Sirius Optics
Unit 1
26 Darnick Street
Underwood, Qld 4119

Opening Hours

10am-5:30pm Mon-Fri
9am-2pm Sat

Phone: 07 3423 2355
www.sirius-optics.com.au

ZWO 31mm Unmounted Narrowband Filter Set 7nm

AUD $659.00

Product Images

Short Description

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Description

Narrowband filter do not eliminate the effects of light pollution or increase the object’s brightness. In many cases, they increase the contrast between nebula and night sky, not brightening the nebula.

It can reduce the transmission of certain wavelengths of light, specifically those produced by artificial light including mercury vapor, and both high and low pressure sodium vapor lights and the unwanted natural light caused by neutral oxygen emission in our atmosphere (i.e. skyglow).

Form 2018, ZWO Made a progress on narrowband filters with new standard, provide better performance.

Technical Parameter:

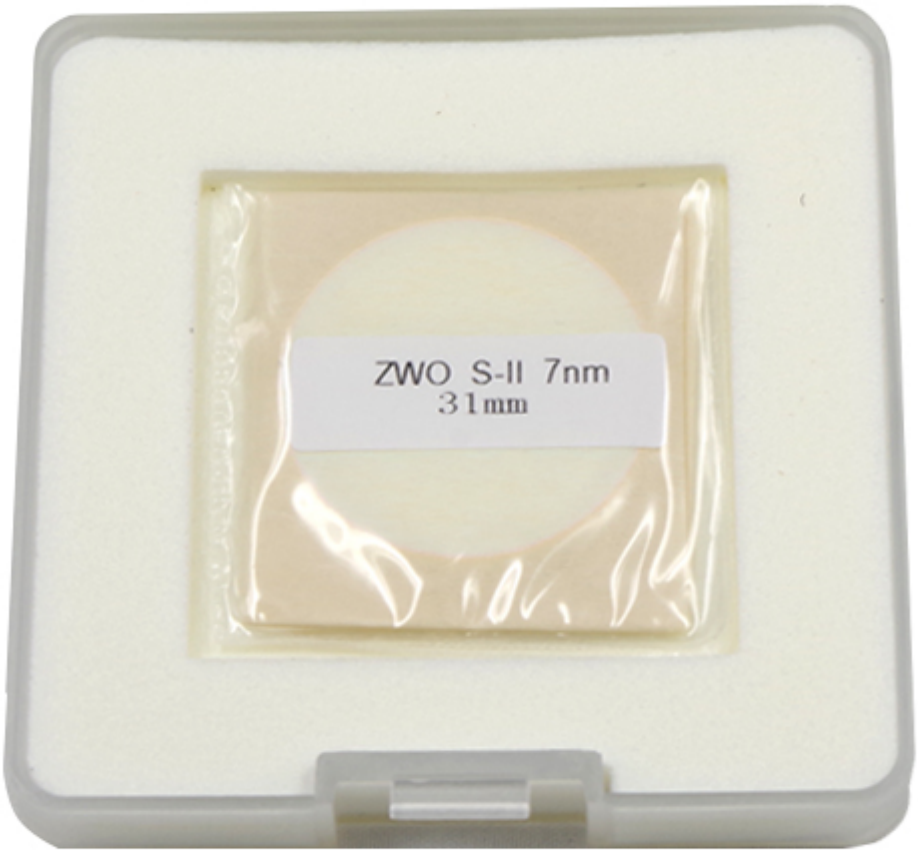
Name: ZWO narrowband 31mm filter

Size: D=31mm

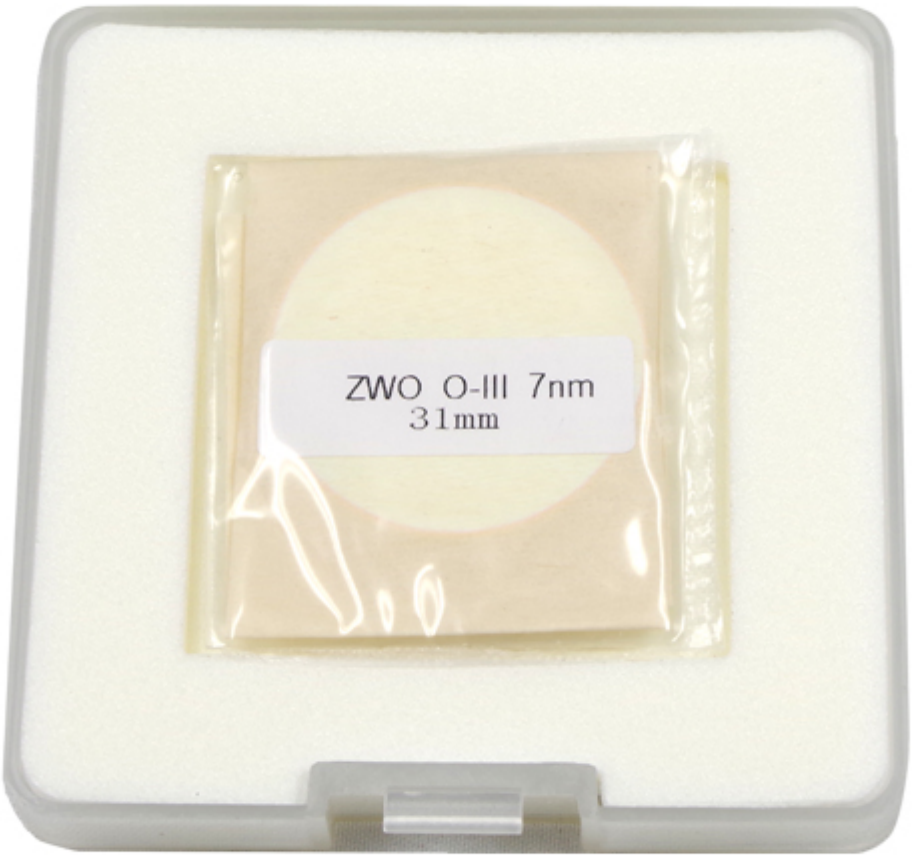
Thickness: 2mm

The ZWO H-Alpha filter has a bandpass of 7nm and passes light at 656nm wavelength, light transmission rate comes up to 80%. Best choice of narrowband H-alpha astrophotography filter for high-contrast imaging and revealing rich details of the nebula even in areas with strong light pollution, just prepare to experience the infinite fun with it !

