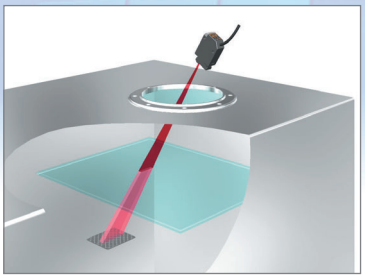
NEW

OMRON

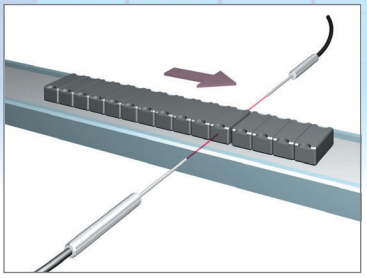
New Models That Counteract the Decline in Operating Rates Caused by Dust and Dirt

Advanced ATC Models

- **Active Threshold Control (ATC)**
  Automatically adjusts the threshold value.
- **ATC Error Output (Selectable Function)**
  Provides an error output when ATC does not adjust the threshold value.
- **Alarm Output (Selectable Function)**
  Provides an alarm when maintenance is required.



Glass substrate detection though view ports



Chip component detection

Digital Laser Sensors
E3C-LDA□AT

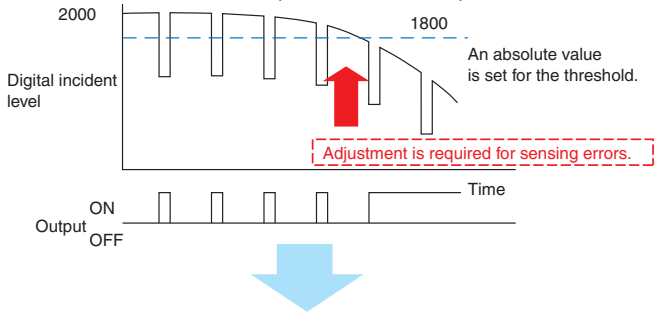
Digital Fiber Sensors
E3X-DA□AT-S

Technology

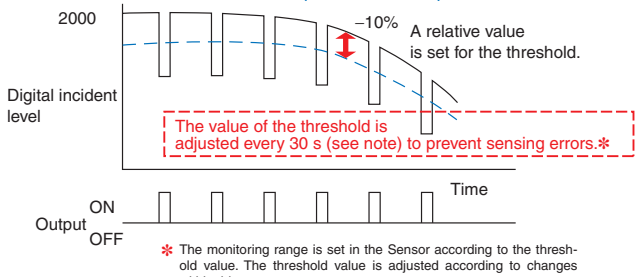
Intelligently Solve Problems Onsite with ATC Function

A unique OMRON algorithm has been used that can determine whether changes have been caused by dust and dirt or by differences in workpieces.
The threshold value is automatically adjusted by the Sensor according to changes to increase equipment operating rates by reducing sensing errors. This is particularly true in applications requiring high-precision detection.

Fixed Threshold Value (Previous Models)



Active Threshold Control (ATC Models)



* The monitoring range is set in the Sensor according to the threshold value. The threshold value is adjusted according to changes within this range.

The *DINC* Engine for High-performance Sensing

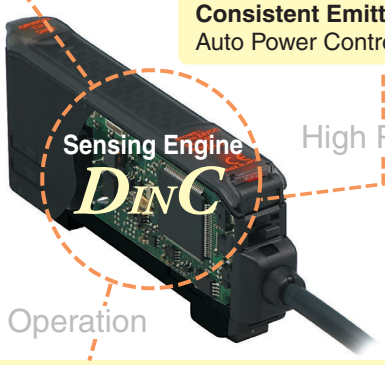
OMRON's many years of accumulated sensing technology and high-speed digital processing techniques merge to meet onsite needs. Our goal is high-performance sensing that provides easy, reliable application.

Reliable Detection of Small Workpieces
12-bit A/D converter (4,000 resolution), high-speed response of 48 μs (Fiber Sensors)

Fine Sensing

Automatic Compensation for External Changes
Active Threshold Control (ATC)

Consistent Emitter Power
Auto Power Control (APC)



High Performance

Easy Operation

Easy-to-read Displays Even at a Distance
Intelligent Display

Eliminates the Need for Distance Mode Settings
Power Tuning

Ordering Information

Digital Fiber Sensor

Type	Appearance	Functions	Model	
			NPN output	PNP output
Pre-wired Models		ATC ATC error output Alarm output	E3X-DA11AT-S	E3X-DA41AT-S
Connector Models			E3X-DA6AT-S	E3X-DA8AT-S

Separate Digital Amplifier Laser Sensors

Type	Appearance	Functions	Model	
			NPN output	PNP output
Pre-wired Models		ATC ATC error output Alarm output	E3C-LDA11AT	E3C-LDA41AT
Connector Models			E3C-LDA6AT	E3C-LDA8AT

Ratings and Specifications

Item	Type / Model	Digital Fiber Sensors		Separate Digital Amplifier Laser Sensors	
	NPN output	E3X-DA11AT-S	E3X-DA6AT-S	E3C-LDA11AT	E3C-LDA6AT
	PNP output	E3X-DA41AT-S	E3X-DA8AT-S	E3C-LDA41AT	E3C-LDA8AT
Response time	Super-high-speed mode	Operate or Reset: 80 μs		Operate or Reset: 100 μs	
	High-speed mode	Operate or Reset: 250 μs		Operate or Reset: 250 μs	
	Standard mode	Operate or Reset: 1 ms			
	High-resolution mode	Operate or Reset: 4 ms			
Functions	ATC	Active threshold control (used for output 1)			
	I/O settings	The signal that is output can be selected (used for output 2): ATC error output			
	Startup operation	The operation when power is turned ON can be selected: No operation, PT, or PT + ATC			

Note: Basic performance is the same as the Advanced Twin-output Sensors. Refer to E3C-LDA Datasheet (E338) and E3X-DA-S Datasheet (E336) for details. Only differences from the Advanced Twin-output Sensors have been given above.

This document provides information mainly for selecting suitable models. Please read the *Instruction Sheet* carefully for information that the user must understand and accept before purchase, including information on warranty, limitations of liability, and precautions.

Note: Do not use this document to operate the Unit.

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Note: Specifications subject to change without notice.

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