

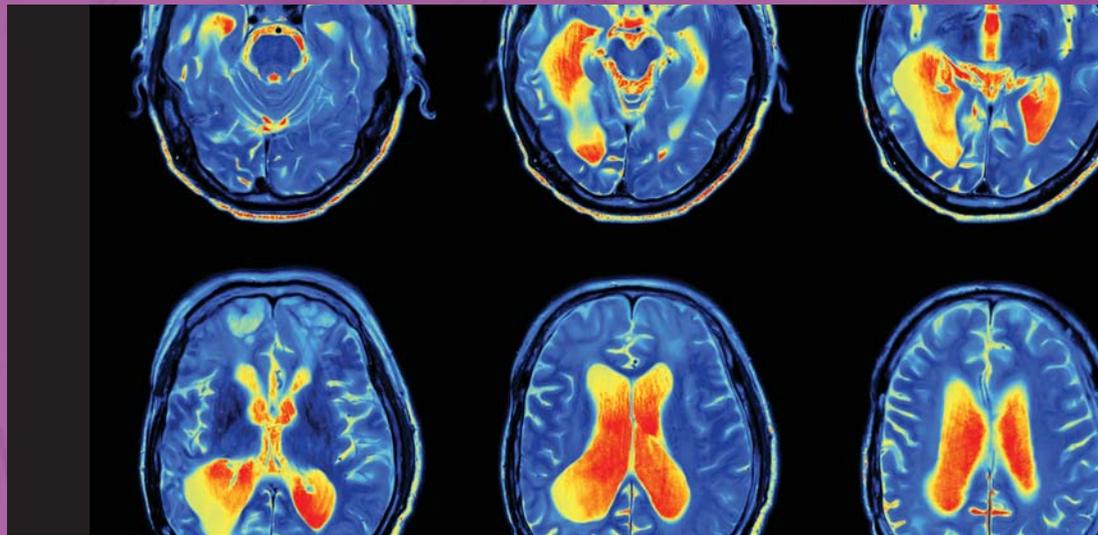
MCP-PMT Photon Detector

IDENTIFY
SINGLE
PHOTONS



Capture every photon

As the global leader in high-speed photon detection, Photonis has been designing custom MCP-PMTs for years. Photonis MCP-PMTs are ideal for high speed, single photon counting applications. With our highly sensitive MCP-PMT photon detectors, you will be able to perform faster and more accurate testing.

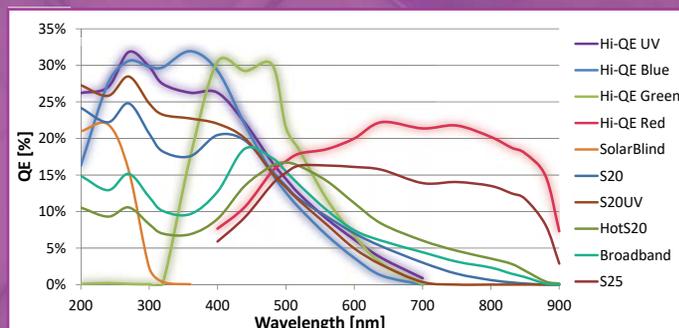


Customized detectors

Photonis has brought together two fast photonic timing detection technologies - photomultiplier tubes and microchannel plates - into one single sensor.

Choose between an 8 or 18 mm MCP and your choice of photocathode to be combined with a single anode. MCP-PMTs are equipped with a single high voltage connector and an SMA signal output, enabling easy installation. An optional miniature USB power supply will help you get your experiment under way quickly.

Figure 1

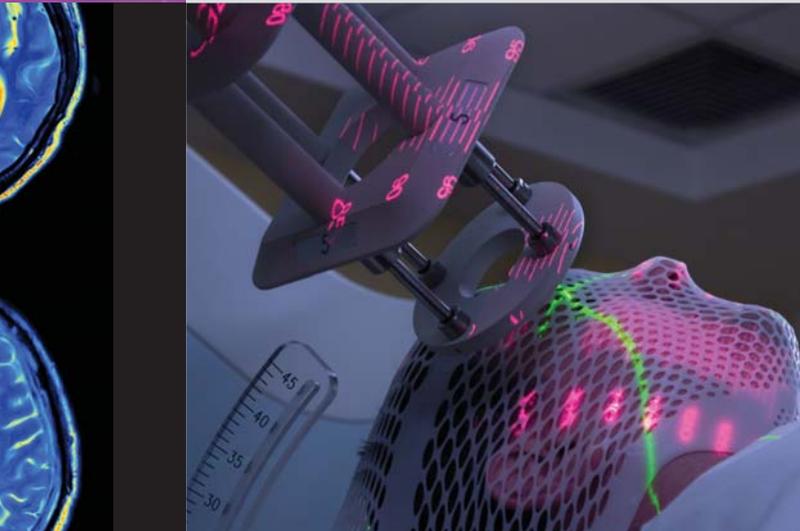


Photonis' MCP-PMTs are equipped with a photocathode of your choice, including Hi-QE, with its unique low dark count rate of 25 cps/cm².

The MCP-PMT can be ordered with a single MCP or in a multi-MCP Chevron or Z-Stack configuration for enhanced sensitivity. Photonis' MCP-PMTs are equipped with a built-in bleeder chain. Photocathode options include standard S20, S25 or Hi-QE, which provides up to 50% greater quantum efficiency than the standard photocathodes. Hi-QE also offers low dark count rates of 25 cps/cm² with low B-field immunity and superior photon detection, Photonis' MCP-PMT detectors are manufactured to meet your exact requirements.

Unique Features

- 40 ps transfer time spread for single photons
- Magnetic field immunity up to 3 Tesla
- Hi-QE photocathode option
- Gated intensifier tubes
- 8 mm or 18 mm active diameter



• **Fluorescence Spectroscopy**



• **Cherenkov Detection - RICH, TOF, TOP, DIRC**



• **Homeland Security (LIDAR)**



• **Nuclear and Particle Physics**



• **Single Photon Counting**



Need a square photon detector?

Photonis also manufactures the Planacon detector which has similar characteristics of the MCP-PMT. The unique square shape allows for multiple units to be tiled together to form a larger image. Regardless of your choice, Photonis can manufacture the custom MCP-PMT that will be ideal for your application.

PHOTONIS

Scientific Detectors

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