



## Improved IDEC Photoelectric Sensors Boost Performance and Capabilities

***The SA2E miniature photoelectric sensor family improves on current models with a standardized ASIC design, delivering faster responses and better detection.***

*IDEC Corporation, Sunnyvale, CA, May 9, 2023* — IDEC Corporation introduces the SA2E general-purpose photoelectric (PE) sensor family, in five major models, each which improve on or replace proven SA1E products. A new ASIC, common to the entire offering, provides a significantly improved price/performance ratio, while delivering better response times and more capable detection.

SA2E PE sensors are offered in five major variations:

- T: Through-beam, for detecting objects passing between emitter/receiver pairs.
- P: Polarized retro-reflective, for detecting objects passing between the receiver and a reflector, even in difficult lighting conditions.
- D: Diffused-reflective, for detecting targets by the light reflected from the target.
- B: Background suppression reflective, for improved and reliable detection of a wide variety of targets by the light reflected by the target.
- N: Small beam reflective, for close detection of small targets.

The SA2E sensors generally improve response times to 0.5ms, compared with 1.0ms for previous generation models, for better detection of smaller and faster moving objects. Sensors are switchable between “light-on” and “dark-on” operating modes, and applicable models have an on-board sensitivity or range adjustment potentiometer. Depending on the model, sensing distances can range up to 20m for through-beam, up to 5m for retro-reflective, and between 10mm and 1000mm for other reflective models. Tighter beams and more adjustability help designers deploy the sensors in a greater variety of applications.

Electrically, the control output is connectable as NPN/PNP open collector with output reverse-polarity protection. The devices consume very low current on the order of 20mA to 35mA, at supply voltages of 12VDC to 24VDC, with the ability to switch up to 100mA maximum. Designers can choose models with cables, or on-board M8 connectors for use with straight and right-angle cables.

SA2E PE sensors are extremely compact at 10.8x19.5x31.5mm, and various mounting brackets are available. Sensors are built to operate in a wide range of temperatures from -30 to +55DegC, and an optional air blower allows stable detection, even in dusty or misty environments.

IDEC SA2E PE sensors provide a superior price/performance detection option for OEM machinery, material handling equipment, freight elevators, automated guided vehicles, robotics, pick-and-place systems, packaging machines, and many other types of applications.

IDEC also offers a wide variety of other complementary control and automation products to help users best meet their requirements. As with all its products, IDEC provides free tech support for its SA2E

series PE sensors. For complete specifications, additional information, or technical support, please contact IDEC Corporation at 800-262-IDEC (4332), or visit us online at <https://lp.idec.com/SA2E-Miniature-US.html> .

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**About IDEC:** *IDEC Corporation is a global supplier that has provided innovative and reliable industrial automation and control products since 1945. Covering a broad range of market needs, these feature-rich and value-driven products include PLCs, human machine interfaces (HMIs), safety products and other industrial automation components. By delivering world-class products backed by personalized service and highly-rated technical support, IDEC enables design engineers to create lean, cost-effective and safe solutions to optimize their automation applications. With the recent acquisition of APEM, one of the world's leading manufacturers of operator interface panels and related components, IDEC continues to enhance our customers' ability to create high-quality solutions. For additional information, visit [www.IDEC.com/usa](http://www.IDEC.com/usa)*

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