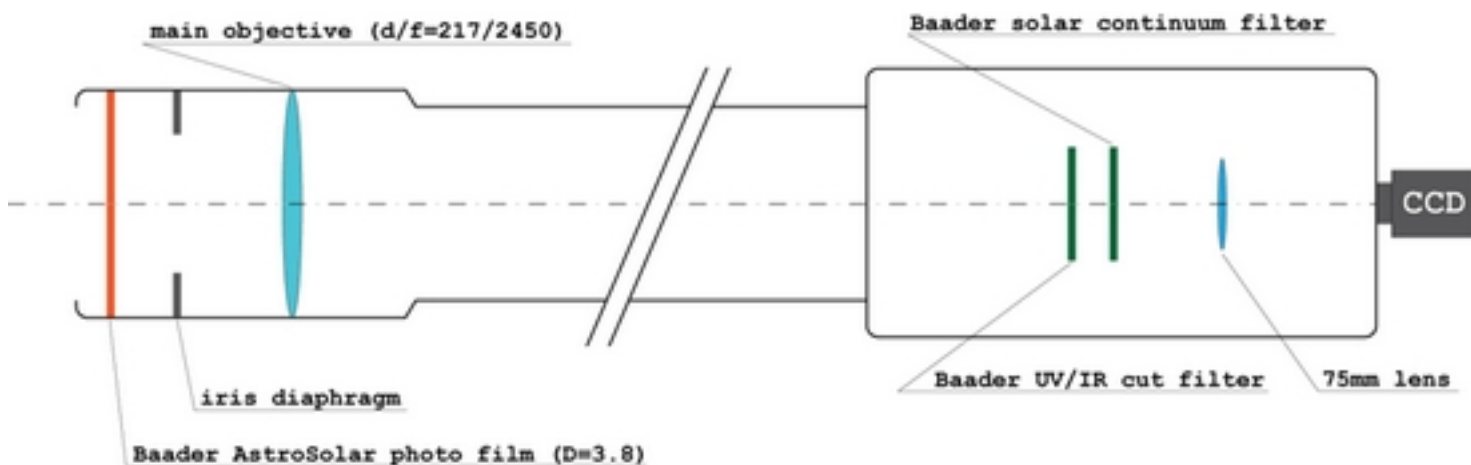


### The Photospheric Telescope

The main objective of the Hvar photospheric telescope is achromatic doublet with diameter of 217 mm and the focal length of 2450 mm. The optical system consists of [Baader AstroSolar photo film](#), iris diaphragm, [Baader solar continuum](#) and [UV/IR cut filter](#), 75mm lens and [CCD camera](#).

. Iris diaphragm controls the amount of light in the telescope together with AstroSolar photo film which reduces sunlight intensity to about 0.001%. The Solar Continuum Filter is designed to enhance the visibility of solar granulation and sunspot details by transmitting a specific spectral region around 540 nm, free of emission and absorption lines thus boosting the contrast and reducing the effects of atmospheric turbulence. The field of view of the corresponding system is about 11.28 arcmin, yielding the resolution of 0.33 arcsec/pix with 4MPix CCD camera.



### The Chromospheric Telescope

The optical system of the chromospheric telescope consists of an energy reduction filter, iris diaphragm, main objective, auxiliary lens, [H \$\alpha\$  filter](#) and [CCD camera](#). The main objective is achromatic doublet with diameter of 130 mm and focal length of 1950 mm. The energy reduction filter blocks most of the sunlight, thus decreasing the heating and turbulence inside the telescope. The [Baader research grade filter](#) is used as H $\alpha$  filter with the narrow 0.2 Å passband. The field of view with corresponding system is about 7.15 arcmin what gives 0.21 arcsec/pix with 4MPix CCD camera.

