

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
			Connector	-	Light ON	SA1E-TN1C	SA1E-TP1C
					Dark ON	SA1E-TN2C	SA1E-TP2C
	Infrared LED w/o Sensitivity Adjustment	15m	Cable	2m	Light ON	SA1E-TN1-NA-2M	SA1E-TP1-NA-2M
					Dark ON	SA1E-TN2-NA-2M	SA1E-TP2-NA-2M
			Connector	-	Light ON	SA1E-TN1C-NA	SA1E-TP1C-NA
					Dark ON	SA1E-TN2C-NA	SA1E-TP2C-NA
	Red LED w/Sensitivity Adjustment	10m	Cable	2m	Light ON	SA1E-TAN1-2M	SA1E-TAP1-2M
					Dark ON	SA1E-TAN2-2M	SA1E-TAP2-2M
			Connector	-	Light ON	SA1E-TAN1C	SA1E-TAP1C
					Dark ON	SA1E-TAN2C	SA1E-TAP2C
Class 1 Laser w/Sensitivity Adjustment	30m	Cable	2m	Light ON/ Dark ON	SA1E-LTN3-2M	SA1E-LTP3-2M	
		Connector	-	Light ON/ Dark ON	SA1E-LTN3C	SA1E-LTP3C	

OI Touchscreens

PLCs

Automation Software

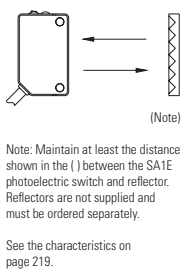

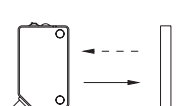
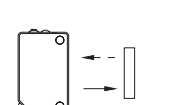
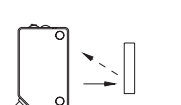

Power Supplies

Sensors

Communication

Barriers

Photoelectric Switches

Sensing Method		Sensing Range	Connection	Cable Length	Operation Mode	Part No.			
						NPN Output	PNP Output		
Polarized Retroreflective	Red LED	 <p>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.</p>	w/Sensitivity Adjustment	Cable	2m	Light ON	SA1E-PN1-2M	SA1E-PP1-2M	
						Dark ON	SA1E-PN2-2M	SA1E-PP2-2M	
				Connector	-	Light ON	SA1E-PN1C	SA1E-PP1C	
						Dark ON	SA1E-PN2C	SA1E-PP2C	
						Light ON	SA1E-PN1-NA-2M	SA1E-PP1-NA-2M	
	w/o Sensitivity Adjustment		Cable	2m	Light ON	SA1E-PN1-NA-2M	SA1E-PP1-NA-2M		
					Dark ON	SA1E-PN2-NA-2M	SA1E-PP2-NA-2M		
			Connector	-	Light ON	SA1E-PN1C-NA	SA1E-PP1C-NA		
					Dark ON	SA1E-PN2C-NA	SA1E-PP2C-NA		
					Light ON	SA1E-PN1-NA-2M	SA1E-PP1-NA-2M		
Class 1 Laser	w/Sensitivity Adjustment	 <p>10m</p>	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	 <p>700 mm</p>	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	 <p>50 to 150 mm</p>	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	 <p>Adjustable Sensing Range</p>	Cable	2m	Light ON	SA1E-BN1-2M	SA1E-BP1-2M		
					Dark ON	SA1E-BN2-2M	SA1E-BP2-2M		
			w/Sensing Range Adjustment	Connector	-	Light ON	SA1E-BN1C	SA1E-BP1C	
	Dark ON					SA1E-BN2C	SA1E-BP2C		
	Class 1 Laser					w/Sensitivity Adjustment	 <p>Adjustable Sensing Range</p>	Cable	2m
			Connector	-	Light ON/ Dark ON				

OT Touchscreens

PLCs

Automation Software

Power Supplies

Sensors

Communication

Barriers