

# FASTUS

FASTUS is a product brand of Optex FA.

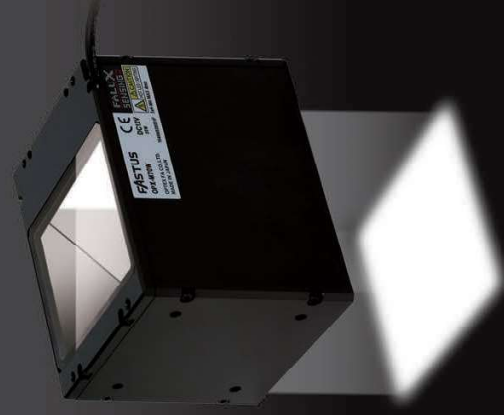


### [ Product Lineup ]

- LED Lighting
  - Ring Lighting
  - Bar Lighting
  - Backlighting
  - Coaxial Lighting
  - Spot Lighting
- Controllers
- Power Supplies
- Options

## LED Lighting for Machine Vision

# 2017



New Product

Sensing Coaxial Lighting

### OPX Series

**Attention: Not to be Used for Personnel Protection.**  
Never use these products as sensing devices for personnel protection. Doing so could lead to serious injury or death.  
These sensors do not include the self-checking redundant circuitry necessary to allow their use in personnel safety applications.  
A sensor failure or malfunction can cause either an energized or de-energized sensor output condition.  
Please consult our distributors about safety products which meet OSHA, ANSI and IEC standards for personnel protection.

- Specifications are subject to change without prior notice.
- Specifications and technical information not mentioned here are written in Instruction Manual. Or visit our website for details.
- All the warnings and cautions to know prior to use are given in Instruction Manual.



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**OPTEX FA CO., LTD.**

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## LED Lighting

### Ring Lighting

Sensing LED Ring Lighting  
**OPR Series**



High brightness Feedback  
Condensed / Low angle / Wide

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Sensing Ring Lighting with Temperature Protection Circuit!

**OPR-SF Series**



High brightness Feedback  
Condensed / Low angle / Wide

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### Bar Lighting

High-Brightness Bar Lighting  
**OPB Series**



High brightness Feedback  
Wide range

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Sensing Bar Lighting  
**OPB-S Series**



High brightness Feedback

**p.23**

### Backlighting

Sensing LED Backlight  
**OPF Series**



High brightness Feedback  
Narrow to wide range

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### Coaxial Lighting

Sensing Coaxial Lighting  
**OPX Series**



High brightness Feedback  
Condensed / Wide

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### Spot Lighting

Sensing Spot Lighting  
**OPS-S Series**



High brightness Feedback  
For use with telescopic lenses

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## Controllers / Power Supplies

LED Lighting Controller  
**OPPD Series**



PWM dimming Capacity: 8W  
Ultra-compact

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LED Lighting Controller Advanced  
**OPPF Series**



PWM dimming Capacity: 8W  
Parallel / RS232 / 0 to 5 V

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Dual-Output Power Supply (CC + PWM)  
**OPPCW Series**



PWM dimming / Constant current  
Parallel / RS232

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## Options

Cable  
**OP Series**



Emission Banding Illumination coded  
Robotic cable

**p.63**

Lighting Monitoring and Illumination Check Sensor  
**MDF Series**



Lighting monitoring Illumination verification  
Amplifier / Fiber

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## Technical Guide

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## What are FALUX and FALUX sensing?

Optex FA LED lighting is equipped with a proprietary technology designed to maintain brightness automatically over long periods by detecting the temperature and brightness of the lighting.

### Problems with LED Lighting

With conventional LED lighting, three problems arise in regard to managing brightness.

#### Problem 1: Variations in brightness between individual LEDs

Because variations in forward voltage of individual LED can affect the brightness of the LED, the forward voltage must be aligned through sorting or some other means.

#### Problem 2: Fluctuations in brightness due to heat generated by the LED

When LED lighting is turned on, the LED itself generates heat, causing temperature to rise.

As the internal or ambient temperature rises, the brightness decreases.

#### Problem 3: Management of long-term variations in brightness

After 40,000 hours of use, the brightness of LED lighting drops by 50%. This means that brightness must be adjusted when used for long periods.



### Solution

(FALUX)

- Applicable Series**
- OPR ▶ P3
  - OPR-SF ▶ P9
  - OPB ▶ P13
  - OPB-S ▶ P23
  - OPF ▶ P27
  - OPX ▶ P35

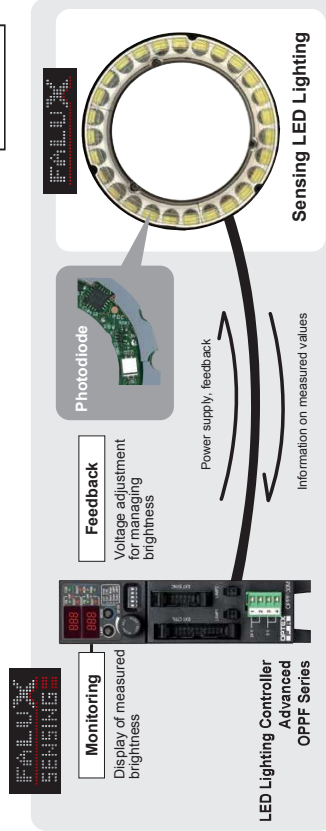


### Solution

(FALUX sensing)

- Applicable Series**
- OPR ▶ P3
  - OPR-SF ▶ P9
  - OPB-S ▶ P23
  - OPF ▶ P27
  - OPX ▶ P35
  - OPSS ▶ P41

### Outline of FALUX and FALUX sensing



⇒ See P. 4 for details.