Cricket Advanced Intensifier Adapter for Scientific Cameras

Photonis’ Cricket provides a simple and cost-effective way to convert your existing camera into a complete plug-and-play intensified solution.

Photonis’ Cricket enables your camera to capture images across a broad spectral range, from 200 to 900 nm. Connecting the Cricket is simple, using a universal C-mount interface. Simply adjust the fine focus and begin.

In addition to providing an intensified image, Cricket can also convert UV and NIR photons into green photons with emission characteristics that perfectly match the spectral response of a solid state camera. High 3 ns temporal resolution is made possible with an optional gating module. Cricket supports 1 μlx sensitivity or single photon counting.

The Cricket is compatible with most CCD, CMOS, EMCCD and sCMOS cameras, and is ideal for a large number of applications including physics, FLIM, plasma research and corona detection.
**Specifications:**

Specification at 20°C and nominal operating conditions:

**Lens Mount Interface**  
Lens side: c-mount, female thread  
Camera side: c-mount, male thread

**Magnification** 1:1  
**Maximum Camera Sensor Format**  
2/3” 4:3 aspect ratio  
1/1.2” 16:10 aspect ratio

**Power Consumption** 60 mW at 3 V, suitable for battery operation

**Housing** Black anodized aluminium

**Overall Dimensions** 94.5 H x 58.0 W x 111.5 L mm

**Weight** Approximately 450 g

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Cricket can be customized to match your experiment to achieve the best available performance. Photonis can expertly advise you on the variety of options available to you to be sure you make the best choice for your needs.

- **Photocathodes**: Choose one of our Hi-QE photocathodes for the best spectral sensitivity range for your application.
- **Microchannel Plates**: Opt for our new High Collection Efficiency MCPs, increasing collection of incoming electrons to almost 100%. A small pore size single MCP for 1 µlx sensitivity or a double MCP in chevron configuration for single photon sensitivity.
- **Phosphor Screens**: Select a high resolution P43 phosphor screen for efficient imaging or a fast decaying P46 for high speed imaging applications.
- **Shutter**: For time-resolved imaging, choose one of our electronic modules giving a 3 ns or 50 ns as minimum shutter time.
- **Power Supply**: The Cricket comes with an integrated HV PSU, converting safe low voltages into the necessary internal high voltages. All PSU’s come with external gain control, enabling you to optimize the dynamic range of your camera.

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Cross-section illustration of Cricket attached to an optional camera and lens. Camera and lens are not included with the Cricket system and shown only for illustration.

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An example of the way that the Cricket can be used. Lens and camera not included.

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**Hi-QE Photocathodes for Cricket**

An example of the way that the Cricket can be used. Lens and camera not included.

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**Contact Information**

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