EX SERIES DUAL-DIGITAL DISPLAY OPTICAL FIBER AMPLIFIER

Intelligent adjustment, simple and stable

Accuracy of detection and simplicity for the customer. Long-term stable brightness and reduced device maintenance.

Setting up with just one key

Just one key to set, press the SET button when there is no target detection object, and press the SET button again when there is a target detection object to automatically set the optimal position.

Dust cover

For easy observation, the dust cover is close to the display.

Adjustable light projection amount

In the case of close range detection or detection of transparent objects or small objects, when the lighted level is saturated, the light projection amount by the sensor can be adjusted without changing the response time to realize stable detection. This function makes it easy to set up detection that previously required changes in response time and optical fiber.

Two digital screens are convenient to use

Equipped with two digital screens, allowing you to check the base value, the light input amount, and various settings at the same time, making high operability.
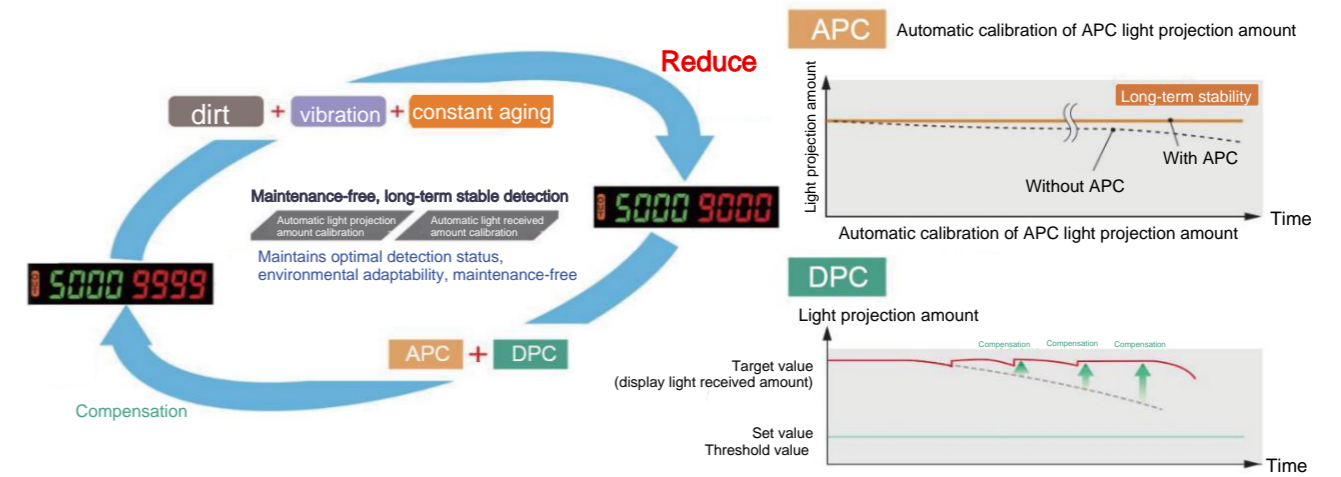
Base value   Light input amount
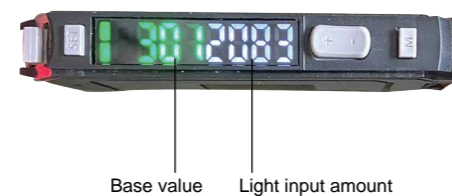
Wire outgoing method

Wire lead type (standard with two meters of flexing-endurable cable) and connector type are available.


Function introduction

Light amount value compensation

The automatic maintenance function restores the sensor to its original display state when it detects a decrease in brightness due to dirt or other reasons. This function eliminates the effects of the surrounding environment and enables the sensor to consistently perform high-precision detection.

