

BVC2951U ESD Visualizing Camera

Detect the instant of discharge phenomenon and capture it in real time !!

By using prism spectroscopic imaging technology, this ESD phenomenon visualizing camera, BVC2951U, works very well to monitor the place of the electrostatic discharge on the production site.

BVC2951U captures NUV rays generated at the time of discharge using ultra-sensitive camera, and it is able to monitor where and when the low voltage ESD (200V as minimum) occurs.

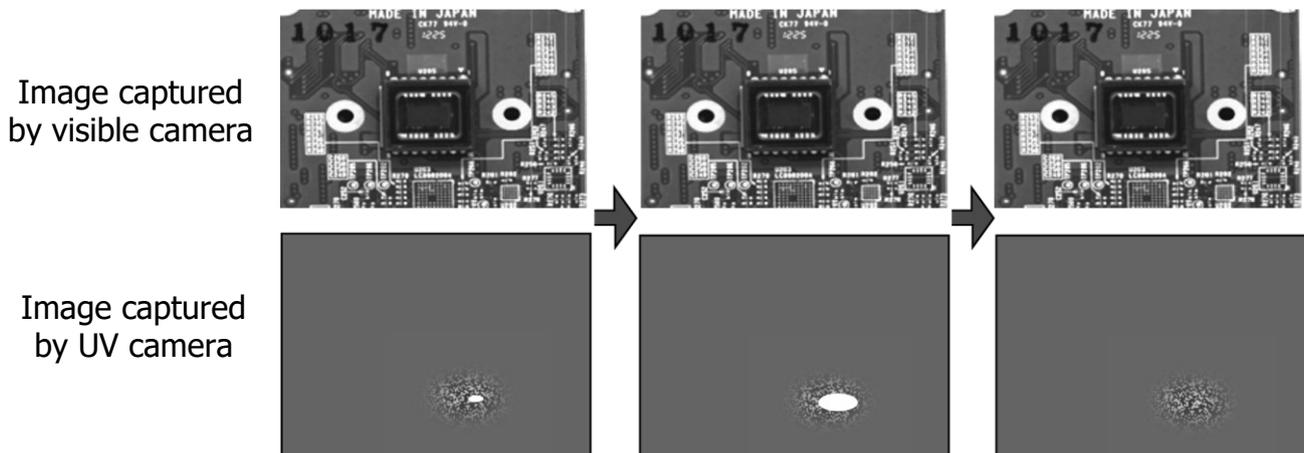


BVC2951U consists of two kinds of sensors, one for taking the visible image of the object and the other for detecting electric discharge phenomenon. It uses a spectroscopic technology adopting a mirror to split the visible light (400nm to 700nm) and NUV rays (200nm to 400nm). BVC2951U has two sensors, a visible sensor with 640 x 480 pixels and an ultra-sensitive UV sensor, and one fixed focal lens. As two sensors and one lens are all in one package, images from two sensors are in the same field of view, which enables BVC2951U to precisely detect the originating point of the ESD damage.

(BVC2951U is a build-to-order product.)

ESD means **ElectroStatic Discharge**, and when the ESD occurs, it generates NUV rays from around 200nm to 400nm (UV-B). Since the light energy produced by ESD is very small, the ultra-sensitive sensor is required to capture this phenomenon.

Illustration Diagram of Capturing



Examples of Application

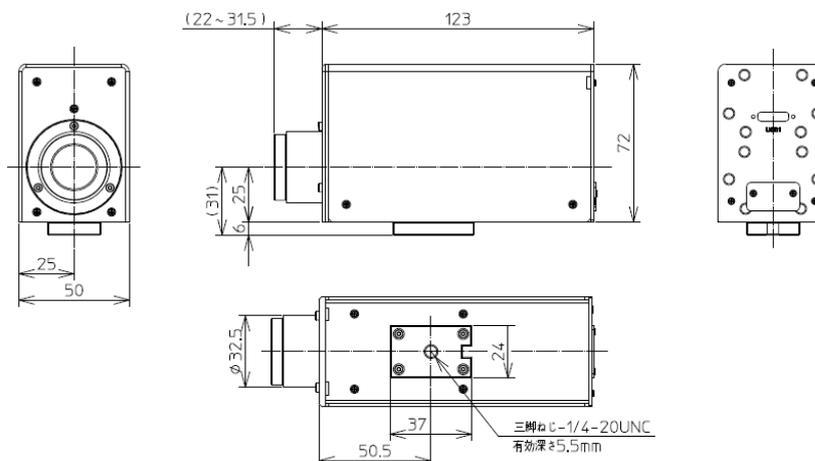
- Manufacturing process of semiconductors (Discharge inside the substrates)
- Production site for display panel
- Places requiring ESD monitoring such as in chemical plants
 - ▶ Discharge on film delamination
 - ▶ Discharge of plastic products
- ESD monitoring for moving workers
- ESD of electric tools
- Managing health injury of workers under electrostatic environment
 - ▶ Efficiency measurement of neutralization apparatus
- Visualization of minimal corona discharge

Specifications

Item		Specifications
Sensor	Visible (B/W) (400nm to 700nm)	CMOS image sensor Effective pixel: 640(H) x 480(V) Image size: 6.34mm x 4.75mm
	NUV (200nm to 400nm)	Ultra-sensitive sensor Effective pixel: 640(H) x 480(V), Image size: 6.34mm x 4.75mm
Output signal		USB 3 (Visible, NUV), Image output pixel: 640(H) x 480(V) Frame rate: 59.94fps (max)
Synchronization		Internal
Minimum illumination		10lx (F2.8, 50%)
Gain		Gain x1/x2/x8 selectable
Gamma correction		built-in
Lens		35mm, F2.8, Auto iris: ON/OFF
Shutter		OFF~1/10000
Interface		USB3
Power supply		Supplied from USB
Power consumption		about 550mA (when DC +5V)
Operating Temperature/Humidity		-10°C~+40°C/20%~80% (non-condensing)
Storage Temperature/Humidity		-30°C~+60°C/20%~80% (non-condensing)
Dimensions		50mm(W) x 72mm(H) x 123mm(D)
Weight		T.B.D.

Specifications are subject to change without prior notice.

Dimensions



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