

WinCamD with BSF Series UV Converter

Required Materials

Ensure receipt of the following items before beginning:

- A WinCamD series camera with or without a screw-on ND4.0 filter covered by a screw-on target cap.
- A separately packaged UV converter with an attached spacer, prefocused for screwing on to the camera.
- UV Converter Calibration Certificate.

Using the UV Converter

Follow these steps to use the UV converter:

1. Install the DataRay software.
2. Unscrew the ND4.0 filter and screw on the UV converter, removing the front cover cap (See Fig. 1).
3. Start the DataRay software. In the **Setup** pull-down menu, choose **Capture Setup Dialog**. In the **Pixel multiply factors** box, enter the PMF value from the label on the UV converter into the **X =** field and press **OK**.
4. Measure the power/energy in your beam in order to ensure that it does not approach the 500 mJ/cm² damage threshold.
5. Use the aperture ring to set the UV converter aperture to f/4 and 'walk' the beam onto the converter from one side. If the camera saturates and increasing the aperture f/# does not help, then additional attenuation or sampling is needed before the converter. Note that the aperture ring allows for varying the irradiance on the camera by a factor of 100:1 by varying the aperture from (typically) f/1.6 to f/16.



Figure 1: WinCamD with UV Converter Attached