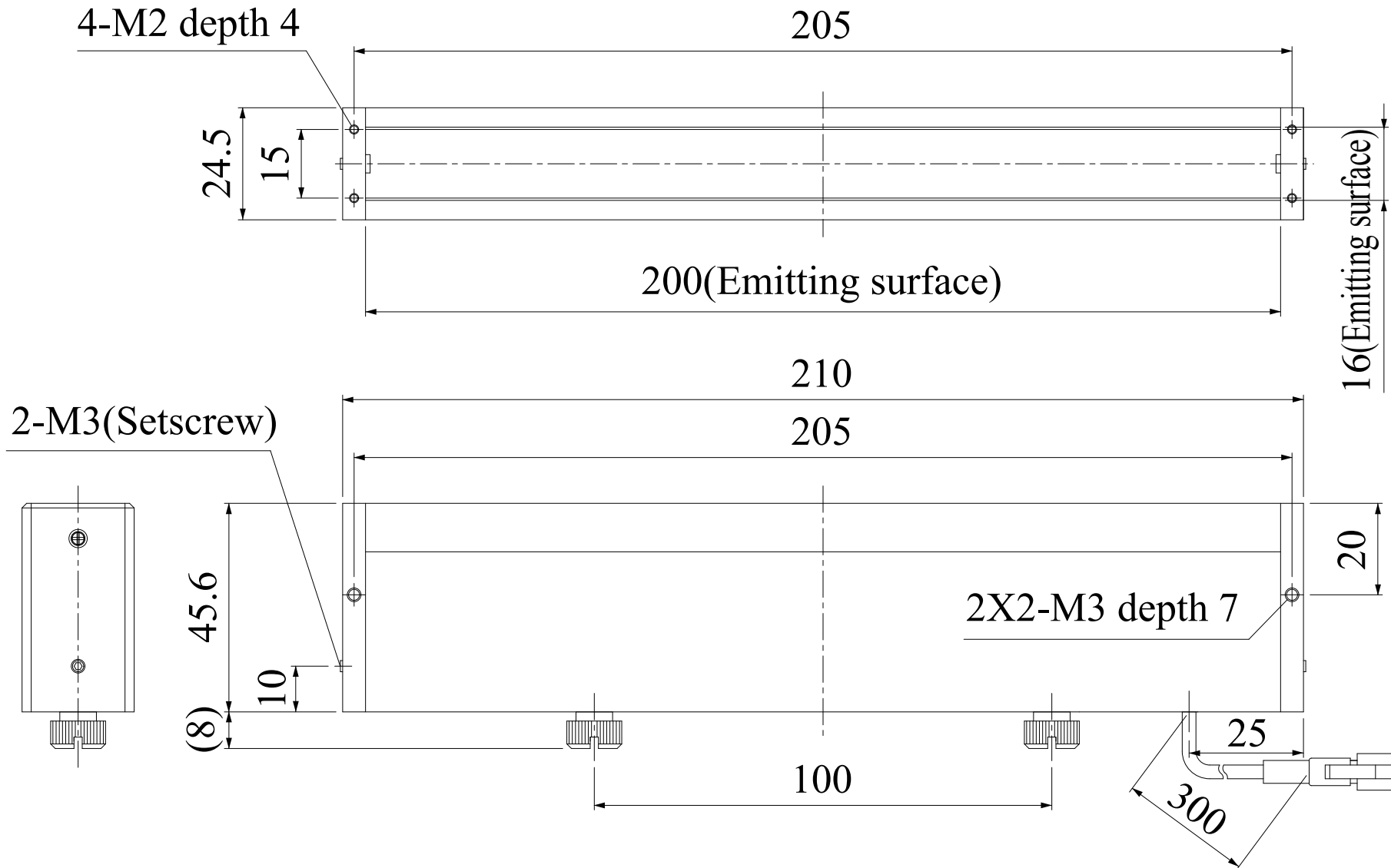


# LN-200/-SW/-GR/-BL

Model	LN-200	LN-200-SW/-GR/-BL
Voltage	12V DC	24V DC
Power consumption	2.4W	3.3W
Mass	210g	210g
Connector type	2P (1: +, 2: -)	3P (1: +, 2: NC, 3: -)

Third Angle Projection Units: mm





# Line Lights

## LN Series

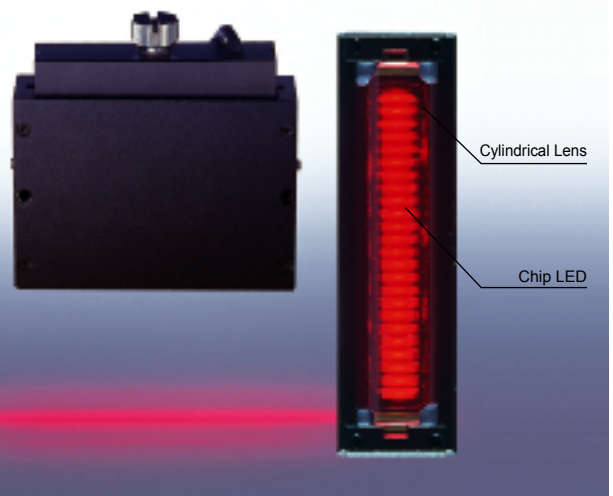
### Line-shaped, convergent-beam system

The convergent beam system uses high luminosity LED's with a cylindrical lens to produce highly focused LED illumination.



