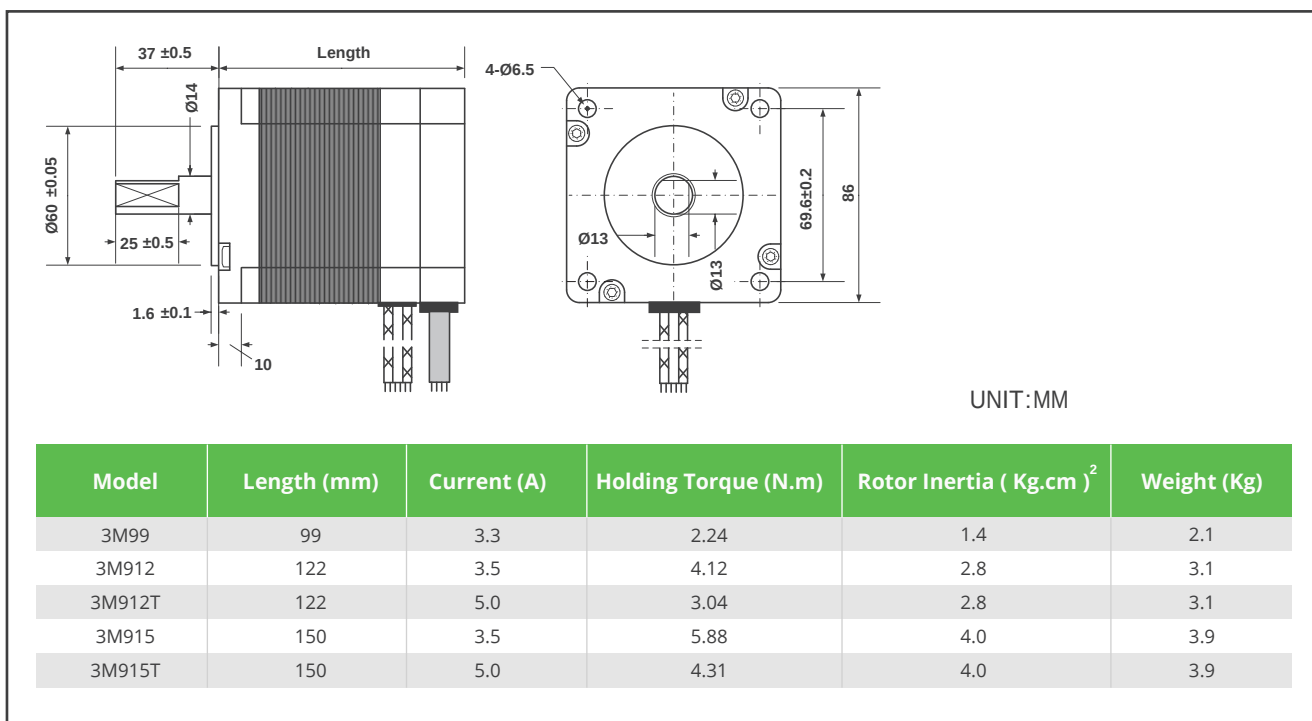
MDLV2	3M68	2048	
Model Name DC 3-Phase Closed-loop Stepping System	Motor Type 3M10,3M68	Encoder Type 2048 = 8192/rev. 2500 = 10000/rev.	Reserved Identify code

MDHV	3M99	2500	
Model Name AC 3-Phase Closed-loop Stepping System	Motor Type 3M99,3M912 3M915	Encoder Type 1000 = 4000/rev. 2500 = 10000/rev.	Reserved Identify code

