

Fast Optimized Observation



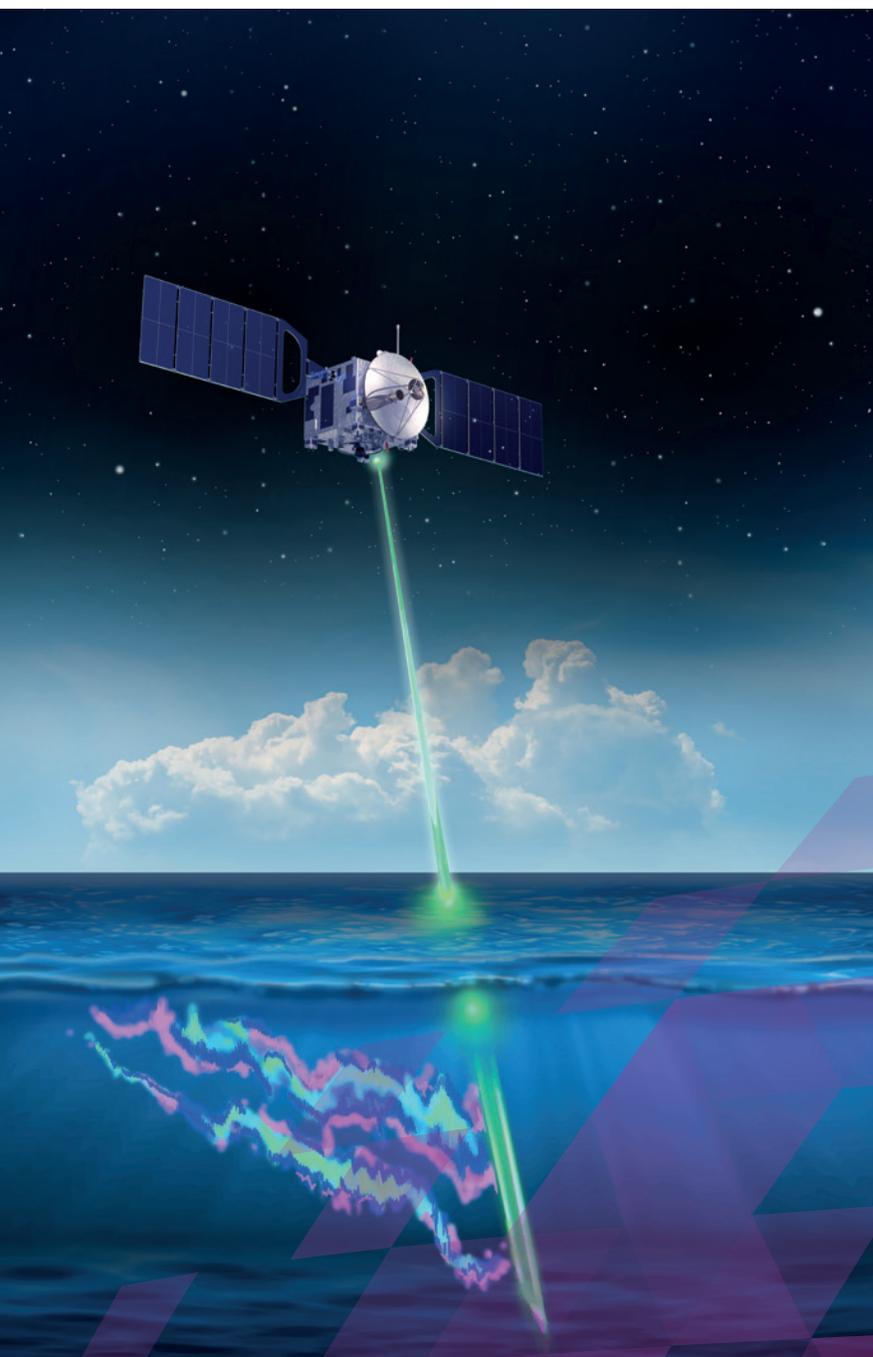
MCP-PMT LIDAR APPLICATIONS

Photonis offers MCP-PMTs optimized for LIDAR applications requiring fast timing and high dynamic range.

