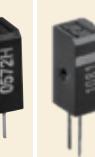


OMRON

# Photomicrosensors™ Selector Guide



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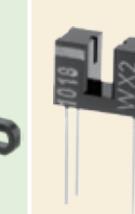
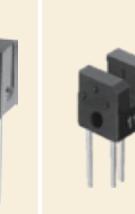
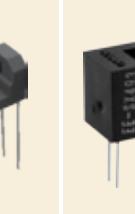
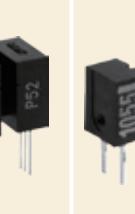
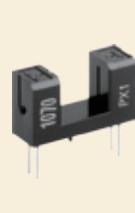
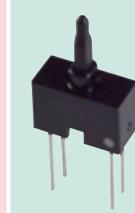
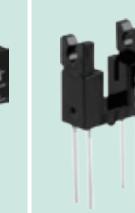
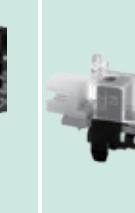
Model *1	EE-SX1320 /4320	EE-SX1321	EE-SX1330	EE-SX1340 /3340,4340	EE-SX1350 /3350,4350	EE-SX1235A-P2 /3239-P2,4235A-P2	EE-SX460-P1	EE-SX461-P11
Sensing Type (Termination)	Transmissive (SMD)						Transmissive (Connectors)	
								
Mounting Type	Surface Mount	Snap-In	Snap-In	Snap-In				
Sensing Distance	2mm	2mm	3mm	4mm	5mm	5mm	5mm	15mm
Output configuration *2	PTr/P-IC	PTr	PTr	PTr/P-IC	PTr/P-IC	PTr/P-IC	P-IC	P-IC
Aperture Size	0.3mm	0.3mm	0.3mm	0.5mm	0.5mm	0.5mm	0.5mm	2mm
Dimensions (L×W×H)	5.1×4×4	5.1×4×4	6×4×5	8×4×5.5	9×4×9	27×8×15.9	30×11×23.6	32.5×12×23.6
Features	Ultra-compact	Output 2ch, Ultra-compact	Ultra-compact	Compact	General purpose	High-resolution model, Easy to mount	Wide slot, Easy to mount	
Model *1	EE-SX1046	EE-SX1106	EE-SX198 /398,498	EE-SX1071 /301,401	EE-SX1057	EE-SX1128	EE-SX1081 /3081,4081	EE-SX1041
Sensing Type (Termination)	Transmissive (Terminal)							
								
Mounting Type	Through-hole	Through-hole	Through-hole	Through-hole	Through-hole	Through-hole	Through-hole	Through-hole
Sensing Distance	3mm	3mm	3mm	3.4mm	3.6mm	4.2mm	5mm	5mm
Output configuration *2	PTr	PTr	PTr/P-IC	PTr/P-IC	PTr	PTr	PTr/P-IC	PTr
Aperture Size	0.5mm	0.4mm	0.5mm	0.5mm	2mm	0.5mm	0.5mm	0.5mm
Dimensions (L×W×H)	10×6.5×5	6.4×4.2×5.4	12.2×5×10	13.6×6.2×10.4 /15.4×6.2×10.4	13×6.35×11.5	13.5×5.2×9.3	13.7×5×10	14×6×10
Features	Horizontal aperture	Compact	General purpose Without a positioning boss*3	General purpose	Dustproof	Horizontal aperture With a positioning boss	General purpose	With a positioning boss
Model *1	EE-SX1161-W11 /3161-W11,4161-W11	EE-SX1088-W11 /3088-W11,4088-W11	EE-SX1096-W11 /3096-W11,4096-W11	EE-SX1160-W11 /3160-W11,4160-W11	EE-SY1200	EE-SY171	EE-SY169 ,169A,169B	EE-SY113 /313,413
Sensing Type (Termination)	Transmissive (Prewired)			*Detachable connector	Reflective			
								
Mounting Type	Screw Mounting	Screw Mounting	Screw Mounting	Screw Mounting	Surface Mount	Through-hole	Through-hole	Through-hole
Sensing Distance	3.2mm	3.4mm	3.4mm	9.5mm	1mm	3.5mm	4mm	4.4mm
Output configuration *2	PTr/P-IC	PTr/P-IC	PTr/P-IC	PTr/P-IC	PTr	PTr	PTr	PTr/P-IC
Aperture Size	0.5mm	0.5mm	0.5mm	0.5mm	not applicable	not applicable	not applicable	not applicable
Dimensions (L×W×H)	12.95×23.7×12.7	25×6×10	25×6×10	31.75×6×15.5	3.2×1.9×1.1	14×4.2×3	12.5×6×8	12×6.2×6
Features	Dustproof	General purpose	Horizontal aperture	Wide slot	Ultra-compact	Thin	Red LED, A:General purpose, B:Red LED, High power	Dustproof

