PHOTONIS
EXOSENS GROUP

Micro Pore Optics

A COMPACT AND LIGHTWEIGHT ALTERNATIVE TO CONVENTIONAL X-RAY OPTICS

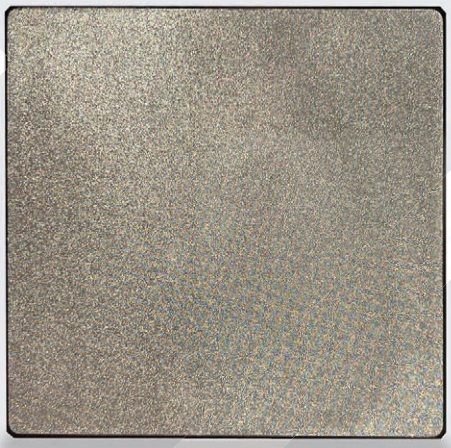
FOCUS EVERY X-RAY...

For more than 40 years, Photonis has led the industry in electron multiplication products with our Microchannel Plate technology. Leveraging this expertise, Photonis have designed Micro Pore Optics. Unlike Microchannel plates that use round channels to convert ions into electrons and accelerate them, Micro Pore Optics employ square channels that are capable of concentrating or collimating X-ray photons, thereby enhancing x-ray imaging capabilities. This innovative approach underscores Photonis' commitment to advancing technology and setting new industry standards.

SQUARE PORE DESIGN
MILLIONS OF SQUARE SHAPED PORES

CUSTOMIZABLE PORE SIZES
AVAILABLE PORE SIZES OF 6, 10, 20, 100 OR 700 MICRONS

COMPACT DESIGN & LIGHTWEIGHT
< 40 MM X 40 MM



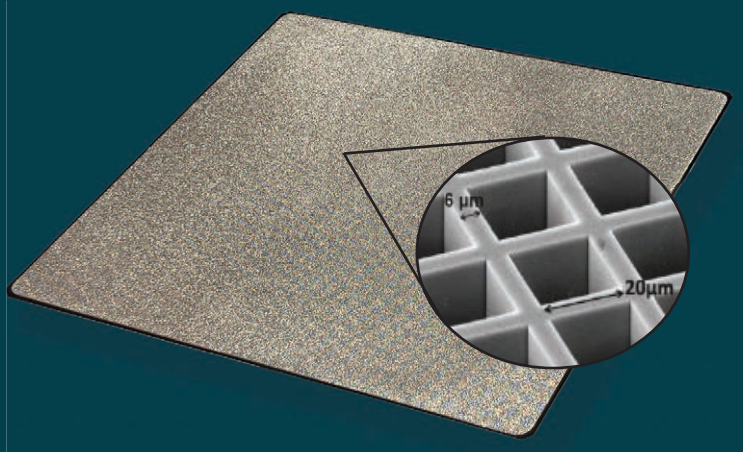
FOCUS X-RAY PHOTONS
FOCUSED, CONCENTRATED, OR COLLIMATED

<2°EXTERNAL REFLECTION
EXTERNAL REFLECTION AT GRAZING ANGELS

FLAT, SPHERICAL & CYLINDRICAL
RADIALLY OR SQUARE PACKED

SUPERIOR PERFORMANCE FOR X-RAY AND UV IMAGING FROM **PHOTONIS**

Photonis' Micro Pore Optics (MPOs) are a compact and lightweight alternative to conventional x-ray optics which allows for a broad range of maging options for UV, EUV and X-Rays. Our MPOs consist of millions of square channels arranged in specific order - either square packed or radially-packed. Take the performance of your x-ray imaging and analysis instruments to the next level with Micro Pore Optics from Photonis.



