

Advanced Performance Detectors

DETECT  
EVERY  
ION



# Identify more ions

Photonis Advanced Performance Detectors are MCP-based complete detector assemblies that can be used in a wide variety of applications to detect charged particles and electromagnetic radiation. At the core of every Advanced Performance Detector are Photonis' Long-Life™ MCPs, which provide the highest level of sensitivity available to the market. With Photonis' detectors, you'll be the first to discover.



## Widest Variety

Our Advanced Performance Detectors can feature MCPs from 4 to 120mm plates, in a wide range of shapes, sizes or geometries. Whether you need a large vacuum-flange assembly for your research or a miniature plug-and-play detector assembly for a portable mass spectrometer, Photonis can fulfill your requirements to be sure you get the high quality detection, longevity and sensitivity you've come to expect from Photonis.

## Custom Performance

Photonis designs and manufactures our Advanced Performance Detectors to optimize output and sensitivity. We can customize any of our detectors to provide the requirements of your application, including:

- Center Hole
- Center Tab
- Grid
- Flange Mounts
- MCP Size and Shape
- Metal Anode
- Multi Metal Anode
- Resistive Anode Encoder
- Phosphor Screen
- CMOS Cameras

## Superior detection devices

Photonis Advanced Performance Detectors are used in some of the world's fastest Time of Flight Detectors, in physics research experiments and on space missions to provide unsurpassed dynamic range, long life and resolution. We provide a complete line of miniature detectors for use in portable mass spectrometers and leak detectors. Our patented technologies and experienced team can manufacture a custom detector for your applications. Bring us your next instrument, and we'll supply our best detector.



### ● **Mass Spectrometry**

Advanced Performance Detectors are widely used in TOF-MS, portable mass spectrometers and other MCP-based techniques as complete electro-optic assemblies.

### ● **SEM and FIB Applications**

Improve resolution of secondary ion or electron images. Enables low beam energy (200v) analysis, provides accurate edge detection.

### ● **Residual Gas Analysis**

Highly sensitive process control and containment monitoring in vacuum systems.

### ● **Ion Imaging Systems**

Live video feedback of ion beam alignment and focus for optimizing or validating instrument design.

# PHOTONIS

Scientific Detectors

---

## Photonis Technologies S.A.S

Domaine de PELUS  
Axis Business Park - Bat E  
18 Avenue de Pythagore  
33700 Merignac, France

**T** +33 (0)556 16 40 50  
**F** +33 (0)556 16 40 62  
**E** [science@photonis.com](mailto:science@photonis.com)  
**W** [www.photonis.com](http://www.photonis.com)

## Photonis USA, Inc.

660 Main Street  
Sturbridge Business Park  
Sturbridge, MA 01566  
United States of America

**T** +1 (508)347 4000  
**F** +1 (508)347 3849  
**E** [science@photonis.com](mailto:science@photonis.com)  
**W** [www.photonis.com](http://www.photonis.com)

[www.photonis.com](http://www.photonis.com)

The information furnished is believed to be accurate and reliable, but is not guaranteed and is subject to change without notice. No liability is assumed by Photonis for its use. Performance data represents typical characteristics as individual product performance may vary. Customers should verify that they have the most current Photonis product information before placing orders. No claims or warranties are made as to the application of Photonis products. Pictures may not be considered contractually binding. This document may not be reproduced, in whole or in part, without the prior written consent of Photonis.