

### ◆ Characteristic / 特點 :

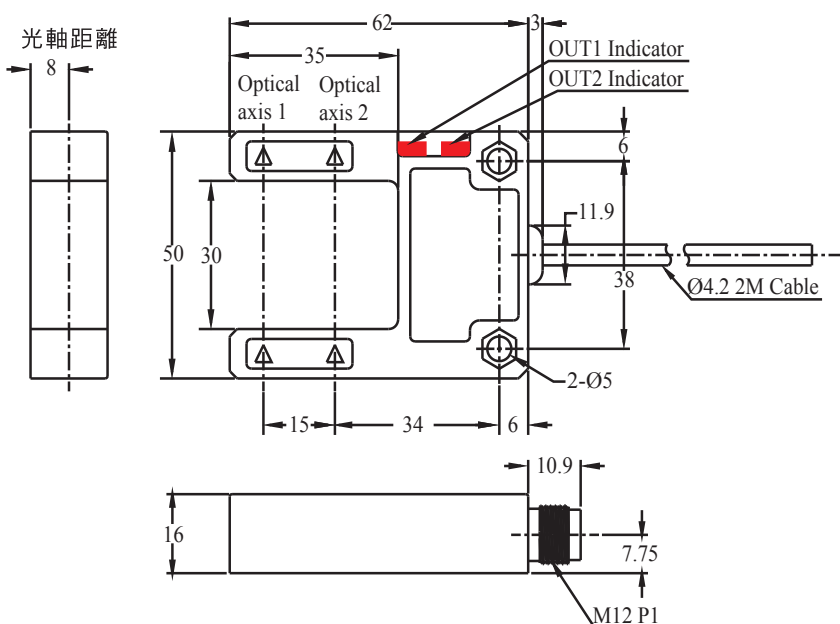
- Two indicators (OUT1 Indicator/OUT2 Indicator). Easy to recognize.  
/ 雙指示燈(OUT1 Indicator/OUT2 Indicator)容易辨認。
- The distance is 7mm between front edge and first optic axis. The distance is 15mm between two optic axes.  
/ 第一光軸與前端相距7mm, 兩光軸相距15mm。
- Two optic axes react respectively.  
/ 兩光軸各自獨立感應。



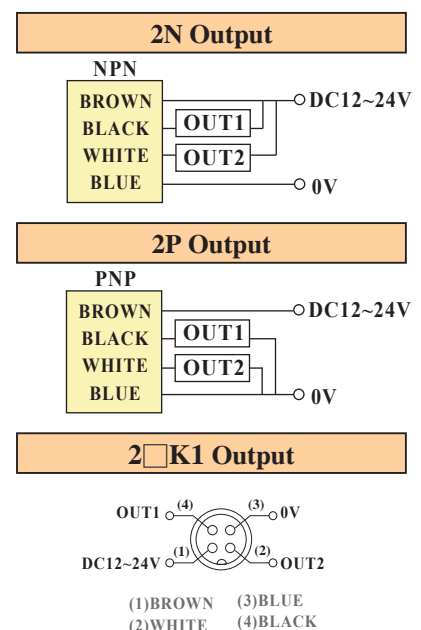
### ◆ Specifications / 規格表 :

Model / 型號	NPN D.on	SU30-2N	SU30-2NK1
	PNP D.on	SU30-2P	SU30-2PK1
Sensing distance / 檢出距離	30 mm		
Min. detection object / 最小檢測物	Opaque / 非透明體 ( Ø1.0 x 10.0mm )		
Emitting light / 發光源	Infrared LED 940 nm		
Operating voltage / 工作電壓	DC12 ~ 24 V		
Current Consumption / 消耗電流	30 mA Max.		
Load current / 負載電流	100mA Max. at DC24V		
Response time / 反應時間	1 ms Max.		
Ambient illumination/使用環境光源	Incandescent light / 白光 : 1,000 lux max.		
Insulation resistance / 隔離阻抗	20MΩ min. (DC500V)		
Voltage withstandability / 絕緣耐壓	AC500V 60Hz for 60 Sec.		
Operating temperature/工作溫度範圍	-20°C ~ + 60°C		
Ambient humidity/溼度範圍	35% ~ 85% RH 相對溼度		
Protection degree / 防水等級	IP64		
Vibration resistance / 耐震頻率	1.5 mm peak to peak amplitude, 10 to 55 Hz, 2 hours in X,Y and z directions		
Shock resistance / 耐震度	50 G repeated 10 times each in X,Y and Z directions		
Material / 外觀材質	PC		
Wiring method / 出線方式	Pre-wired Ø4.2 x 2 M / 4-wires	M12 Plug-in connector type / M12接頭式	
Weight / 重量	Approx.86g		Approx.26g

### ◆ Dimensions / 尺寸圖 : (unit:mm)



### ◆ Wiring diagrams / 接線圖 :



# SU30

# U-shape Photo Sensor

### ◆ Timing chart / 時序圖 :

NPN/ PNP/ NP Type

No. of optical axes/model	Operation mode	Timing charts	
1 axis SU30-N SU30-NK1 SU30-P SU30-PK1 SU30-NP SU30-NPK1	Dark ON	<p>Incident light</p> <p>No incident light</p> <p>Operation indicator (red) ON OFF</p> <p>Control output ON OFF</p> <p>Output transistor OFF</p> <p>Load Operate (e.g., relay) Operate Reset</p>	
2 axis SU30-2N SU30-2NK1	Dark ON	Optical axis1	Optical axis2
		<p>Incident light</p> <p>No incident light</p> <p>Operation ON OFF</p> <p>indicator (red) OFF</p> <p>Control output ON OFF</p> <p>Output transistor OFF</p> <p>Load Operate (e.g., relay) Operate Reset</p> <p>(Between brown and black (white) leads)</p>	<p>Incident light</p> <p>No incident light</p> <p>Operation ON OFF</p> <p>indicator (red) OFF</p> <p>Control output ON OFF</p> <p>Output transistor OFF</p> <p>Load Operate (e.g., relay) Operate Reset</p> <p>(Between brown and black (white) leads)</p>

### ◆ To detect the retardation and stop locations on stacker cranes and guided trolleys.

(1)One optic axis:

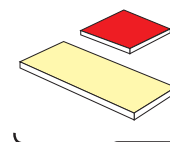
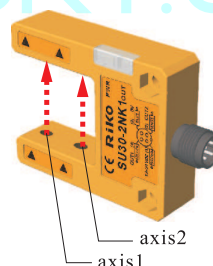
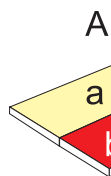
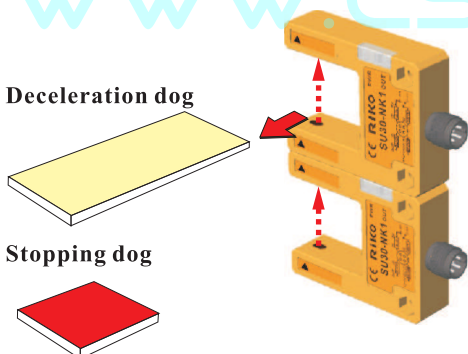
For retardation and stopping, you have to use two sensors.

(2)Two optic axes:

Just need to use one sensor if you change the shape of dock like A. It will have the same application like (1).

Deceleration dog

Stopping dog



You can use this kind of configuration, too.

The first optic axis detects the retardation on a.  
The second optic axis detects the stopping on b.

### ◆ Two optic axes sensors can be mounted side by side to read the positions.

(A application of 8 optic axes)

Detection dog

