



Highlights

- **NEW!** Background suppression (BGS) can reliably detect target objects regardless of color and reflectivity
- Sensing range: 20mm to 200mm
- Compact size: 31.5mm H x 19.5mm W x 10.8mm D
- IP67 rated, UL/c-UL listed and CE marked
- Fast response time: 1ms
- 2m cable or M8 connector types available
- Competitive price
- See back page for part numbers and pricing



NEW Miniature Photoelectric Sensors with Background Suppression

Ensuring accurate detection of objects is a real challenge in many control systems, especially when the objects are close to a surface that you don't want to detect such as a conveyor belt. But this problem is a thing of the past with the new SA1E miniature background suppression (BGS) photoelectric sensor from IDEC!

This sensor determines the presence of target objects based on a predetermined sensing distance. That means objects can be accurately and reliably detected regardless of color, reflectivity or proximity to other objects. The sensor can ignore workers in the foreground, as well as sense specific objects without detecting the conveyor belt or other objects in the line.

Adjustable sensing ranges from 20mm to 200mm enable the SA1E (BGS) to precisely

ly detect targets while ignoring objects beyond the defined cut-off range. And in just 1ms. This high level of precision, speed and repeatability means less errors and increased productivity.

A choice of NPN or PNP outputs are available, as well as a choice of Dark ON or Light ON operation modes. All SA1E sensors are IP67 rated, UL/c-UL listed and CE marked.

With the addition of a background suppression sensor to the SA1E family, IDEC offers sensors with five different sensing methods: through-beam, polarized retroreflective, diffuse-reflective, small-beam reflective and background suppression.

For additional information, please contact IDEC at 1-800-262-IDEC (4332) or visit www.idec.com/sensors.



Market Information

The current North American photoelectric and proximity sensors market is estimated at \$620 million. Photoelectric sensors comprise 30-35% of that. It's forecast that photoelectric sensors will be the largest contributor and fastest growing segment in this market with a compound annual growth rate of 5-6%.

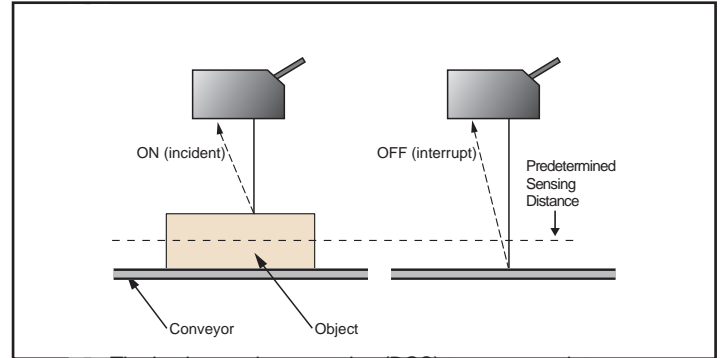
IDEC's photoelectric sensor business has grown nearly 30% each year of the last few years. With the addition of a background suppression sensor to the SA1E family, we expect this year to be even better.

Selling Strategies

Background suppression type sensors are used in applications where it's critical to detect targeted objects with precision and repeatability. It produces less errors and as a result, increases productivity. The largest industries using photoelectric sensors are Material Handling, Packaging Equipment, Semiconductor Manufacturing Equipment, Mail Sorting Machinery, Printing Press and Pharmaceutical. When selecting sensors, the most important

criteria are: reliability, durability and ruggedness. IDEC SA1E photoelectric sensors give you all that plus the fastest response for the lowest price. Top SA1E (BGS) selling features include:

- Excellent reliability and precision
- High-speed response
- Miniature design
- cULus listed, CE marked
- Competitive Price



Competitor Comparison

Company	List Price (MSRP)	Series	Power voltage	Sensing range	Control output	Operation mode	Response time	Connection method	IP rating
IDEC	\$85	SA1E	12-24VDC	20-200mm	NPN or PNP	Light or Dark ON	1ms	2m cable or M8 connector	IP67
Allen-Bradley	\$155	42BT	12-24VDC	0.2-2m	NPN or PNP	Light and Dark ON	2ms	-	IP50
Automation Direct	\$52.50	CX	10-36VDC	15-150mm	4 Mode in One	Light or Dark ON	100ms	2m cable or M8 connector	IP65
Banner	\$157	QMT42	10-30VDC	25-400mm	NPN or PNP	Light and Dark ON	1ms	2m or 4-pin Disconnect	IP67
Baumer Electric	\$99	MINOS	10-30VDC	10-60mm	NPN or PNP	Light or Dark ON	0.5ms	2m cable or M8 connector	IP65
Omron	\$135	E3Z-LS	12-24VDC	20-200mm	NPN or PNP	Light or Dark ON	1ms	2m cable or M8 connector	-
P&F	\$126	ML6	10-30VDC	20-120mm	NPN and PNP	4 Modes in One	0.5ms	2m or Quick Connect	IP67
Sick	\$154	WTB160T	10-30VDC	20-150mm	NPN or PNP	Light and Dark ON	2.5ms	2m cable or M8 connector	IP67
Siemens	-	K20	10-30VDC	25-100mm	NPN or PNP	Light or Dark ON	0.5ms	2m cable or M8 connector	IP67
Sunx	\$114	CX-400	12-24VDC	20-300mm	NPN or PNP	Light or Dark ON	1ms	2m cable or M8 connector	-

New SA1E (BGS) Part Numbers

Part Numbers	Description	List Price (MSRP)
SA1E-BN1-2M	2m cable, Light ON, NPN output	\$85
SA1E-BN2-2M	2m cable, Dark ON, NPN output	\$85
SA1E-BP1-2M	2m cable, Light ON, PNP output	\$85
SA1E-BP2-2M	2m cable, Dark ON, PNP output	\$85
SA1E-BN1C	M8 connector, Light ON, NPN output	\$85
SA1E-BN2C	M8 connector, Dark ON, NPN output	\$85
SA1E-BP1C	M8 connector, Light ON, PNP output	\$85
SA1E-BP2C	M8 connector, Dark ON, PNP output	\$85

SA1E Connector Cable Part Numbers

Part Numbers	Description	List Price (MSRP)
SA9Z-CM8K-4S2	Straight, 2m	\$20
SA9Z-CM8K-4S5	Straight, 5m	\$26
SA9Z-CM8K-4L2	Right angle, 2m	\$20
SA9Z-SM8K-4L5	Right angle, 5m	\$26

For more information, call IDEC at: 800-262-IDEC (4332)
 1175 Elko Drive • Sunnyvale, CA 94089
 Fax: (408) 745-5258 • www.idec.com