\*1 EE-SX3~...Dark On, EE-SX4~...Light On

\*2 PTr...Phototransistor, P-IC...Photo-IC

\*3 With a positioning boss version...EE-SX199

\*4 With a positioning boss version...EE-SX1115

EE-SX3148-P1	EE-SX3009-P1 ,4009-P1	EE-SX3162 ,4162-P1(-Z),P2	EE-SX3163 ,4163-P1,P2	EE-SX3164 ,4164-P1,P2	EE-SX1018	EE-SX1103	EE-SX1105	EE-SX493	EE-SX1055				
					Transmissive (Terminal)								
													
Screw Mounting	Screw Mounting	Screw Mounting	Screw Mounting	Screw Mounting	Through-hole	Through-hole	Through-hole	Through-hole	Through-hole				
3.6mm	5mm	5mm	5mm	5mm	2mm	2mm	2mm	2mm	2.8mm				
P-IC	P-IC	P-IC	P-IC	P-IC	PTr	PTr	PTr	P-IC	PTr				
0.5mm	0.5mm	0.5mm	0.5mm	0.5mm	0.5mm	0.4mm	0.4mm	0.2mm	0.5mm				
26x6.4x13.5	34x11x21	13x16x14	13.6x13.3x14.7	22.6x8.3x14	8x4x6	5x4.2x5.2	4.9x2.6x3.3	11x8x9.7	8.9x4x5.4				
A boss on one side enables securing the Sensor	High-resolution model	Connector with lock manufactured	Connector with lock manufactured	Connector with lock manufactured	Compact	Ultra-compact	Ultra-compact	High-resolution model	Compact				
EE-SX1042	EE-SX1035	EE-SX1070 ,3070,4070	EE-SX1140	EE-SX129	EE-SH3	EE-SV3	EE-SX1088 ,3088,4088	EE-SX1096	EE-SG3 ,SG3-B				
													
Through-hole	Through-hole	Through-hole	Through-hole	Screw Mounting	Screw Mounting	Screw Mounting	Screw Mounting	Screw Mounting	Screw Mounting				
5mm	5.2mm	8mm	14mm	3mm	3.4mm	3.4mm	3.4mm	3.4mm	3.6mm				
PTr	PTr	PTr/P-IC	PTr	PTr	PTr	PTr	PTr/P-IC	PTr	PTr				
0.5mm	1mm	0.5mm	1.5mm	0.2mm	0.2/0.5/1mm	0.2/0.5/1mm	0.5mm	0.5mm	2mm				
14x5x14.5	12.6x6.3x6.9	17.7x6x10	23x5x16.3	13x11x8	25.4x6.2x10.4	15.1x19x10.4	25x6x10	25x6x10	25.4x6.35x11.7				
High profile Without a positioning boss <sup>4</sup>	Compact with wide slot	Wide slot, With a positioning boss	Wide slot	High-resolution model	High-resolution model	High-resolution model	General purpose	Horizontal aperture	Dustproof				
EE-SY110 ,310,410	EE-SF5 ,SF5-B	EE-SB5	EE-SA105	EE-SA103	EE-SA104	EE-SA407-P2	EE-SA401-P12	B5W-LA01	Z4D-C01				
Actuator								Convergent Reflective	Micro Displacement				
													
Through-hole	Through-hole	Screw Mounting	Through-hole	Through-hole	Through-hole	Snap-In	Snap-In	Screw Mounting	Screw Mounting				
5mm	5mm	5mm	2.1mm	3mm	3mm	3.6mm	3mm	70mm	6.5±1mm				
PTr/P-IC	PTr	PTr	PTr	PTr	PTr	P-IC	P-IC	PTr	Micro Displacement				
not applicable	not applicable	not applicable	not applicable	0.5mm	0.5mm	0.5mm	0.5mm	not applicable	not applicable				
12x4.6x4.8	13x5.7x8	25.4x6.35x11.5	9.4x4.4x14.2	9x4x6	9x4x9.7	27x8x21.9	30x11x18.5	40x8.4x13.3	35.5x15x16				
General purpose	Dustproof	Dustproof	Low operating force	Side attachment	Top attachment	Top attachment	Long distance	detects transparent objects	Resolution: ±10 µm				

Omron Electronic Components reserves the right to make any changes to the specifications of the products described on this packaging at its sole discretion and without prior notice.

Please note: Part pictures are not to scale. Not all product variations shown - please refer to datasheets for further models.

Cat. No.Y211-E1-02 0217(1015)

- Application examples provided in this document are for reference only. In actual applications, confirm equipment functions and safety before using the product.
- Consult your OMRON representative before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems or equipment that may have a serious influence on lives and property if used improperly. Make sure that the ratings and performance characteristics of the product provide a margin of safety for the system or equipment, and be sure to provide the system or equipment with double safety mechanisms.

**Note: Do not use this document to operate the Unit.**

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