Reduce

dirt + vibration + constant aging

Maintenance-free, long-term stable detection

Automatic light projection amount calibration   Automatic light received amount calibration

Maintains optimal detection status, environmental adaptability, maintenance-free

APC + DPC

Compensation

APC   Automatic calibration of APC light projection amount

Light projection amount

Long-term stability

With APC

Without APC

Time

Automatic calibration of APC light projection amount

DPC

Light projection amount

Compensation   Compensation   Compensation

Target value (display light received amount)

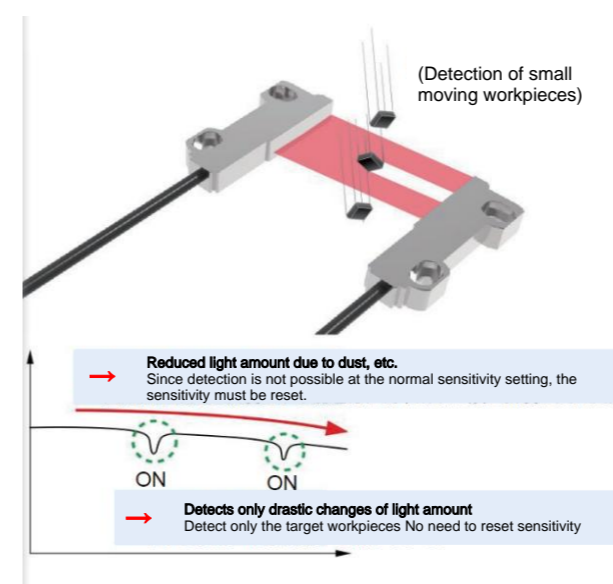Set value Threshold value

Time

Four methods of detection

Four detection modes are available: standard detection mode 1ms, high speed 250us, ultra-high speed 25us and high precision 16ms, which can also be used to detect small workpieces moving at high speed.
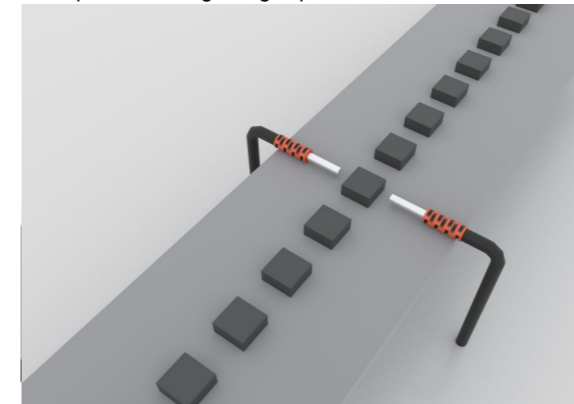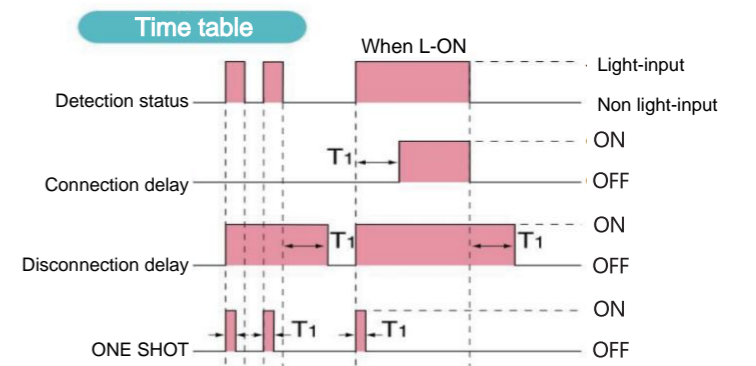
Differential detection mode

Measurements that used to be performed by multiple sensor and those for which it was difficult to set a base value can be realized.

(Detection of small moving workpieces)

→ **Reduced light amount due to dust, etc.** Since detection is not possible at the normal sensitivity setting, the sensitivity must be reset.

ON   ON

→ **Detects only drastic changes of light amount** Detect only the target workpieces No need to reset sensitivity

There are 3 types of timers available

Equipped with switch-on delay, disconnect delay and ONE SHOT timer. (Time of timer is about 1ms~10s)

Time table

When L-ON

Detection status   Light-input / Non light-input

Connection delay T_1 ON / OFF

Disconnection delay T_1 T_1 ON / OFF

ONE SHOT T_1 T_1 ON / OFF

ON delay   Delayed output of ON status after detection.

OFF delay   When the detection time is short and it is not possible to execute the detection through PLC. Maintains output of ON status.

SHOT inching   Timed output is possible even if the size of the detected object is uneven.