

BAADER UHC-S FILTER

The Baader Planetarium UHC-S Nebula filter excels at delivering a high-contrast and natural view of emission nebula - without excessive dimming and loss of background star fields. The perfect filter for viewing emission nebula from light polluted skies, or for boosting the contrast of nebula from dark sky sites. The advanced technology coatings enable the filter to achieve an outstanding transmission of over 97% across the entire passband, with total blockage of prominent light pollution lines. This translates to maximum image brightness and contrast. Owners of smaller, 4"-10" telescopes will especially appreciate the high efficiency, and larger scope users will love the rich star fields and detailed subtle nebular shadings that are left intact.

The Baader UHC-S manages to improve on the contrast of the typical broadband or so-called "Deep Sky" filters. Sky background is darker, and contrast of emission nebulae are noticeably improved. Most other "UHC" filters tend to excessively darken the sky and star fields, leaving the nebulae looking artificial and flat, set against an empty background. The high transmission, sharp cutoffs, and more moderate 60nm passband of the Baader UHC-S filter retains a more natural view, yet significantly boosts overall contrast. Imagers will appreciate the broader passband and inclusion of an extremely efficient H-Alpha passband (>99% @656nm), as well as the extreme optical quality.

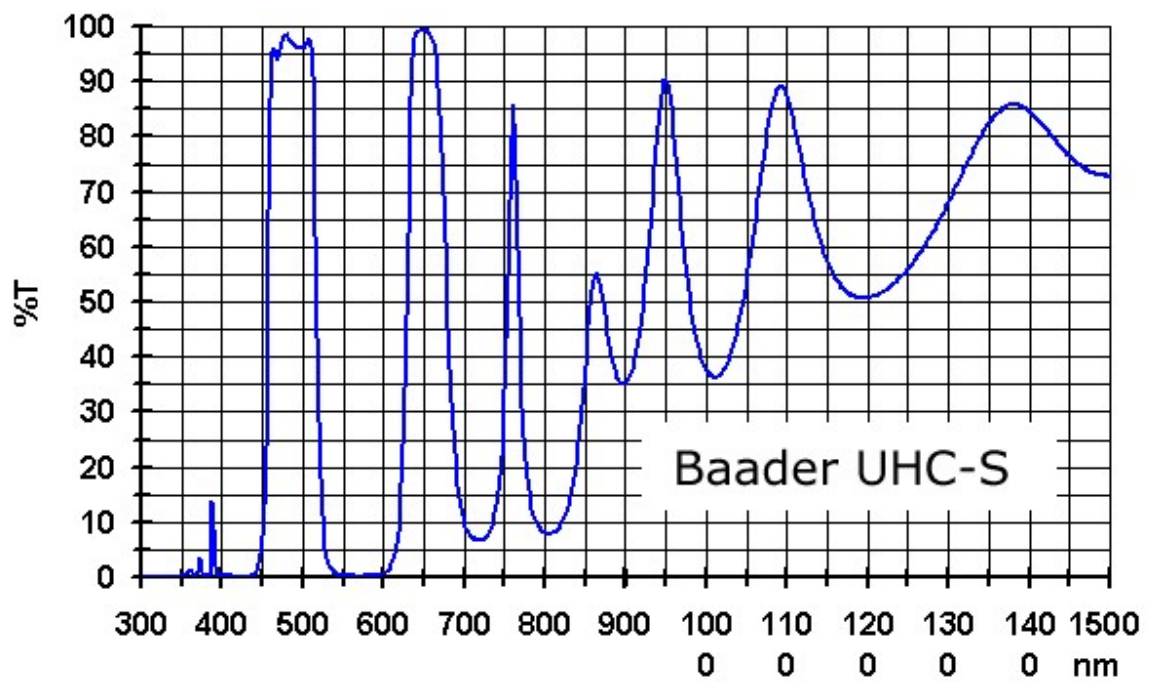
At the heart of the Baader filters are their special fineoptical substrate polishing process and advanced coating design. The result is a filter that imparts no image degradation, unlike other filters. To prevent deterioration from cleaning or exposure to moisture, some other filters even resort to sandwiching their delicate coatings between two layers of filter glass, resulting in potential blurred or double images. The combination of hardened coatings and fineoptical substrate of the Baader UHC-S avoids this image degradation. A common misperception is that deep sky viewing is limited to low powers, and image resolution is not as important as in planetary observation. In reality, high magnifications are very common and useful in studying fine details, particularly for the brighter diffuse and planetary nebulae. Baader UHC-S filters can take high magnifications, and stars retain their pinpoint sharpness, even if the filter is used far ahead of the image plane (ie, for imaging use, or ahead of a star diagonal or binoviewer). Baader filters fulfill the requirements of an ideal filter - to perform their filtration at highest efficiency without any other detectable effect on the image.

In addition to its optimum spectral and optical characteristics, the Baader UHC-S filter offers important features that set it apart and result in the best possible usability, real-world durability, and value;

- Filter durability has always been a hallmark of Baader Planetarium. The multi-layer dielectric coatings are plasma assisted and Ionbeam hardened using the latest technology (the coatings are harder than the glass substrate itself!). Baader filters withstand repeated real-world exposure to the elements and physical cleaning. Users need not leave their nebula filters dull and dust encrusted to avoid cleaning - Baader filters may be used and cleaned without fear.
- The filter cell itself offers unique features that enhance their reliability and usability. The special threading has been designed to fit the wide variety of eyepieces and accessories (there is significant variation between the filter threading used by eyepiece and accessory manufacturers). The front 'crown' of the filter incorporates milled notches which make handling and threading the filter a more secure operation in the dark. Filter aperture is the maximum possible, thanks to the very thin cell profile. Compare to other nebula filters, and the difference is easy to see.
- Low cost. Despite the high quality and advanced technology, Baader Planetarium filters are affordable. By leveraging high volumes across all filters in the Baader family, these filters can be offered at very reasonable prices.

Baader UHC-S Filter Curve

The above transmission plot is not a theoretical curve - but an actual measurement taken of a Baader UHC-S filter.



- Baader UHC-S Nebula Filter, 1¼" (#FUHC-1)
- Baader UHC-S Nebula Filter, 2" (#FUHC-2)