Shinkoh Elecs

Find your possibilities

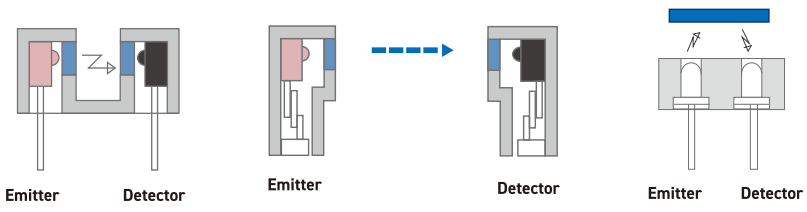
PRODUCT INTRODUCTION

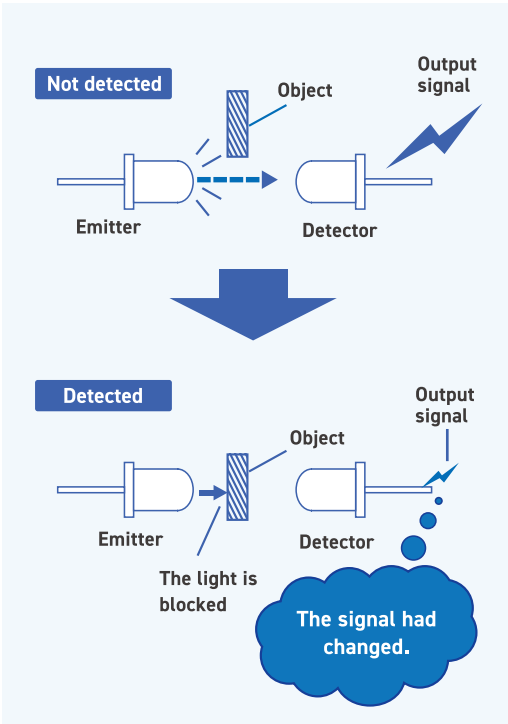
Shinko Electronics is an optical senser maker.
Optical sensers (Photo sensors) are used in various devices in our daily lives,
and they are indispensable. We are engaged in the entire process of planning, developing,
and producing optical sensors.

What is Optical sensing?

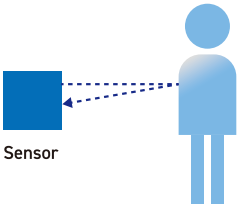
Optical sensing consists of an emitter and a detector converts the light it receives into an electrical signal.
When an object blocks the light emitted by the emitter, the amount of electrical signal converted by the detector changes, thereby enabling detection of the object.
Non-contact detection is one of the main features of optical sensing.

■ **Example of internal structure of Photo sensors**





New product



【Triangulation Type】
Hardly influenced by the color of the object to be detected.

KM Series

Motion Sensor

Ours first human body detection sensor series.
These photo reflective sensors are hardly influenced by reflectivity and color of targeted objects and highly resistant to ambient light.

- Digital output type. (Output voltage : High or Low)
- Detection distances lineup: 5cm to 200cm
- 5V DC type and Free-ranging power type (5.5V~27V) are available.

Example

- Human detection at ATMs, Self checkout machines, automatic doors, etc.
- Human passing detection at Security gates, Ticket gates, etc.
- Non-contact switching for lighting, etc.
- Seating detection for amusement equipment, etc.

Rated detection distance

Type \ Part No.	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20
Thin short type	-	-	-	5 cm	-	-	-	-	10 cm	-	-	-	-	-	-	-	-	-	-
short type	-	-	-	5 cm	6 cm	7 cm	8 cm	9 cm	10 cm	-	-	-	-	-	-	-	-	-	-
Middle type	20 cm	30 cm	40 cm	50 cm	60 cm	70 cm	80 cm	-	-	-	-	-	-	-	-	-	-	-	-
Long type	-	-	-	50 cm	60 cm	70 cm	80 cm	90 cm	100 cm	110 cm	120 cm	130 cm	140 cm	150 cm	160 cm	170 cm	180 cm	190 cm	200 cm

KB Series

Long distance type (Mass production in 2024)

CODE

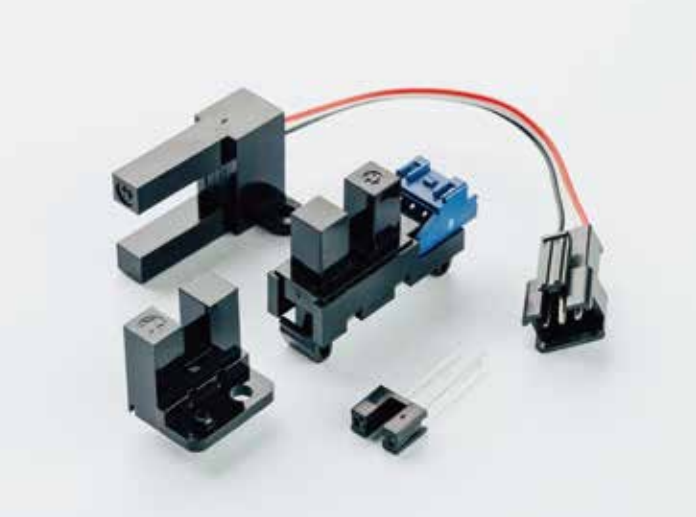
KB3725-AA12LF (Emitter)	KB3725-AA22LF (Detector)

Example

- For human passage detection, etc.

