AREA SENSOR
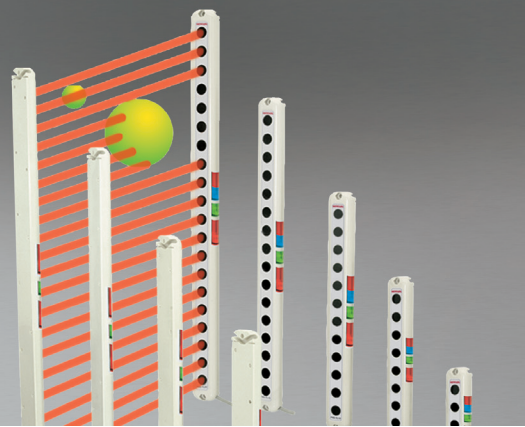# PAS series

Area sensor

▶ Simple installation, less space (Thickness: 13.5 ㎜, Width : 30 ㎜)
▶ Built in the auto sensitivity compensating function
▶ Built in the mutual interference preventing function
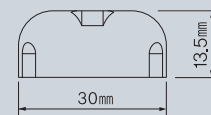▶ Minimum sensing object (Ø 33 ㎜)

➡ Suffix code

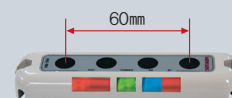| Model	Code			Description
PAS -	□	□	□	Area sensor
Sensing method	T			Through beam
Number of optical axis		4		4 optical axis
		8		8 optical axis
		12		12 optical axis
		16		16 optical axis
		20		20 optical axis
Control output			N	NPN open collector
			P	PNP open collector

➡ Specification

Model	NPN	PAS-T4N	PAS-T8N	PAS-T12N	PAS-T16N	PAS-T20N
	PNP	PAS-T4P	PAS-T8P	PAS-T12P	PAS-T16P	PAS-T20P
Number of optical axis		4	8	12	16	20
Sensing width		60 ㎜	140 ㎜	220 ㎜	300 ㎜	380 ㎜
Sensing method		Through beam type				
Sensing distance		5 m				
Sensing object		Opaque object above Ø30 ㎜				
Optical axis pitch		20 ㎜				
Power supply voltage		12 - 24 V d.c ±10 % (max Ripple 10%)				
Current consumption		max 80 ㎃	max 90 ㎃	max 100 ㎃	max 110 ㎃	max 120 ㎃
Output		NPN/PNP open collector output less than 100 ㎃ (30 V d.c)				
		Induced load : 50 ㎃, Remaining voltage : max 1 V d.c				
Output mode		All optical axes L.ON, then ON operation				
		(More than 1 optical axis D.ON then OFF operation)				
Output action		All optical axes L.ON, then ON operation (More than 1 optical axis D.ON then OFF operation)				
Weight		max 160 g	max 180 g	max 200 g	max 220 g	max 240 g
Response time		max 7 ㎳				
Pointing angle		Within ±5° (Only with distance more than sensing distance (2m)				
Light source (wave length)		Infrared LED (880 ㎚)				
LED		Trns : Power display(Green LED), M/S display(Red LED), Output Display(Red LED)				
		Rcvr : Light on stability display(Green LED), Output Display(Red LED)				
		E1 display(Red LED), E2 display(Blue LED)				
Ambient illumination		Sunlight : max 10,000 Lux				
Ambient temperature		-10 ~ 55 ℃ (surrounding storage temperature : -25 ~ 70 ℃)				
Ambient humidity		35 ~ 85 % R.H. (without no condensation)				
Protective structure		IP 40 (IEC)				
Insulation resistance		min 20 ㏁ (500 V d.c)				
Dielectric strength		1,000 V a.c, 50/60 Hz for 1 min (Between the current part and case)				
Vibration resistance		10 - 55 Hz, double amplitude : 1.5 ㎜, for 2 hours in X, Y and Z direction				
Shock resistance		500 ㎨, 3 times each in X, Y and Z directions				
Connection method		Cable extended type, 0.2 ㎟ 5pin, Thickness : Ø4.3 ㎜, Length : 3 m				
Material		Case : ABS, Display unit : Acryl				
Protective function		Auto sensitivity compensation, mutual interference prevention in parallel installation (M/S mode) reverse polarity protection, over current protection				

■ **13.5 ㎜ Slim size**
(Simple installation at the narrow space)

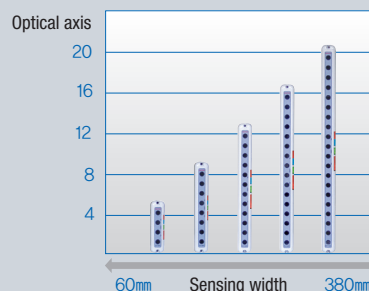■ **Minimized 4 optical axis**
(Sensing width : 60 ㎜)

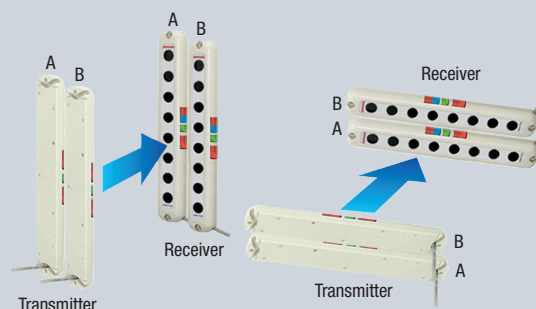■ **Auto sensitivity compensating function**
- using exclusive ASIC IC

■ **Picking sensing function**
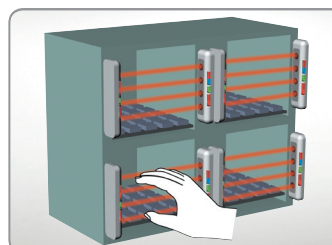
■ **Various sensing width 60 ㎜ - 380 ㎜**

■ **In case of using mutual interference preventing fucntion**
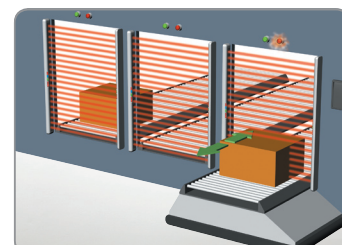- not effected by another near sensor

Example of using PAS series

➡ Picking sensor application

When taking an object out of box or container

When putting in and taking out an object