

Photomicrosensors Selection Guide



■ Photomicrosensors

Classified According to Product model
Transmissive Models (Groove-type)



* Indicates models with indicators that light red when the light is interrupted.

Infrared light

Appearance	Sensing distance	Configuration	Features	Output configuration	Indicator*	Model					
						NPN output	PNP output				
 	5 mm (groove width)	IR light	Subminiature, slim, pre-wired models Emitter-Detector 	Dark-ON	---	EE-SX770	EE-SX770P				
						EE-SX770A	EE-SX770R				
				Light-ON	---	EE-SX870	EE-SX870P				
						EE-SX870A	EE-SX870R				
				Dark-ON	---	EE-SX771	EE-SX771P				
						EE-SX771A	EE-SX771R				
				Light-ON	---	EE-SX871	EE-SX871P				
						EE-SX871A	EE-SX871R				
				Dark-ON	---	EE-SX772	EE-SX772P				
						EE-SX772A	EE-SX772R				
				Light-ON	---	EE-SX872	EE-SX872P				
						EE-SX872A	EE-SX872R				
 	5 mm (groove width)	IR light	General-purpose models with connectors Emitter-Detector 	Dark-ON/ Light-ON (selectable)	---	EE-SX670	EE-SX670P				
						EE-SX670A	EE-SX670R				
				Dark-ON/ Light-ON (selectable)	---	EE-SX671	EE-SX671P				
						EE-SX671A	EE-SX671R				
				Dark-ON/ Light-ON (selectable)	---	EE-SX672	EE-SX672P				
						EE-SX672A	EE-SX672R				
				Dark-ON/ Light-ON (selectable)	---	EE-SX673	EE-SX673P				
						EE-SX673A	EE-SX673R				
				Dark-ON/ Light-ON (selectable)	---	EE-SX674	EE-SX674P				
						EE-SX674A	EE-SX674R				
				 	3.6 mm (groove width)	Modulated light	Models with connectors Emitter-Detector 	Dark-ON	---	EE-SPX740	---
								Light-ON	---	EE-SPX840	---
Dark-ON	---	EE-SPX742	---								
Light-ON	---	EE-SPX842	---								
Dark-ON	---	EE-SPX743	---								
Light-ON	---	EE-SPX843	---								
	5 mm (groove width)	Modulated light	Models with connectors Emitter-Detector 					Dark-ON	---	EE-SPX741	---
								Light-ON	---	EE-SPX841	---

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Transmissive Models (Groove-type)



Infrared light

Appearance	Sensing distance	Configuration	Features	Output configuration	Model
	3.6 mm (groove width)	Modulated light	Pre-wired models Emitter-Detector 	Dark-ON	EE-SPX302-W2A
				Light-ON	EE-SPX402-W2A
				Dark-ON	EE-SPX304-W2A
				Light-ON	EE-SPX404-W2A
				Dark-ON	EE-SPX305-W2A
				Light-ON	EE-SPX405-W2A
	13 mm (groove width)			Dark-ON	EE-SPX303
				Light-ON	EE-SPX403

Transmissive Models



Infrared light

Appearance	Sensing distance	Configuration	Features	Output configuration	Model
	1 m	Modulated light	<ul style="list-style-type: none"> • Miniature size • Bright, easy-to-see, ON-state indicator 	Dark-ON	EE-SPW311
				Light-ON	EE-SPW411
	300 mm		<ul style="list-style-type: none"> • Miniature, slim • Excellent space efficiency 	Dark-ON	EE-SPW321 EE-SPW321-A
				Light-ON	EE-SPW421 EE-SPW421-A

Reflective Models



Infrared light

Appearance	Sensing distance	Sensing method	Configuration	Features	Output configuration	Model
Horizontal models 	2 to 5 mm	Convergent reflective models	Modulated light	<ul style="list-style-type: none"> • Minimal influence from background objects 	Dark-ON	EE-SPY311
Vertical models 					Light-ON	EE-SPY411
					Dark-ON	EE-SPY312
					Light-ON	EE-SPY412

Selection Guide

■ Photoelectric Sensors

Classified According to Product Model
 Reflective Models



Infrared light

Appearance	Sensing distance	Sensing method	Configuration	Features	Output configuration	Model
<p>Horizontal models</p>	1 to 5 mm	Diffuse reflective	Polarized light	Equipped with sensitivity adjuster	Dark-ON/Light-ON (selectable)	EE-SY671
<p>Vertical models</p>						EE-SY672

■ Liquid Level Photomicrosensors

Classified According to Product Model

Appearance	Outer diameter of mounting pipe	Configuration	Features	Output configuration	Model
<p>EE-SPX613</p>	<ul style="list-style-type: none"> • 6 to 13 mm dia., thickness: 1 mm • Transparent pipe 	Light modulation	<ul style="list-style-type: none"> • Easy mounting • Equipped with sensitivity selector 	Dark-ON/Light-ON (selectable)	EE-SPX613

■ Photomicrosensors to Detect Wafer-carrier Mounting

Classified According to Product Model

Infrared light

Appearance	Sensing distance	Sensing method	Features	Output configuration	Model
<p>EE-SPY801/802</p>	0 to 3 mm (wafer carrier)	Reflective (light modulation)	Wafer-carrier mounting detection	Turns ON when wafer carrier is present.	EE-SPY80 <input type="checkbox"/>