◆ MDLV2 Motor Dimensional Drawing & Motor Specification Table



◆ MDHV Motor Dimensional Drawing & Motor Specification Table



PTLT-1000

Trigger Duplicator

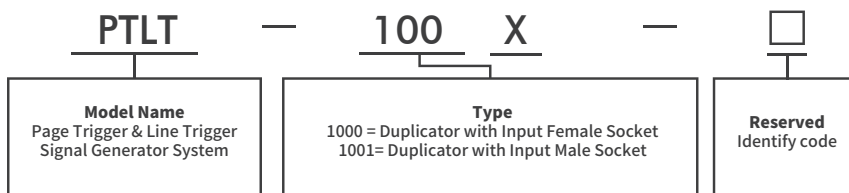


◆ Product Features

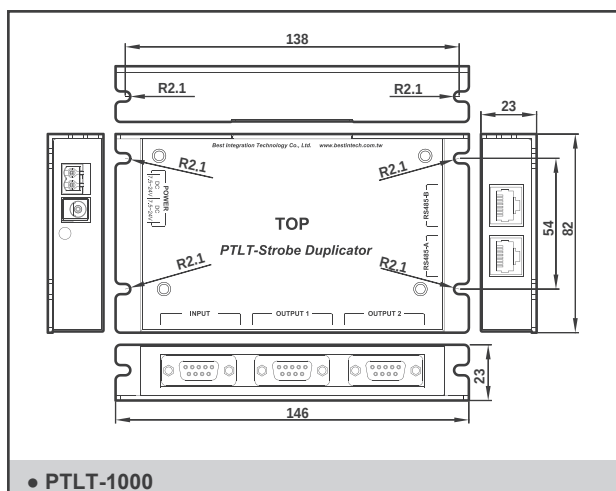
Strobe duplicator is especially designed for the need of AOI trigger signal to solve the problem of the external interferences resulted from differential signal splitter or long distance decay. This product can receive the signal input from linear scale, encoder, and motion card to enlarge signal, repeat signal, and multiple splitters. In addition, it can increase communication distance while decreasing signal interference to enhance system reliability.

- 2 sets input for high-speed pulse signal : It receives pulse signal from 5V Differential/TTL or 24V Open-collector linear scale, encoder, and motion card. It supports 1 set of EA/EB, Pulse/Dir, CW/CCW, and the maximum differential input is 2Mpps
- 1 set input for low-speed control signal : The voltage input range is 5V~24V which can be used for enable control
- 8 sets output for high-speed differential signal: Line drive spec. is 5V Input signal is one pair to 4, and can be divided into 2-set connector output

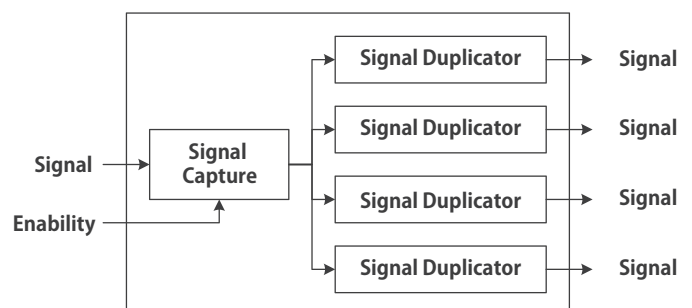
◆ Model Guide



◆ Dimensional Drawing



◆ Function Schematic



Trigger Generator

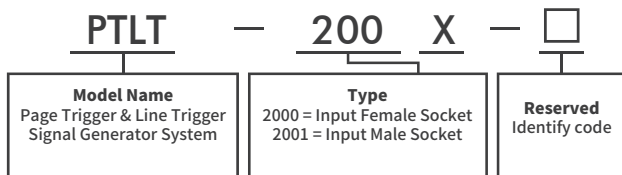


◆ Product Features

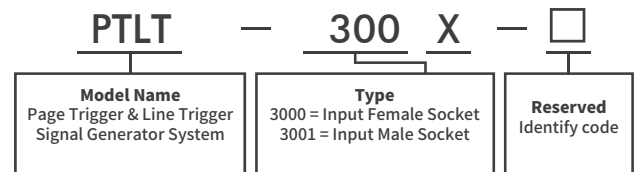
Strobe generator is a Page/Line trigger generator especially designed for the need of AOI system by adapting FPGA and digital signal processing technique to effectively and accurately decode and analyze pulse signal input from linear scale or encoder. This product's Page/Line trigger can provide differentiation and timing trigger for AOI related devices such as CCD, image capture card, and LED driver to complete image capture and LED driver output synchronously and complete strobe function.

