FHV7

Ultimate flexibility to fit ever-changing production scene

OMRON

Processing performance min 2-3x faster than main competitor

A robust all-in-one body that makes it easy to install

Quick integration via a variety of interfaces

Industries first 12MPix Smart Camera

High performance FH Vision Software onboard

Hardware scalability using one Software

Multi Color Illuminator

High-speed and long lasting Liquid lens Modules

Wide range of optical solutions C-mount Version for combination of standard optics

Product Highlights

OMRON

Flexibility accommodates object changes

Difficulties in processing product variation

Flexibly accommodates object changes

A robust all-in-one body that makes it easy to install

Harsh installation environments

A robust all-in-one body that makes it easy to install

Excellent productivity performance

Urgent need to improve manufacturing quality

Excellent productivity performance

Accommodate color variations

R   G   B   IR

Robust structure

FHV7 Applications

Commodity

- Food safety
- Reduction of manual work
- Higher implementation of automatic systems like robots
- Higher requirements concerning design and quality standard

Automotive

- Traceability / code reading / identification
- High precision measuring
- Quality control (assembly line / robot guided)

Food & Commodity + Pharma

- Label / print inspection
- Packaging
- Quality control
- Serialization

Additional features:

Ultimate flexibility to fit ever-changing production scene
• Modular structure for a wide range of applications
• Responding to changes of objects like human eyes
• Raising quality standard without sacrificing cycle time
• Wide range of optical solutions
• Hardware scalability using one software
• Easy integration in your system and machine platform

Nearly-infinite combination to fit any production
• Rugged design with IP67 classification
• Maintains IP67 waterproof structure even after module replacement, allowing use in wet conditions.
• Waterproof hood
• Captive screws are used in the modules. The screws do not drop on products.

Single camera for inspecting various products
• Multi-color light - accommodates color variations
• Autofocus lens - accommodates size variations
• Industries first 12MPix smart camera
• Easy addition of external lights and filter replacement
• Easy filter replacement

FHV7 Product Portfolio

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Smart Camera

PROFI NET®
EtherNet/IP
Ethernet
EtherCAT. *1

Image sensors (color/monochrome)

