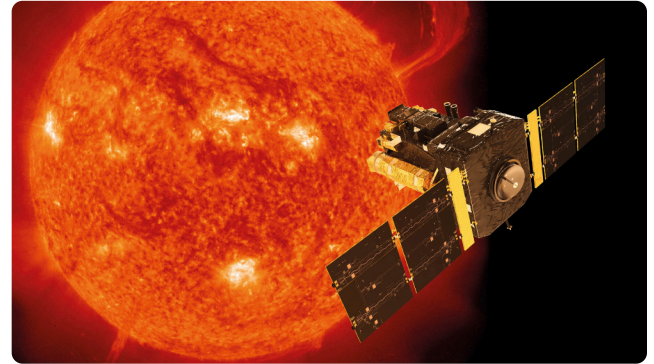




Space Qualified EUV Photodiodes

Extreme Ultraviolet (EUV) light, with wavelengths ranging from 10 to 120 nanometers, plays a critical role in space and weather-related applications. The ability to measure these wavelengths provides invaluable insights into solar activities, such as solar flares and coronal mass ejections (CMEs), which significantly impact space weather and can affect satellite operations and communication on Earth. This information is crucial for maintaining accurate GPS and satellite communication systems, designing spacecraft resilient to intense solar radiation, predicting geomagnetic storms and auroras, and enhancing our understanding of climate dynamics and stratospheric ozone distribution. Hence, EUV light measurement is an essential tool in advancing our knowledge and readiness in space weather monitoring, satellite operations, climate studies, and astrophysics research.

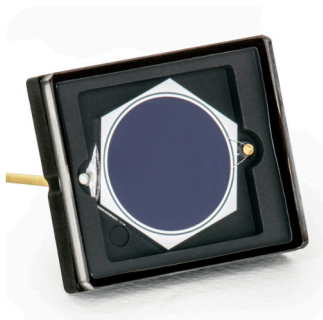


European Space Agency - SOHO Mission

One crucial component for monitoring EUV light in space applications is the photodiode. These photodiodes are designed to measure EUV light wavelengths, most commonly emitted during solar flares and coronal mass ejections. Photodiodes designed for space must have a track record for high reliability and performance throughout the entirety of the mission lifetime, oftentimes surviving far beyond the capacity of most other instruments onboard the spacecraft; owing to their radiation ruggedness. EUV photodiodes offer the distinct advantage of delivering consistent and accurate measurements across a wide spectrum of wavelengths, ensuring minimal signal degradation throughout the duration of the mission. In the case where only a narrow set of wavelengths require measurement, a bandpass filter can be utilized; which can be directly coated onto the photodiode's sensing area or implemented through the use of filters specifically engineered for EUV wavelengths.

With a proven track record in the photonics industry and a commitment to innovation, Opto Diode continues to provide high-quality, reliable solutions for space qualified photodetectors for EUV space applications. Whether it's enhancing our understanding of solar activities or ensuring the reliability of satellite communication systems, our cutting-edge photodiodes play a crucial role in advancing space technology and contributing to the future of global communication and exploration. With Opto Diode's industry-leading capabilities, we are uniquely positioned to meet the ever-evolving demands of the photonics industry, ensuring our clients receive the most advanced, reliable and efficient solutions for their specific needs in the realm of space technology and beyond.

Standard and Custom Offerings



Model Number	Description	Wavelength Range	Active Area
AXUV100TF030	Photodiode with Directly Deposited Thin Film Filter	1-12nm	100mm ²
AXUV100TF135	Photodiode with Directly Deposited Thin Film Filter	12-18nm	100mm ²
AXUV100TF400	Photodiode with Directly Deposited Thin Film Filter	18-80nm	100mm ²
SXUV100	EUV Photodetector	1-190nm	100mm ²
SXUV20HS1	High Speed EUV Photodetector	1-190nm	19.7mm ²
SXUV5	High Speed EUV Photodetector	1-190nm	5mm ²

*See our website for a full selection of standard and custom solutions at www.OptoDiode.com