

Short Wave Infrared Industrial Camera Series

Product Guide



Overview

Omron's brand new SWIR Camera Series gives vision engineers the incredible technology of Short Wave Infrared inside of Omron's state of the art mechanically designed Industrial Cameras. The SWIR Cameras features three unique interfaces in GigE Vision, USB3 Vision & Camera Link, alongside a 0.3MP or 1.3MP resolution. Utilizing Short Wave Infrared Technology with the Sony Pregius IMX990 & IMX991 SWIR Sensors, users can see beyond the standard visual spectrum in order to inspect what was previously thought to be impossible.

The Omron SWIR Camera Series is compatible with a myriad of Machine Vision softwares, short wave infrared lenses, lighting and more. This allows users to truly customize their application when using the Omron SWIR series. If you need to inspect products through a plastic wrapping, a top layer of a board, or any other type of obstacle, then the Omron SWIR Series is the camera series to look for!

Key features

- **Top of the line, high-end sensors-** Sony Pregius IMX990 and IMX991 SWIR Sensors
- **Unique Interfaces for Customizability-** GigE Vision, USB3 Vision, Camera Link Interfaces
- 0.3MP or 1.3MP resolution
- **One-of-a-kind Heat dissipation technology-** Fanless Peltier Cooling Design
- **Removes environmental dependency and variability-** SWIR technology allows for highly controlled and precision inspection
- **Inspect the impossible-** SWIR technology allows inspection throughout the full manufacturing process, even under plastic wrap or silicon coating.

Applications

The Omron SWIR Camera Series is focused on Machine Vision applications within Automation that require unique forms of inspection, specifically around utilizing Short Wave Infrared technology. The SWIR Series is ideal for companies who need to utilize different visual spectrums to inspect through layers of a product or are looking to remove ambient lighting problems by switching to a different lighting wavelength.

The SWIR Camera Series is designed for use in highly industrialized, automation, and manufacturing applications, specifically in the, Semiconductor, Electronics, Life Sciences, and Food/Commodity industries. Some of the applications that are ideal for the SWIR Camera Series are: Wafer Inspection, Fill Level Detection, Blood Flow Analysis, and more.

- Wafer Inspection
- Package Content Inspection
- Fill Level
- Liquid Leak
- Internal Wiring Inspection
- Crop & Agriculture Inspection
- Fruit Inspection

Primary Benefits

- **Inspect the Impossible:**
Utilizing Short Wave Infrared Technology, Omron industrial cameras can see through different visual spectrums which allows for inspection of products after manufacturing even if they are covered in materials such as plastic wrap or silicon coating.
- **See Beyond Light:**
Short Wave Infrared allows cameras to break away from traditional lighting in favor of a new wavelength. This removes any environmental lighting conditions from the equation and allows for highly controlled and precision inspection.

Product Selection & Accessories:

Part Number	Interface	Resolution	Frame Rate	Sensor Size
STC-LBS34POE-SWIR	GigE Vision	0.3 MP	242 FPS	1/4"
STC-LBS132POE-SWIR	GigE Vision	1.3 MP	84 FPS	1/2"
STC-LBS34U3V-SWIR	USB3 Vision	0.3 MP	260 FPS	1/4"
STC-LBS132U3V-SWIR	USB3 Vision	1.3 MP	134 FPS	1/2"
STC-LBS34CL-SWIR	Camera Link	0.3 MP	258 FPS	1/4"
STC-LBS132CL-SWIR	Camera Link	1.3 MP	125 FPS	1/2"

Omron Automation | 800.556.6766 | automation.omron.com

