



H α -H β -OIII Imaging Filter,

RASA 8

#93619



PARTS LIST

- H α -H β -OIII Imaging Filter
- Spectral Transmission Graph
- Plastic Case

The H α -H β -OIII Imaging Filter for the Rowe-Ackermann Schmidt Astrograph (RASA) 8 allows you to take spectacular images of nebulae from heavily light polluted locations. This filter transmits the key emission wavelengths at 656nm (H α), 486nm (H β), and 496nm/ 501nm (OIII) while blocking all other wavelengths of light—only the “good” light from the nebulae passes through while the “bad” light from light pollution is blocked. You’ll notice the most dramatic improvement when using the filter under light polluted skies, but you’ll also see some improvement in contrast when using the filter under dark skies, as the filter blocks natural skyglow.

Unlike other similar filters, the H α -H β -OIII Imaging Filter for RASA 8 was designed specifically to perform well with a fast F/2.0 optical system, as the transmission bandwidth has been adjusted to account for the light rays arriving at the focal plane at steeper angles due to the fast optics. Filters with narrower FWHM bandwidths perform poorly at F/2.0 due to the associated spectral shift and will cause a reduction in transmission at the desired wavelengths as a result.

This filter was tested at the factory and its spectral transmission carefully measured. You’ll find the test results for your specific filter included in this package.

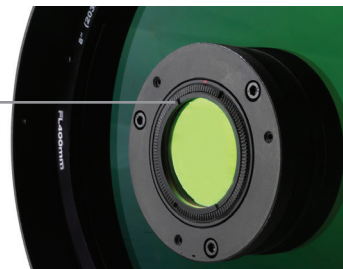
INSTALLING THE FILTER IN RASA 8

The H α -H β -OIII Imaging Filter replaces the RASA 8 optical window. This maintains optical performance, as no extra piece of glass is added to the fast optical system. The optical window is removed along with its cell, and the filter is installed using its own cell.

WARNING: When removing the optical window and installing the filter, avoid touching optical surfaces or you may leave fingerprints. Handle the filter and optical window by their cells only.

1. Carefully grasp the knurled edge of the optical window cell within the RASA 8 lens group cell, and begin rotating it counter-clockwise. If the edge of the optical window cell cannot be grasped initially because it is too recessed, use the notches in the knurled surface of the cell to begin rotating it. Completely unthread and remove the optical window cell. The optical window can be stored in the filter case when the filter is in use.
2. Install the H α -H β -OIII Imaging Filter by threading its cell into the lens group cell of the astrograph. The notches in the edge of the filter cell should be facing outward. Do not over-tighten; the filter cell should only be threaded until it stops turning.

Notches on filter
face outward



CARE AND CLEANING OF THE FILTER

Avoid touching the optical surfaces of the filter. Handle the filter by its cell only. Keep the filter stored in its plastic case when not in use. If the filter remains installed on the astrograph, keep the astrograph's dust cover on.

Dust should normally be removed with a blower bulb or an optical cleaning brush. If the filter must be cleaned, use optical grade tissue with a few drops of optical cleaning solution applied to the tissue. Gently wipe one small area at a time. Do not rub. Use a new tissue and solution for each wipe.

Filter Glass	H-K9L
Glass Thickness	2.0 mm
Filter Diameter	46 mm
Clear Aperture	43 mm
Coatings	Dichroic multi-bandpass and multi-layer antireflection coatings
Filter Cell	Aluminum, black anodized

CELESTRON TWO YEAR LIMITED WARRANTY

Celestron warrants your telescope mount to be free from defects in materials and workmanship for two years. Celestron will repair or replace such product or part thereof which, upon inspection by Celestron, is found to be defective in materials or workmanship. As a condition to the obligation of Celestron to repair or replace such product, the product must be returned to Celestron together with proof-of-purchase satisfactory to Celestron.

This product is designed and intended for use by those 14 years of age and older.



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