Global shutter

0.4 Mpix	1.6 Mpix
3.2 Mpix	5 Mpix

Rolling shutter

6.3 Mpix	12 Mpix

Modules

Lenses

High-speed autofocus NEW
6/19 mm

Standard autofocus
6/9/12/16/25 mm

Module Auto-adjust function PATENT PENDING *2
This function automatically adjusts according to the mounted lens module so that the image sensor has uniform light sensitivity throughout its area.
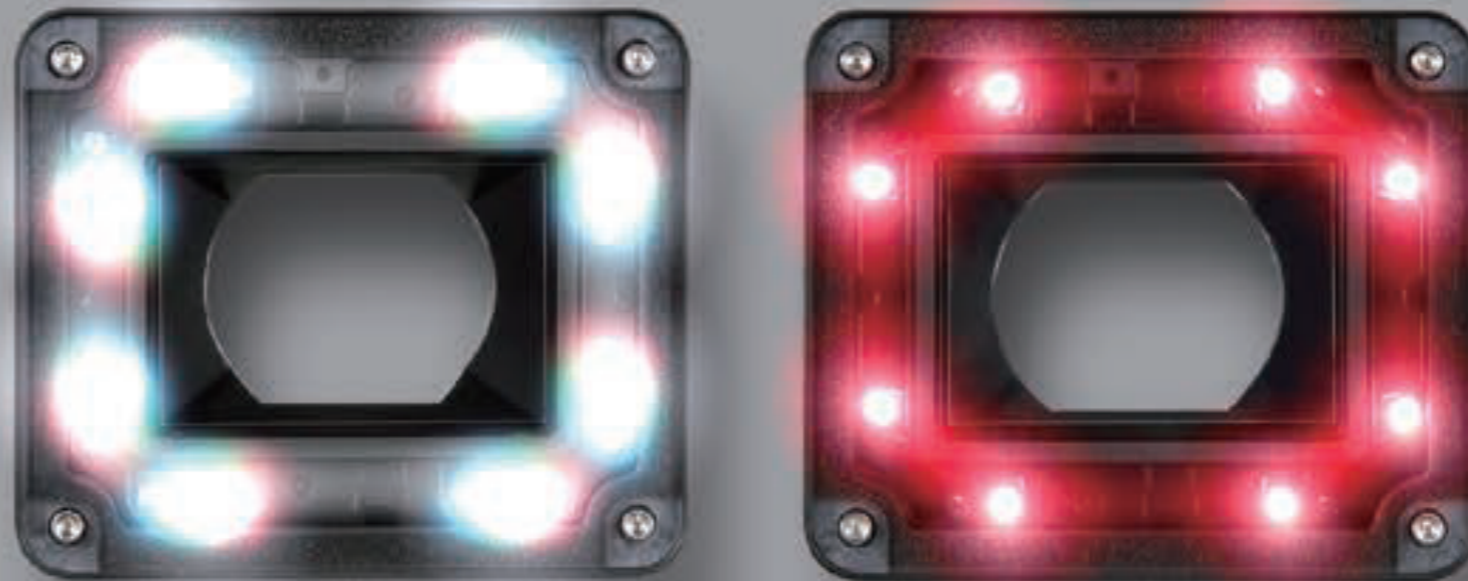
C mount lenses (examples)
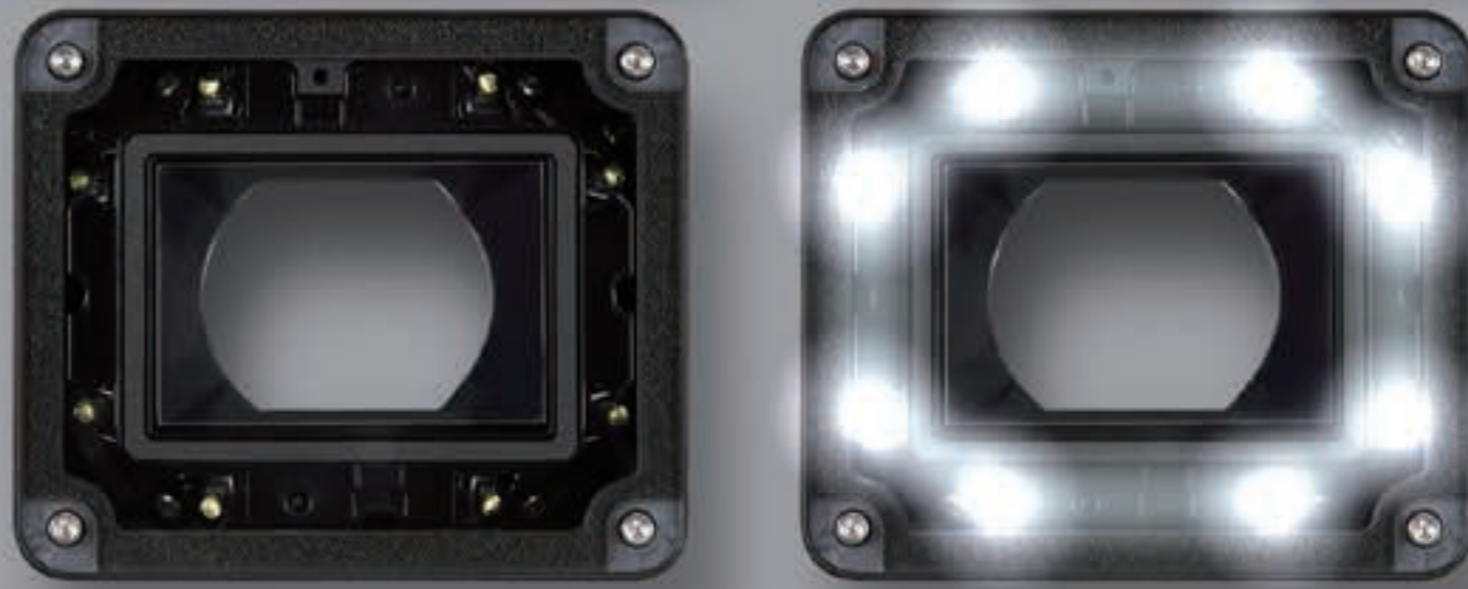
Waterproof hood

This component is required to ensure IP67 protection without using a lighting module.

Lights

Multi-color (R/G/B/IR)

Red

IR

White

Easy connection with FLV/FL External Lights

You can select from a broad lineup of more than 150 models.

Optical Filters

Diffusion filter

Polarization filter (visible light)

Polarization filter (infrared and visible light)

*1. The FHV-SDU30 EtherCAT® Interface is required for EtherCAT connection.
*2. "Patent pending" means that we applied for a patent in Japan, and "Patented" means that we obtained a patent in Japan. (As of April 2019)