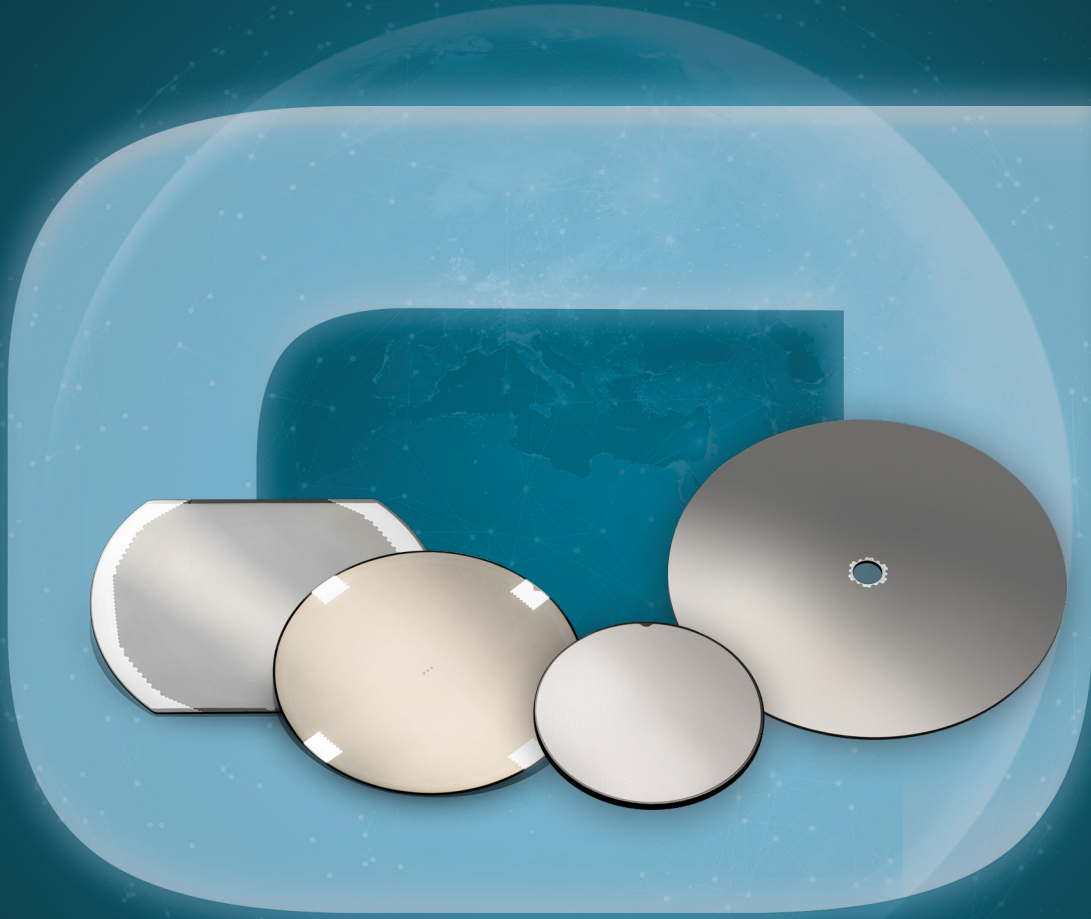


# **LONG-LIFE™**

## **MICROCHANNEL PLATES**



**SUPERIOR RESOLUTION  
FOR LIFETIME AND ION DETECTION**

# DETECT MORE IONS...

For more than 40 years, Photonis has led the industry in electron multiplication products with our Microchannel Plate technology. Today, our Long-Life™ Microchannel Plates are setting the industry standard for performance and lifetime. Our unrivaled expertise in designing and manufacturing MCPs ensures our customers receive the most sensitive and reliable amplification devices available. Photonis specializes in providing MCPs in custom formats so that you will be the first to discover new phenomena.

## EXTENDED DYNAMIC RANGE

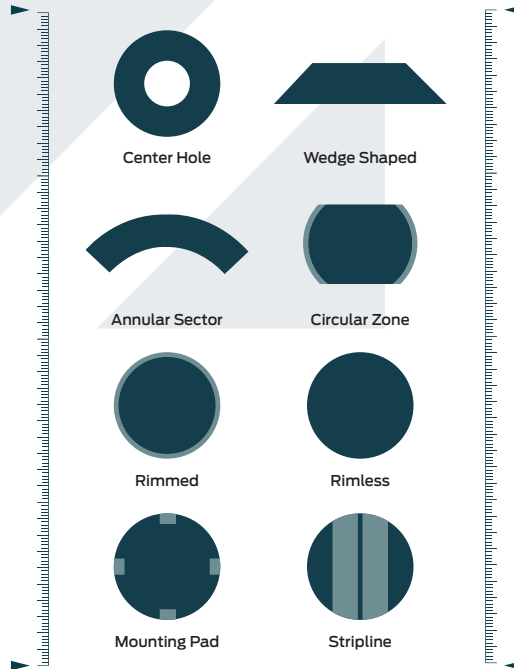
Increases detection limits by a factor of ten

## ULTRA-FLAT MCPS

TruFlite™ MCPs with + 5µm flatness for reduced time jitter in TOF applications

## SIZES AND SHAPES

Custom plates can be made 8-150mm and in square, arc, center hole, trapezoid and more.