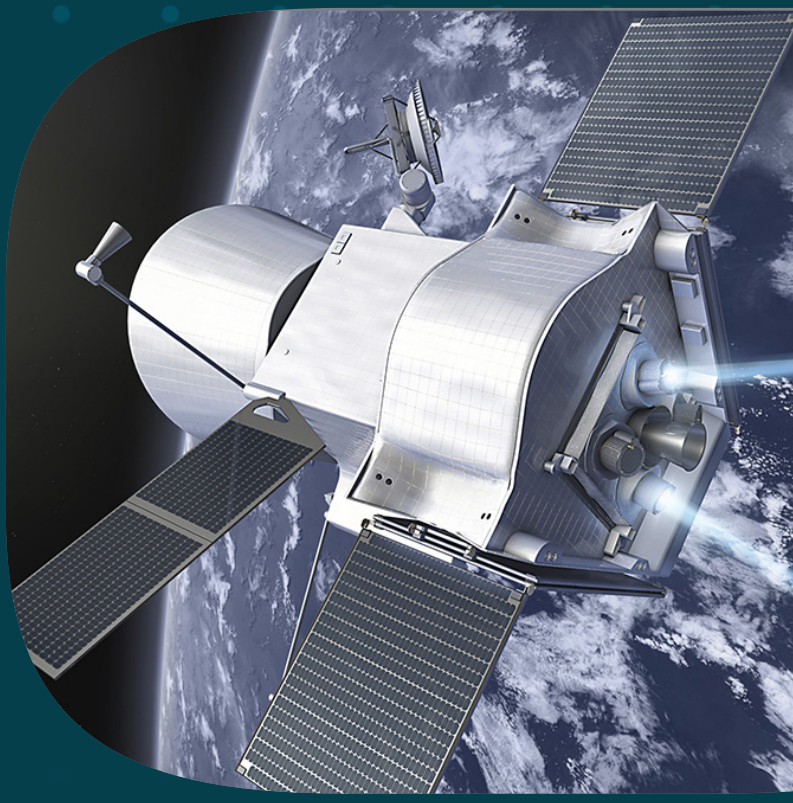
MPO Pore sizes range from 6µm – 700µm

...TO DETECT NEW MATTER

Photonis designed the Micro Pore Optic detector to be used in X-Ray imaging applications. Its perfectly square, flat channels are optimized to allow X-Ray and UV photons to be focused or collimated due to the total external reflection at a grazing angle of less incidence.

Micro Pore Optics are installed on a number of international space missions. The unique square pore plate is efficient and can be configured in radially packed or square packed channels. They are provided with Iridium coatings to enhance reflection and films to provide a heat shield.

Micro Pore Optics provide a more robust alternative to the standard X-Ray and UV imaging products available today. Be the fi rst to discover new matter with Photonis' MPO product line.

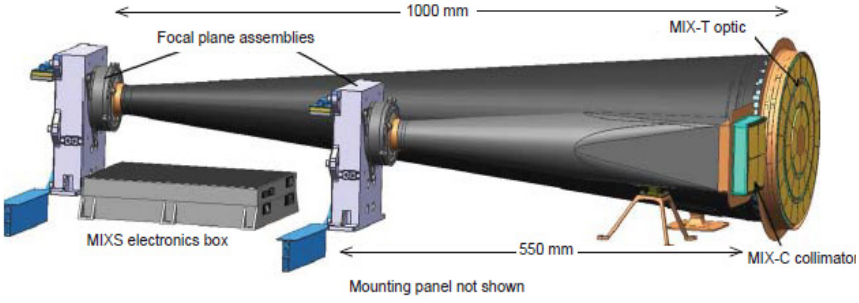


To learn more about MPO Technology, scan the QR code

MPO DETECTION ABOARD ESA'S BEPICOLOMBO

In order to develop the MPO, Photonis worked closely with the European Space Agency and the University of Leicester UK. The MPO is on board the ESA mission to Mercury, BepiColombo.

The Mercury Imaging X-Ray Spectrometer (MIXS) is the first instrument in space equipped with MPOs for the purpose of X-ray imaging. It will measure X-Ray emission from the surface of Mercury in the energy range of 0.5 - 8 keV.



SPACE QUALIFIED IMAGING

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