

Photek Image Diodes

From our partners at Photek:

The Image Diode is a proximity focused diode vacuum photo-tube, otherwise known as a Generation 1 proximity image intensifier. Image Diodes do not contain micro-channel plate (MCP) electron multipliers. Instead, light gain is accomplished solely through the acceleration of photoelectrons to roughly 10 keV and the subsequent conversion of the electron energy into light via a phosphor screen. Light gain is typically >10X, and is determined by the photocathode, phosphor and applied voltage.

Image diodes have excellent spatial resolution and dynamic range compared to MCP based image intensifiers. They are often used as “Booster Tubes” where they are fiber-optically coupled to the output of an image intensifier. This provides a brighter image with higher dynamic range that is often required for intensified cameras operating at >300 fps.

Another common use of image diodes is for the conversion of Ultraviolet or Infrared light into visible light for viewing by eye or a CCD/CMOS camera. In this application, image diodes are often referred to as “Converter Tubes.”

Photek’s line of image diodes are available in 18 mm, 25 mm, and 40 mm formats. Other formats are available, as well as our Demagnifying Image Intensifier.

Photek also manufactures power supplies, gate modules, and other accessories required for operation. Sydor’s team is happy to assist with product selection to determine the optimum configuration for your research requirements.

For complete product details and specifications, visit www.photek.com to review the product datasheet. Photek is accredited to ISO 9001 and ISO 14001.



Features:

- ⊕ Better spatial resolution and dynamic range compared to MCP based image intensifiers
- ⊕ Light gain typically >10x

Applications:

- ⊕ High speed intensified imaging as a Booster Tube
- ⊕ Wavelength conversion from UV or IR to visible light as a Converter Tube

& more...