#### Expanding Possibilities

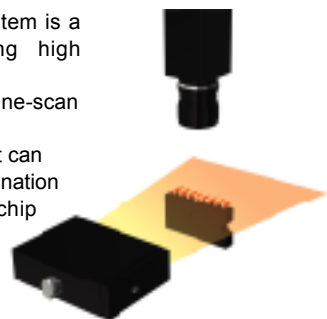
The LN Series enables high-resolution, high-speed processing applications to be correctly lit. Light from the high-luminosity chip LEDs inside the unit passes through the cylindrical lens and is formed into a high-intensity, tightly focused beam.



This line-shaped, convergent-beam light is suitable for a variety of applications, ranging from inspection of a limited point to three-dimensional inspection.

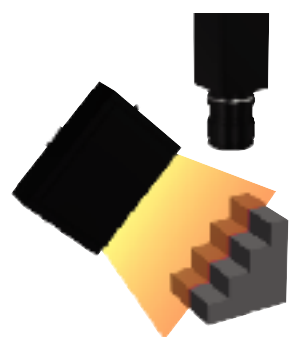
#### Application to a two-dimensional CCD camera

The convergent beam system is a focused line light using high intensity chip LEDs. It is particularly suited for line-scan applications, where a high intensity light is required. It can also be used to focus illumination on small parts such as IC chip pins to highlight specific details/defects.



#### Can also be used for the light section method

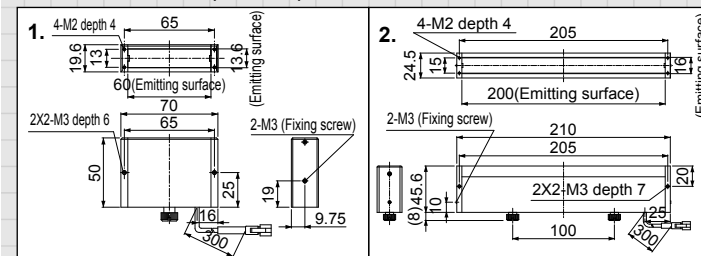
Molded pieces and other three-dimensional objects can also be inspected using line light.



### Product Lineup Table

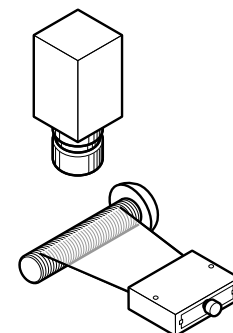
Series	Model Name	Color	Power Consumption	Options	Dimension
LN	LN-60A	●	12V/2.2W	—	1 □
	LN-60-SW/-GR/-BL	○/●/●	24V/1.0W	—	
	LN-200	●	12V/2.4W	—	2
	LN-200-SW/-GR/-BL	○/●/●	24V/3.3W	—	

### Dimensions (Unit: mm)

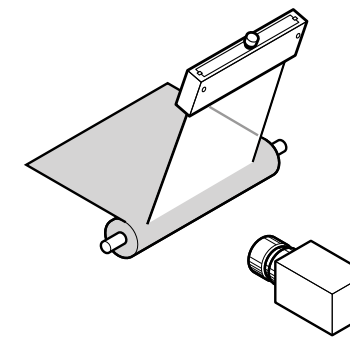


### Typical Applications

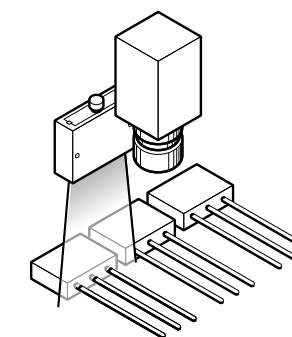
Inspecting the thread pitch of a screw by illuminating only the tips of the threads



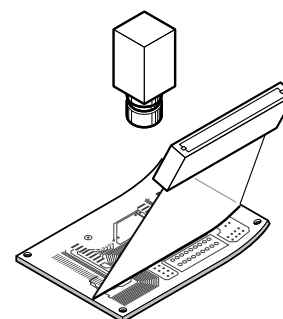
Winding inspection



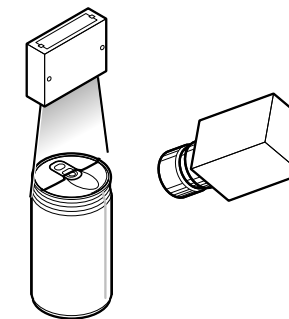
Inspecting the lead pitch on an electronic component



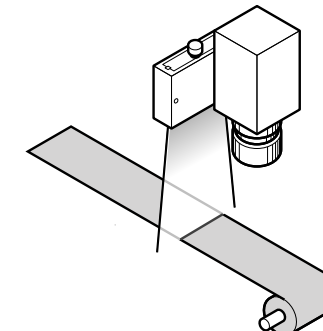
Inspecting a printed circuit board for warping (LED line generator)



Inspecting the depth of the groove on a ring-pull can in a typical 3D profiling type application

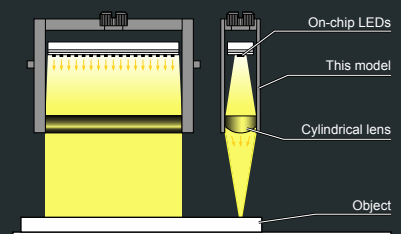


Inspecting a web in a line-scan application



#### Illumination Structure of LN-60

The work is illuminated with high-luminosity light from a chip LED that has been converged into a line by passing it through a leading cylindrical lens.



#### Examples of Convergent Beam Illumination Images

Inspecting the side of a coin

Convergent line light illuminates only the side of the coin.

Light used: LN-60



Measurement inspection of connector pin widths

Only the tip of each connector pin is illuminated, enabling point inspection.

Light used: LN-60



Surface inspection on glass surface.

Light is projected from side, thus illuminating scratch.

Light used: LN-60

