



Introducing

Optodiode

Next Generation

Avalanche

Photodiode



Where Precision Meets Innovation

Designed and built in our U.S. wafer-fab, Opto Diode's APDs achieve superior gain and ultra-low noise performance. From detecting single photons to measuring high-intensity pulses, these detectors deliver unmatched consistency across the visible to SWIR spectrum.



Three Models Infinite Applications



Engineered for precision and versatility, Opto Diode's new Avalanche Photodiodes deliver high sensitivity, fast response, and low noise performance across visible to SWIR wavelengths—empowering applications from LiDAR and optical communication to medical imaging, scientific research, and beyond.

Each APD is engineered for stability and long-term reliability under the toughest conditions. With hermetically sealed construction, low dark current, and sub-nanosecond rise times, these detectors maintain performance across extreme temperature, vibration, and radiation environments. Every device is designed, characterized, and tested in-house at Opto Diode's U.S. wafer fabrication and R&D facility—ensuring consistent performance, proven durability, and unmatched precision in every application.



Ready for Any Environment

Engineered for Every Industry

From autonomous vehicle sensing and medical imaging to spectroscopy, optical communications, and industrial inspection, Opto Diode's APDs deliver exceptional speed, high gain, and low-noise performance for accurate light detection in every setting.

Each device is designed, fabricated, and rigorously tested in-house to ensure consistent operation across temperature, vibration, and radiation extremes — proven dependable from laboratory use to aerospace and defense environments.



AVALANCHE PHOTODIODE

- ULTRA-LOW NOISE
- FAST RISE TIME
- SINGLE PHOTON DETECTION

Covering wavelengths from visible to SWIR, our APDs provide the precision, stability, and performance needed to power cutting-edge advancements in sensing, imaging, and photonic system development.



OPTO DIODE

An ITW Company