

EvoFF - Field Flattener for SkyWatcher EvoGuide 50ED



The EvoFF field flattener for the SkyWatcher EvoGuide 50ED produces pinpoint stars over a large field of view, making the EvoGuide 50ED a perfect portable wide-field imaging telescope. The EvoFF also works on other small refractors with focal lengths in the 250-450mm range.



To get the best image quality, the backfocus distance from the field flattener to the image sensor must be set correctly. For the EvoGuide 50ED, the required distance from the male T-threads on the camera side of the flattener is 34mm. For other focal length telescopes, see the table below.

Example: A ZWO cooled camera has a 17.5mm backfocus from the mounting threads to the sensor. This then requires a spacer that is $34 - 17.5 = 16.5$ mm long. This length adapter is included with ZWO cooled cameras. For other camera combinations, contact Starizona and we can help you get the right adapter.

Backfocus Table

| Telescope Focal Length | Backfocus |
|------------------------|-----------|
| 250mm | 34mm |
| 300mm | 28mm |
| 350mm | 25mm |
| 400mm | 23mm |
| 450mm | 21mm |

Installing on the Telescope

To install the EvoFF on the EvoGuide 50ED, begin by removing the threaded extension tube from the helical focuser. Then the 1.25" nosepiece of the EvoFF can slip into the focuser and is held in place with the three thumbscrews. The helical focuser will end up fairly far out when the telescope is at focus with the EvoFF in place.



For other telescopes, the EvoFF can fit into any 1.25" focuser or into a 2" focuser using a standard 1.25" step down ring.

Using Filters

The front of the 1.25" nosepiece of the EvoFF is threaded for standard 1.25" filters. This allows the use of light pollution or UV/IR filters. The 34mm available backfocus on the EvoGuide 50ED will allow some combinations of monochrome cameras and filters wheels, such as most ZWO cooled cameras and ZWO filter wheel. It is also possible with some cameras to use Starizona's Filter Slider for manually changing filters.

Specifications

Optics: 2 elements, fully multicoated

Barrel Size: 1.25"

Filter Size: 1.25"

Image Circle: 27mm (APS-C)

Camera Threads: M42 T-threads

Overall Length: 1.6"

Overall Diameter: 2.0"

Weight: 0.18 lbs (82g)

STARIZONA

5757 N. Oracle Rd.

Tucson, AZ 85704

520-292-5010

www.starizona.com