Choosing a Star Analyser Grating

Are you using a DSLR or Astronomical Camera?

- **I’m using a DSLR**
  - Are you using your DSLR with your telescope optics or camera lens?
    - DSLR w/ camera lens
      - **“Objective Grating”**
        - Use AD-58 adapter to mount grating on DSLR lens cap threads. Cameras (non-Canon) whose lens cap threads aren’t 58mm require a step-up or down ring. (In the calculator, use the focal length of the lens as grating-to-sensor distance.)
      - 1. Use Star Analyser-100.
      - 2. Use AD-T2 adapter to mount to your camera’s T-Ring.
        - (In the calculator, use 70 mm as grating-to-sensor distance.)
      - Use Star Analyser-100 as an objective grating
      - Use Star Analyser-200 as an objective grating

- **I’m using an astronomical FITS or Video Camera**
  - Determine the distance from your camera’s CCD sensor to the tip (far-end) threads of the camera nosepiece (or filter wheel).
  - Then use this number as the “grating-to-sensor” distance in the calculator (link) to determine whether to use a Star Analyser-100 (preferred) or 200 (link).

**Notes on non-DSLR, astronomical cameras:**
1. **How to determine camera CCD sensor setback:** Most camera sensors are recessed behind the face of the camera. You can determine this distance from the manufacturer’s specs or by poking a toothpick into the sensor opening, being very careful not to touch the sensor itself. Measures can be approximate. Don’t worry about eliminating the thickness of any glass cover plate on the sensor. See the drawing to the right.
2. **If the calculator says you need to increase the grating to sensor distance**, you can use one or more Star Analyser spacers. Each increase the distance by 7 to 10 mm.
3. Astro cameras of the following companies (and many others) usually work as-is by screwing the Star Analyser 100 onto the factory-supplied 1.25” nosepiece:
   - ZWO
   - Atik
   - NexImage
   - Skyris
   - Imaging Source
   - Mallincam

*Grating can be screwed onto camera nosepiece or it can be mounted in filter wheel.