- Dual-communication interface: USB/RS-485
- 1 set input from linear scale or encoder: Be able to set up pulse input from EA/EB, Pulse/DIR, and CW/CCW, and the maximum differential input is 2Mpps
- 4 sets differential output for Line-Trigger, support up to 500Kpps; be able to set Drop, multiplier, and divider
- 4 sets differential output for Page-Trigger, each set can individually set up trigger position, and provides Page-Trigger Table, which can store 90 positions for continuous shooting

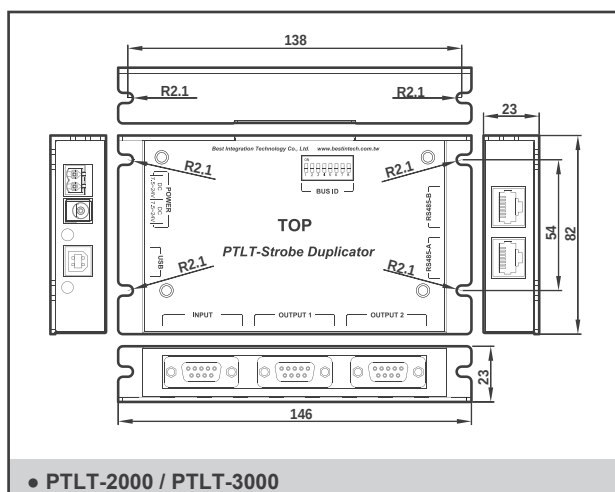
◆ Model Guide



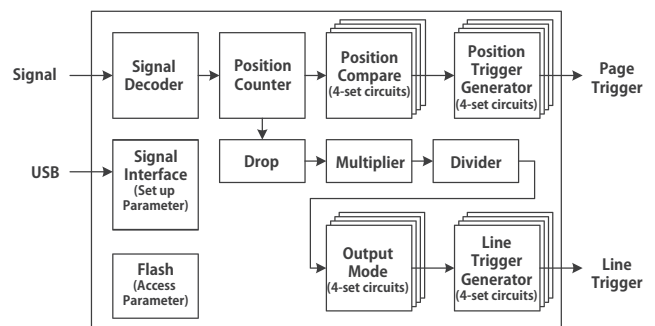
[Advanced Edition]



◆ Dimensional Drawing



◆ Function Schematic



CLDR Series

CameraLink Duplicator/Repeater



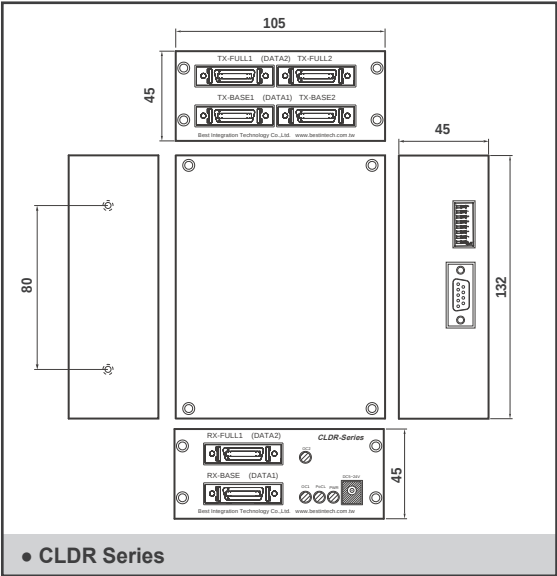
Product Features

- Doubles the max. distance between camera and frame grabber
- Duplicates a CameraLink video input stream into two video output streams
- Supports all CameraLink configurations (Base, Medium and Full & DECA(80-bit))
- Supports PoCL with over-current protection circuits for PoCL Camera
- Uses standard CameraLink MDR cables (not included)
- Uses standard 3M 26-pin MDR type connector (INx2 & OUTx4)
- High-speed 20~85MHz CameraLink interface chipset, works with any CameraLink Camera
- Selectable serial interface source from frame grabber 1 or 2
- Selectable CC1~CC4 control interface source from frame grabber 1, 2 or external RS422/TTL/COMS input
- Optional external power supply

