

SA1E Miniature Photoelectric Switches

Key features:

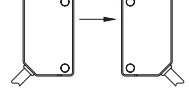
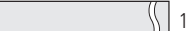
- Seven sensing methods: through-beam, polarized retroreflective, small beam reflective, diffuse, background suppression, convergent, and transparent.
- 2m cable type and M8 connector.
- NPN output, PNP output, light ON, dark ON can be selected.
- Coaxial polarized retro-reflective type (SA1E-X) available for sensing transparent objects.
- Background suppression (SA1E-B) type detects objects only, ignoring the background.
- Red LED available for easy alignment in long distance applications (SA1E-T, -P, -N, and -B)
- Convergent reflective type (SA1E-G) is ideal for detecting objects at a short distance with a background.
- Also available without sensitivity adjustment (SA1E-T, -P)
- Air blower mounting block for installing an air blower to clean the lens surface. Ideal to maintain a clean lens surface and sensor performance.
- UL Listed and CE marked
- IP67



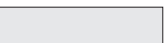
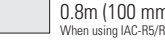
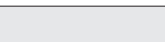
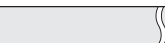
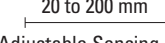
Part Numbers



Photoelectric Switches

Sensing Method				Sensing Range	Connection	Cable Length	Operation Mode	Part No.		
								NPN Output	PNP Output	
Through-beam	Infrared LED	w/Sensitivity Adjustment		 10m	Cable	2m	Light ON	SA1E-TN1-2M	SA1E-TP1-2M	
					Dark ON	SA1E-TN2-2M	SA1E-TP2-2M			
		w/o Sensitivity Adjustment		 15m	Connector	—	Light ON	SA1E-TN1C	SA1E-TP1C	
					Dark ON	SA1E-TN2C	SA1E-TP2C			
	Red LED	w/Sensitivity Adjustment		 10m	Cable	2m	Light ON	SA1E-TN1-NA-2M	SA1E-TP1-NA-2M	
					Dark ON	SA1E-TN2-NA-2M	SA1E-TP2-NA-2M			
		w/o Sensitivity Adjustment		 15m	Connector	—	Light ON	SA1E-TN1C-NA	SA1E-TP1C-NA	
					Dark ON	SA1E-TN2C-NA	SA1E-TP2C-NA			
	Class 1 Laser	w/Sensitivity Adjustment		 10m	Cable	2m	Light ON	SA1E-TAN1-2M	SA1E-TAP1-2M	
					Dark ON	SA1E-TAN2-2M	SA1E-TAP2-2M			
		w/o Sensitivity Adjustment		 10m	Connector	—	Light ON	SA1E-TAN1C	SA1E-TAP1C	
					Dark ON	SA1E-TAN2C	SA1E-TAP2C			
				 30m	Cable	2m	Light ON/ Dark ON	SA1E-LTN3-2M	SA1E-LTP3-2M	
					Connector	—	Light ON/ Dark ON	SA1E-LTN3C	SA1E-LTP3C	

Photoelectric Switches

Sensing Method			Sensing Range	Connection	Cable Length	Operation Mode	Part No.	
							NPN Output	PNP Output
Polarized Retroreflective	Red LED	w/Sensitivity Adjustment	 2.5m (100 mm) When using IAC-R5/R8	Cable	2m	Light ON	SA1E-PN1-2M	SA1E-PP1-2M
			 1.5m (100 mm) When using IAC-R6			Dark ON	SA1E-PN2-2M	SA1E-PP2-2M
			 1.3m (150 mm) When using IAC-RS2	Connector	-	Light ON	SA1E-PN1C	SA1E-PP1C
			 1.0m (150 mm) When using IAC-RS1			Dark ON	SA1E-PN2C	SA1E-PP2C
			 0.8m (100 mm) When using IAC-R5/R8□					
	w/o Sensitivity Adjustment	(Note) Note: Maintain at least the distance shown in the () between the SA1E photoelectric switch and reflector. Reflectors are not supplied and must be ordered separately. See the characteristics on page 219.	 3.0m (100 mm) When using IAC-R5/R8	Cable	2m	Light ON	SA1E-PN1-NA-2M	SA1E-PP1-NA-2M
			 2.0m (100 mm) When using IAC-R6			Dark ON	SA1E-PN2-NA-2M	SA1E-PP2-NA-2M
			 1.4m (150 mm) When using IAC-RS2	Connector	-	Light ON	SA1E-PN1C-NA	SA1E-PP1C-NA
			 1.1m (150 mm) When using IAC-RS1			Dark ON	SA1E-PN2C-NA	SA1E-PP2C-NA
			 1.0m (100 mm) When using IAC-R7□					
	Class 1 Laser	w/Sensitivity Adjustment	 10m	Cable	2m	Light ON/ Dark ON	SA1E-LPN3-2M	SA1E-LPP3-2M
				Connector	-	Light ON/ Dark ON	SA1E-LPN3C	SA1E-LPP3C
Diffuse-reflective	Infrared LED	w/Sensitivity Adjustment	 700 mm	Cable	2m	Light ON	SA1E-DN1-2M	SA1E-DP1-2M
						Dark ON	SA1E-DN2-2M	SA1E-DP2-2M
	w/Sensitivity Adjustment			Connector	-	Light ON	SA1E-DN1C	SA1E-DP1C
						Dark ON	SA1E-DN2C	SA1E-DP2C
Small-beam Reflective	Red LED	w/Sensitivity Adjustment	 50 to 150 mm	Cable	2m	Light ON	SA1E-NN1-2M	SA1E-NP1-2M
						Dark ON	SA1E-NN2-2M	SA1E-NP2-2M
	w/Sensitivity Adjustment			Connector	-	Light ON	SA1E-NN1C	SA1E-NP1C
						Dark ON	SA1E-NN2C	SA1E-NP2C
Background Suppression	Red LED	w/Sensing Range Adjustment	 20 to 200 mm Adjustable Sensing Range	Cable	2m	Light ON	SA1E-BN1-2M	SA1E-BP1-2M
						Dark ON	SA1E-BN2-2M	SA1E-BP2-2M
				Connector	-	Light ON	SA1E-BN1C	SA1E-BP1C
	Class 1 Laser	w/Sensitivity Adjustment	 20 to 300 mm Adjustable Sensing Range	Cable	2m	Light ON/ Dark ON	SA1E-LBN3-2M	SA1E-LBP3-2M
				Connector	-	Light ON/ Dark ON	SA1E-LBN3C	SA1E-LBP3C

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