

## Industrial GigE vision VIS-SWIR PoE cameras



MORE INFO



### KEY ADVANTAGES

#### Visible + SWIR

Image acquisition in the visible and short-wave infrared spectrum up to 1.7  $\mu\text{m}$ .

#### High quantum efficiency even in visible wavelength

Thinner top indium-phosphorus layer allows more light reaching InGaAs layer.

#### Finer pixel pitch and smaller pixels

High-resolution in small camera.

*Dual use product subject to export control.*

ITALA G.SWIR cameras are designed and manufactured in Italy by Opto Engineering®, combining a robust and reliable design with advanced functionalities.

**ITALA G.SWIR** is a series of GigE vision PoE industrial cameras capable of detecting both visible and short wave infrared (SWIR) light from 400 to 1.700 nm using Sony's SenSWIR™ InGaAs technology.

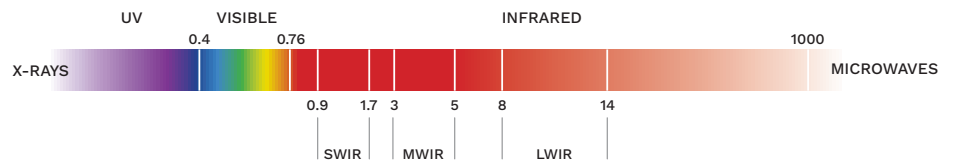
These cameras enable a wide range of applications in high resolution spanning from semiconductors precision positioning (SWIR light penetrates silicon wafers) to food inspection (water absorbs light at a wavelength equal to 1450 nm).

### HIGH QUALITY SENSORS



#### SenSWIR™ sensors

SONY SenSWIR™ image sensors detect wavelengths from 0.4  $\mu\text{m}$  to 1.7  $\mu\text{m}$ .



### APPLICATIONS



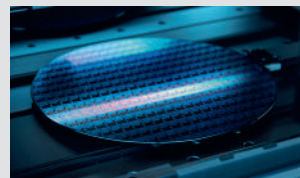
Food sorting & foreign object detection.



Plastic waste recycling.



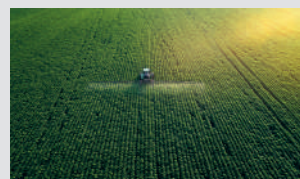
Detection of contaminants in pharmaceutical tablets.



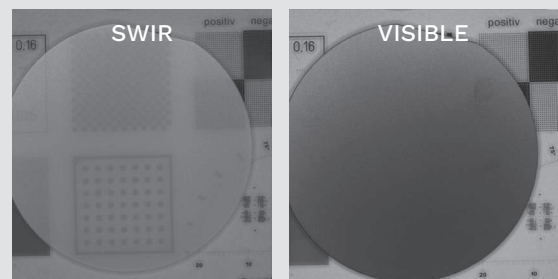
Semicon - silicon wafer positioning & ICs inspection.



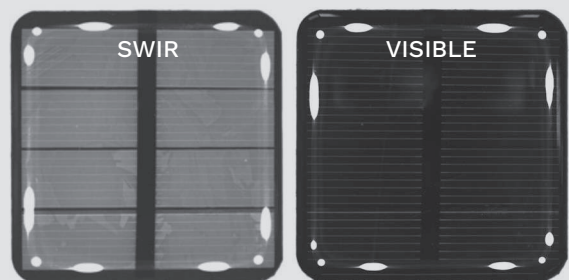
Identification of flames in wildfires through smoke.



Crop Health Assessment.



Silicon wafers appear transparent at 1200 nm. Backside illumination enables to inspect the alignment of marks in bonded wafers pairs. Frontside SWIR illumination can be used to detect micro-cracks and voids.



Multi-crystalline silicon solar cells can be inspected at 1300 nm to identify cracks or other defects.