The new Photonis MCP-PMTs enable detection from single photon to few Ghz in photon burst mode and few 100 MHz in continuous illumination thanks to the high linearity properties. Along with the extremely low dark rate it results in 8 orders of magnitude dynamic range.

Those unrivalled timing properties, combined with a long lifetime and a high collection efficiency, make these MCP-PMTs an excellent choice for many demanding applications whether it is used in space or in the lab.

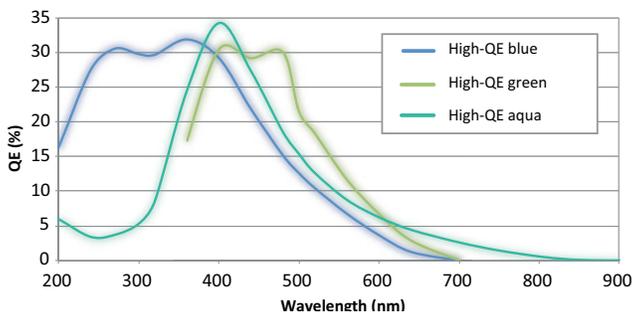
Customizable, it will ensure the best match to your application.



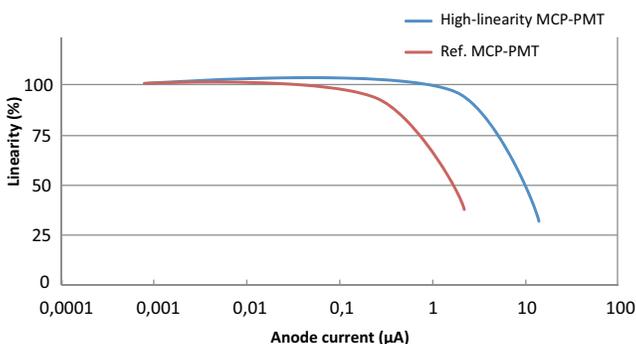
Features:

- **High Dynamic Range:** single photon to few GHz
- **Time resolution (TTS):** below 50 ps
- **Large Detection area:** up to 18 mm active diameter
- **Single anode**
- **Hi-QE Photocathode:** peak QE above 30%
- **Low Dark Count rate:** 25 Hz/cm²
- **Long Lifetime:** 10 C extracted charge at the anode
- **Operation mode:** photon counting and analogue
- **Single HV:** <2500 V
- **Compact Dimensions:** 38/45mm diameter, 55mm length
- **Housing:** Anodized aluminium

Hi-QE Photocathodes



Optimized spectral response with the series of Hi-QE photocathodes.

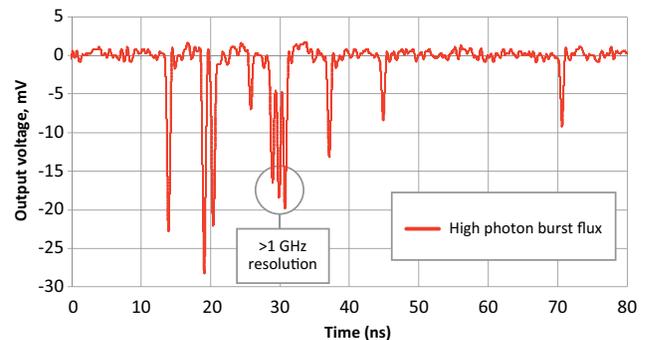


Output linearity properties: increase of the saturation level of a factor 10 with the High Linearity MCPs.

Customization Options

MCP-PMTs from Photonis can be customized to achieve the best results for your analysis. Photonis can expertly advise on the variety of options available in order to make the best choice.

- **Photocathodes:** Choose one of our Hi-QE photocathodes for the best spectral sensitivity for your application or choose a narrow band photocathode for the best match to the laser wavelength.
- **Microchannel Plates:** A chevron configuration of Photonis' MCPs will guarantee single photon counting capability, extremely high dynamic range and long lifetime. For a near 100% collection efficiency, Photonis offers the new Hi-CE MCPs.
- **Gating:** This option is available for applications where background light needs to be suppressed as much as possible.
- **Power Supply:** A resistive bleeder chain is integrated in the MCP-PMT housing. Only a single high voltage needs to be applied.



Fast timing properties for high photon flux detection and high LIDAR echo resolution.

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