Model Guide

Model	CameraLink™ Configurations	Video Function
CLDR-1000	Base	Repeater
CLDR-1100	Full / Medium / Base	Repeater
CLDR-2000	Base	Duplicator / Repeater
CLDR-2100	Full / Medium / Base	Duplicator / Repeater

Dimensional Drawing



Specification

Features	Specification
Power Requirements	DC5V~24V / 0.5A (w/o PoCL™ Camera) DC15V~24V / 1A (with PoCL™ Camera)
Operating Temp. Range	0 to 65 °C (non-freezing)
Storage Temp. Range	-25 °C~75 °C (non-freezing)
Relative Humidity	0 to 90% (non-condensing)
Cabinet Dimensions	112(W. max.) x 142.5(L. max.) x 48(H. max.) mm

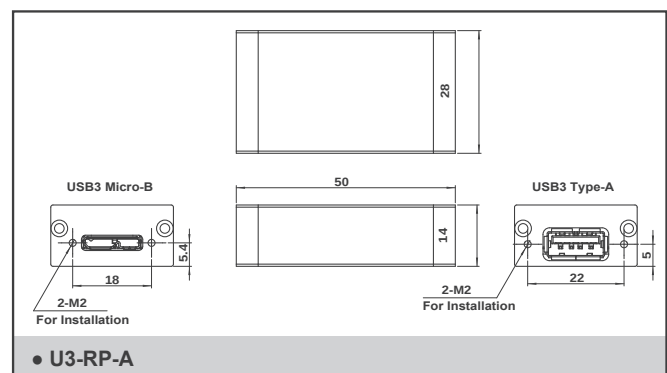
USB3.0 Repeater



◆ Product Features

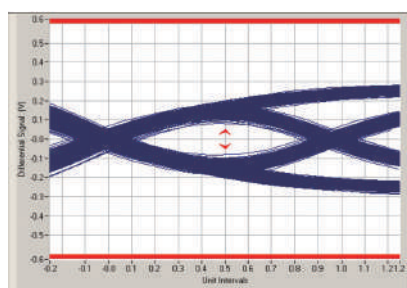
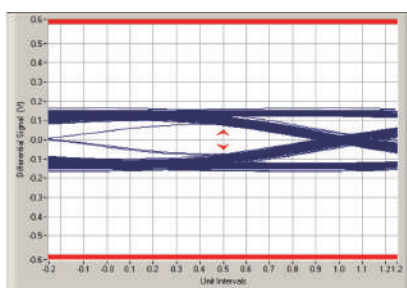
- Able to extend additional 2~5 meters in USB 3.0 signal
- Able to extend USB 3.0 SuperSpeed (5Gbps) and USB 2.0 signal
- USB bus power supply , no need for external power supply
- Plug and Play, no drivers required
- USB3.0 micro B-type connector from host side
- USB3.0 standard A-type connector to camera side

◆ Dimensional Drawing



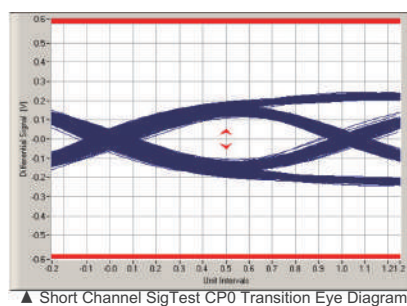
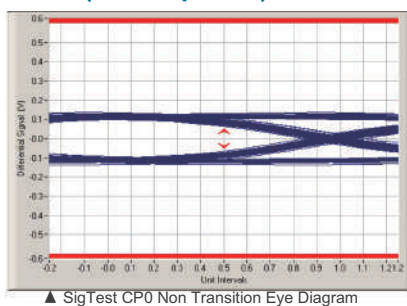
◆ Test Result:

• Case1 (Without repeater)



Host → USB 3.0 Cable 5m → USB3.0 Camera

• Case2 (With repeater)



Host → USB 3.0 Cable 5m → USB3.0 Repeater (U3-RP-A) → USB 3.0 Cable 5m → USB3.0 Camera



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