The ZWO narrowband S-II 7nm filter passes light at 672nm wavelength with a bandpass of 7nm which is designed for nebula observation . It is suitable for visual observation on most emission nebulae, planetary nebulae and supernova remnants, use it with H-alpha and OIII narrowband filters (SHO Set) for tricolor CCD astrophotography.



The ZWO nrrowband O-III 7nm filter is designed for nebula observation allowing 7nm bandwidth of light centered on a wavelength of 500nm through, which corresponds to OIII emission lines, blocking out all other light. Adding the ZWO O-III Narrowband filter to your imaging collection will help you go beyond the RGB imaging and will help capture your favorite nebulas in a totally new light, no matter how polluted your skies may be!



- Hubble look of images can be made by the combination of H-alpha, OIII-CCD and SII-CCD, such as the famous “Pillars of Creation” (M16 Eagle Nebula)
- Narrowband imaging with SHO set (H-alpha, OIII-CCD and SII-CCD) can be done with the moon up in heavy light pollution, so your equipment is not sitting dormant for several weeks
- H-alpha filter is the first narrowband addition to LRGB set for most imagers who blend a black-and-white Ha image into RGB data to enhance structural detail while maintaining natural look

How to judge the positive and negative?

New Ha and SII filter:

Very simple, you can judge by color like below:

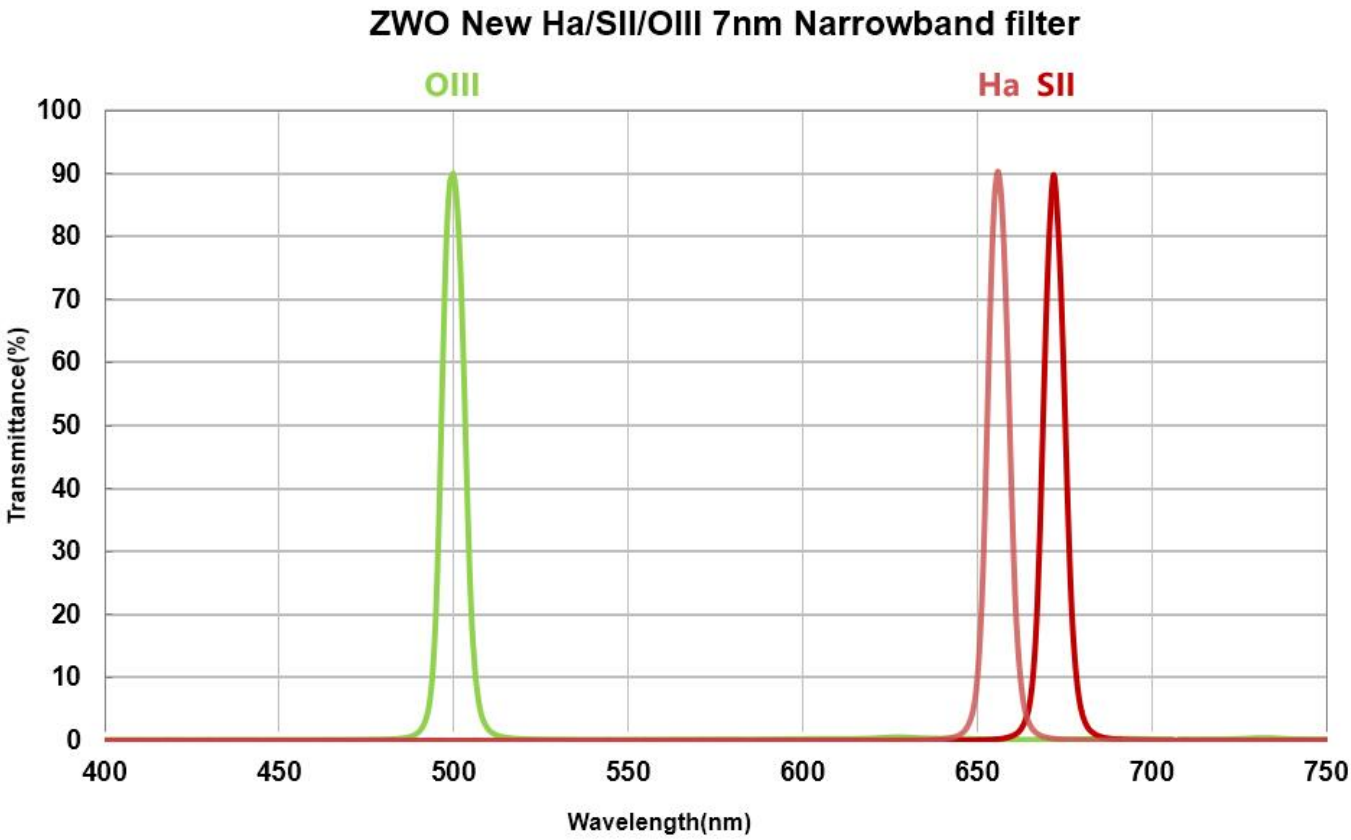
New OIII filter:

Both side will be fine.

Technical Data

- FWHM：7±0.5nm
- Glass Thickness 2.0+/-0.03 mm (31mm/36mm)
- Fine-optically polished to ensure accurate 1/4 wavefront over the both surfaces
- About 90% transmission at H-alpha line 656nm (H-Alpha filter)
- About 90% transmission at SII line 672nm (SII filter)
- About 90% transmission at major OIII line 500nm (OIII filter)
- Infrared wavelength 700-1100nm cut-off
- <0.1% transmission of off-band, OD3(Optical Density)

Transmission Curve



New Narrowband & Old Narrowband filter:

New Ha filter is based on new glass base, less reflection(less halo of bright stars).

New SII filter is based on new glass base, less reflection(less halo of bright stars).

New OIII filter is based on same glass base, new coating standard, better block rate of off-band.

Here is a test of ZWO Ha Filters (ASI1600 mono camera, single frame, 300s, DDP in MaximDL) :

Additional Information

Specifications	N/A