

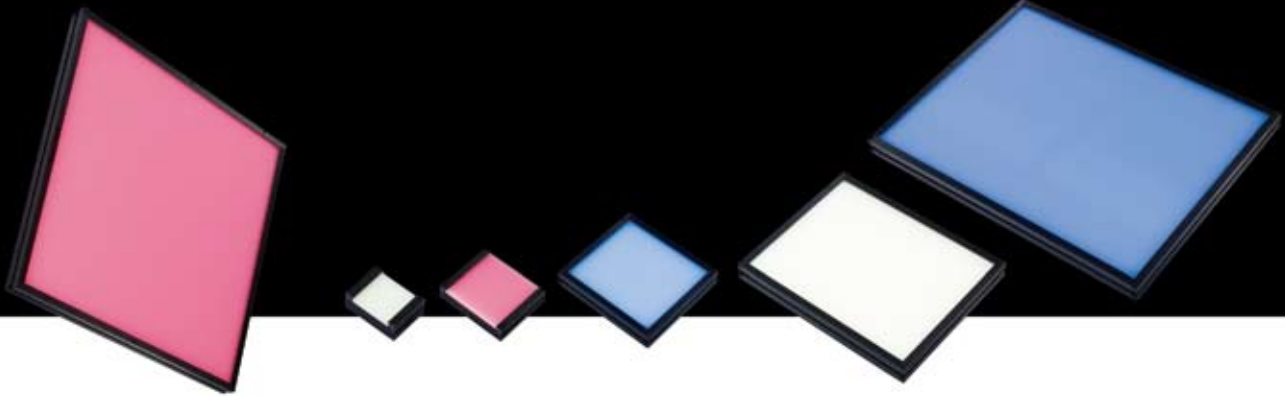


Flat Lights

TH Series

High output and High Uniformity

Ideal for silhouette inspection.



High-output Flat Lights

By redesigning the optical system and improving illumination efficiency we created a flat light with unprecedented high output.

Previous model: LDL-TP(Red)



Shutter speed: 1/10,000 sec.
Light intensity: 100% dimming

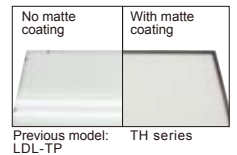
TH series(Red)



Shutter speed: 1/10,000 sec.
Light intensity: 100% dimming

New Diffusing Plate with Anti-Reflection Effect

Previously, there were cases in which the camera lens was subject to secondary reflections which caused glare to appear on the image. For the TH series, the matte coating on the surface of the diffusion plate eliminates light reflections.



The ambient light is reflecting on the diffusing plate.

The matte coating prevents the reflection.

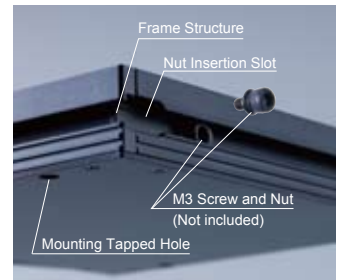
Broad Selection

There are over 11 emitting surface sizes ranging from the smallest at 27 mm × 27 mm to the largest at 211 mm × 200 mm. LED colors are available in red, white, or blue. The increased lineup now includes 33 different size and color combinations.



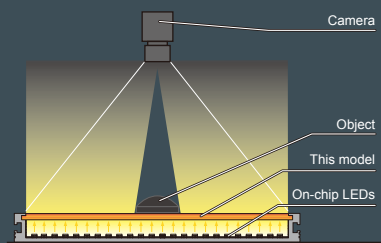
Flexibility of Mounting to Match Your Site Environment

Mounting is possible with frames or with tap holes on the bottom. You therefore have the freedom to select the installation method according to your site environment.



Illumination structure of TH-140x105

A high output is achieved with a flat design. You can illuminate the workpiece from the back, through a Diffusion Plate.



Examples of Flat light Images

Imaging Plastic Bottle Liquid Levels

Sharply captures the liquid level.

Light used: TH-200x150RD



Imaging Plastic Containers for Defect Inspections

Can check for lid deformations and the quality of the seal of the transparent case.

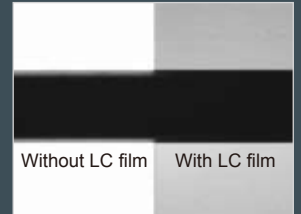
Light used: TH-140x105RD



Example using Light Control (LC) Film

On the left side, light diffraction occurs. On the right side, the outline is accurately inspected.

Imaging Exterior of Metal Rods



Direct Number : A direct number is a 7-digit number assigned to a CCS product. You can easily access the web page providing information on any desired product by simply entering the direct number in the space provided on the CCS website pages for machine vision. (Refer to the back cover of this brochure.)

Product Lineup Table

Series	Direct Number	Model Name	Color	Power Consumption	Option	Dimension
TH	1004715	TH-27×27RD	●	24V / 1.9W	L·B	1
	1004716	TH-27×27SW	○	24V / 2.2W		
	1004717	TH-27×27BL	●	24V / 2.2W		
	1004718	TH-43×35RD	●	24V / 3.8W	L·B	2
	1004719	TH-43×35SW	○	24V / 3.0W		
	1004720	TH-43×35BL	●	24V / 3.0W		
	1004721	TH-51×51RD	●	24V / 5.1W	L·B	3
	1004722	TH-51×51SW	○	24V / 5.2W		
	1004723	TH-51×51BL	●	24V / 5.2W		
	1004307	TH-63×60RD	●	24V / 8.1W	L·B	4
	1004308	TH-63×60SW	○	24V / 7.9W		
	1004309	TH-63×60BL	●	24V / 7.9W		
	1004310	TH-83×75RD	●	24V / 11W	L·B	5
	1004311	TH-83×75SW	○	24V / 12W		
	1004312	TH-83×75BL	●	24V / 12W		
1004313	TH-100×100RD	●	24V / 19W	L·B	6	
1004314	TH-100×100SW	○	24V / 18W			
1004315	TH-100×100BL	●	24V / 18W			

Series	Direct Number	Model Name	Color	Power Consumption	Option	Dimension
TH	1004316	TH-140×105RD	●	24V / 25W	L·B	7
	1004317	TH-140×105SW	○	24V / 24W		
	1004318	TH-140×105BL	●	24V / 24W		
	1004319	TH-160×120RD	●	24V / 28W	L·B	8
	1004320	TH-160×120SW	○	24V / 30W		
	1004321	TH-160×120BL	●	24V / 30W		
	1004322	TH-200×150RD	●	24V / 38W	L·B	9
	1004323	TH-200×150SW	○	24V / 37W		
	1004324	TH-200×150BL	●	24V / 37W		
	1004325	TH-224×170RD	●	24V / 41W	L·B	10
	1004326	TH-224×170SW	○	24V / 41W		
	1004327	TH-224×170BL	●	24V / 41W		
	1004328	TH-211×200RD	●	24V / 45W	L·B	11
	1004329	TH-211×200SW	○	24V / 45W		
	1004330	TH-211×200BL	●	24V / 45W		

*The peak wavelength for Red lights is 635 nm. If a sharp-cut filter is required, use a R60 Filter (optional).

*The following letters indicate options.

L: Light Control Film, B: Bracket

*For further details on these options, refer to page 103 to 105.

Dimension Diagrams (Unit: mm)