Detection distance : 1 meter (Maximum)
Ambient Illumination (Maximum)
50,000Lux for halogen lamp
70,000Lux for sun light
※Please refer to a data sheet for details.

Product category



KI Series

Photo Interrupter

Photo interrupter detects an object by blocking light between the emitter and detector of the sensor.
We have the largest number of standard photo interrupter products in the photo sensor industry.

Example
Mechanical part detection, Encoder slit detection, etc.

KR Series

Photo Reflector

This series of photo sensors detects an object by reflecting the light of the sensor onto the object and into the detector of the sensor.
There are many kind of photo reflector products by using a variety of light sources from UV to IR for special detection.

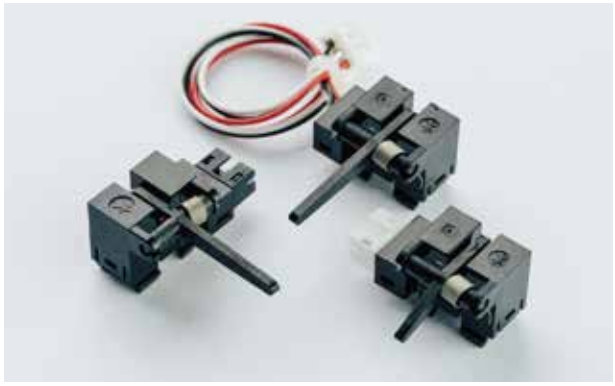
Example
Media mark detection, Transparent object detection, etc.

KB Series

Photo Interrupter Separate Type

This is a series of long-range detectable photo sensors with separate and independent emitter and detector parts of a photo interrupter.

Example
Banknote detection, Coin detection, Paper detection, Mechanical part detection for long distance, etc.



KA Series

Photo Interrupter Actuator Type

This series combines a photo interrupter with an actuator. An object is detected by passing through the actuator.

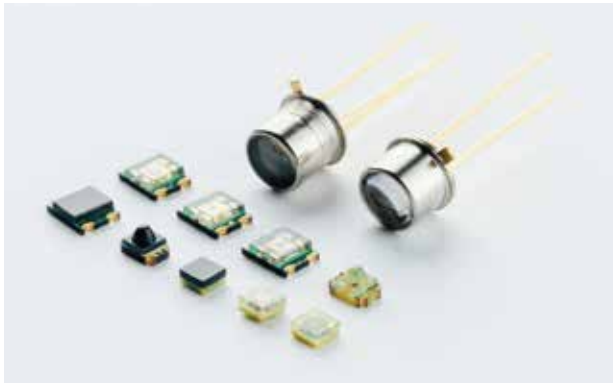
Example
Transparent film detection, Transparent plate detection, etc.

KP Series

Prism Photo Sensor

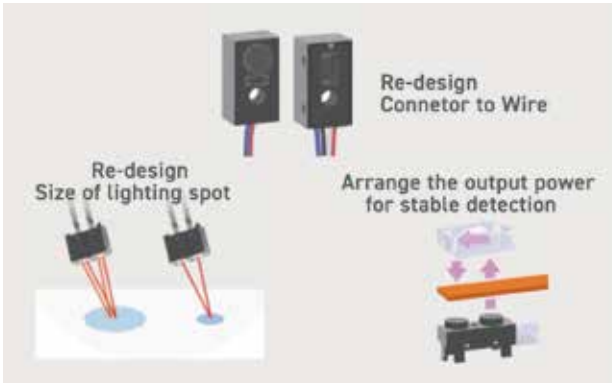
This is a series of prism photo sensors consisting of a emmtter, a detector, and a prism to make the light return to the detector. Prism photo sensor has two detection points (two optical axes) by one sensor.

Example
Skewed paper detection, etc.



LED, Photo Diode, Photo Transistor

We have a variety of packaged emitters and detectors. (Can package, SMD, COB, etc.)



Customized sensors

We offer a variety of custom products, from semi-custom products based on standard products to fully custom products, upon request.

Example
Shape customization, Parts customization, Optical properties customization, etc.