## MOUNTINGPAD™

Patented technology provides a rigid area for clamping the MCP to maintain flatness when exposed to moisture and reduce noise.

## COATINGS

Photonis provides a wide range of coatings to optimize UV, X-Ray or high-speed sequential events.



## SUPERIOR CHARGED PARTICLE DETECTION FROM PHOTONIS

Photonis' MCPs are installed in products that are used in Mass Spectrometry, Military, Space, Metrology and other commercial applications. As a manufacturer, we are able to provide MCPs in a variety of shapes and sizes as well as configurations (Z-stack or Chevron). We will work with you to determine the customizations best suited to your needs.

## MASS SPECTROMETRY

Photonis MCP based detectors are at the core of industry leading systems 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

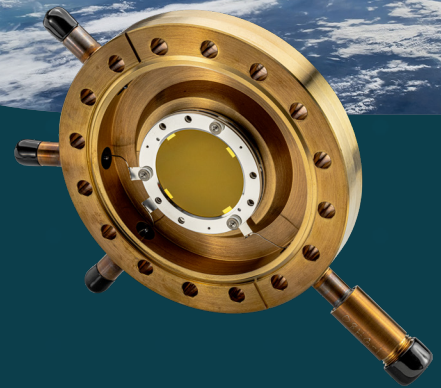
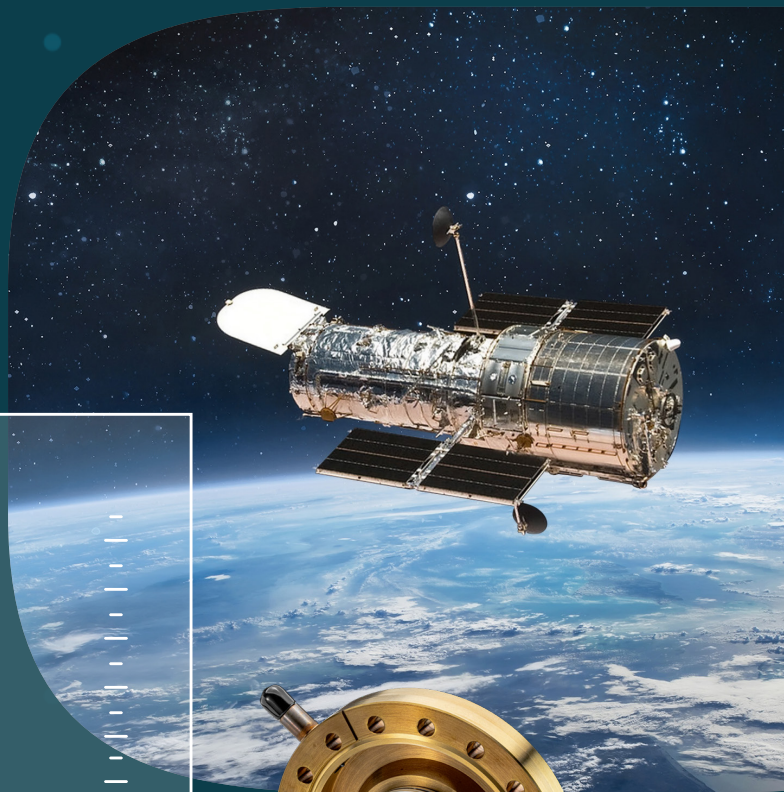
Live video feedback of ion beam alignment and focus for optimizing or validating instrument design.

## ...TO IDENTIFY MORE IONS

Photonis offers a variety of Advanced Performance Detectors (MCP-based complete detector assemblies) that can be used in numerous applications. At the core of every Advanced Performance Detector are Photonis' Long-Life™ MCPs, with the highest level of sensitivity available on the market. With Photonis' detectors, you'll be the first to discover.

### PHOTONIS ADVANCED PERFORMANCE DETECTORS

The world's fastest TOF Detectors used in research experiments and on space missions are manufactured by Photonis. Our complete line of miniature detectors for use in portable mass spectrometers and leak detectors provide unsurpassed dynamic range, long life and resolution. Our patented technologies and experienced team can manufacture a custom detector for your application. Bring us your next instrument, and we'll supply our best detector.



### WIDEST VARIETY

Our Advanced Performance Detectors can feature MCPs from 4 to 120mm, 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



# LEADING YOU TO PEAK PERFORMANCE

**PHOTONIS**  
EXOSSENS GROUP



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