

FRA300 pro

User's Manual

WARNING!!

**DO NOT LOOK AT SUN THROUGH TELESCOPE.
IT WILL CAUSE IRREVERSIBLE DAMAGE TO YOUR EYE.**

www.askarlens.com

English

Instructions for use

Since their inception, Askar FRA series short focal ratio astrograph have been very well received by astronomical amateurs. This year, we launched the FRA300 Pro--the smallest 60mm F/5 Petzval astrograph with the fastest native focal ratio in the FRA series so far, its focal length is 300mm.

The star is sharp and delicate. At the center of its field of view, the RMS radius can reach 2um. Even a serious user can also be satisfied when it comes to the shape of stars. It performs excellence with full-frame and supports 44mm imaging, which is a rare astrograph for amateur astronomers. Compared with F/6 or F/7, F/5 can effectively reduce the exposure time, helping you get the same exposure in less time. In addition, the entire OTA is compact, making it the portable choice for field photographers.

FRA300 Pro 's objective lens adopts a quintuplet fully air-spaced structure, including one piece of ED glass, it also adopts a fully-multi-coating to effectively remove stray light.

In particular, the rear group lens adopts the two pieces of far-separated refractive lenses, which improves both the star quality and the aberration correction performance, and it has a very good control of full-frame peripheral light reduction.

Thanks to the native Petzval design, the user does not need to

calculate the backfocus, as long as the focus is within a certain range is the optimal position.

Mechanically, FRA300 Pro is assembled with high-quality CNC-machined components, wrapped with smooth spray coating and light oxidation process, both beautiful and practical. The tube ring design is equally lightweight and stylish. Despite the increased cost, we want enthusiasts to use the FRA300 Pro that performs well in every way and was considered thoroughly in every aspect.

The focuser is 2.5" rack-and-pinion, which is solid and beautiful. It was designed with dual-speed hand knobs, twin knobs for coarse adjustment and a fine adjustment knob to accurately the focus, equipped with a universal M48X0.75 thread adapter. There are also two separate M54X0.75 and M42X0.75 adapters in the standard kit for easy access to a variety of imaging equipment and accessories. The end is equipped with a 360° rotator, which is convenient for users to rotate at any angle when shooting.

FRA300 Pro also comes standard with a multi-function handle and a 300mm vixen-style dovetail plate, which can be directly connected to various mounts and accessories, the multi-functional handle can also be connected to the universal vixen-style finder base. The 300mm dovetail plate allows the astrograph to maintain balance on the mount.

FRA300Pro, as the first Pro version launched by Askar, goes further on the good reputation of the original FRA series, with amazing shooting performance, convenient carrying and using experience.

Aperture size: 60mm

Focal length: 300mm

Focal ratio: F5

Objective lens: quintuplet fully air-spaced Petzval APO (including one ED glass)

Image circle: 44mm full-frame

Maximum accessory connection (with the focuser fully retreated):

Imaging mode:

71mm (from the base of M42×0.75 male thread)

67mm (from the base of M48×0.75 male thread)

71mm (from the base of M54×0.75 male thread)

Total length: 303mm

Net weight: 2.26kg

Gross weight: 3.12kg

Rear-end thread:

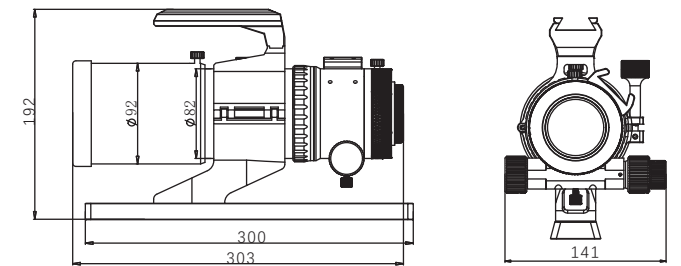
M42×0.75 male thread

M48×0.75 male thread (built-in 2" filter thread adapter)

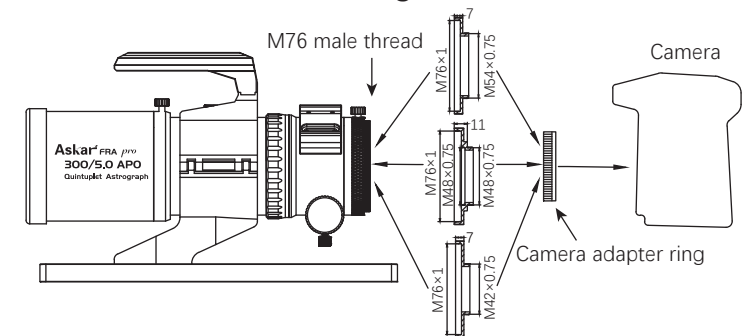
M54×0.75 male thread

Standard package items: a tube ring, a handle, a 300mm Vixen-style dovetail plate, a M54×0.75 adapter, a M42×0.75 adapter, a warranty, a manual

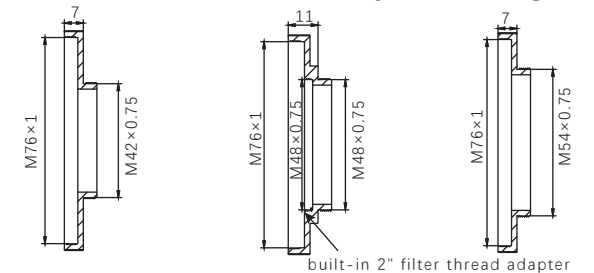
Product Size Diagram



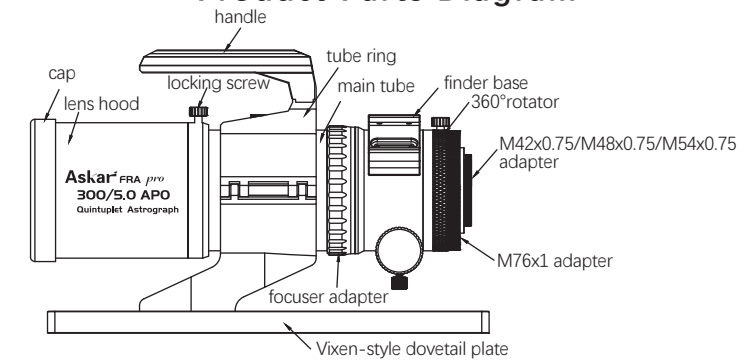
Connection Diagram of Camera



M42、M48、M54 Adapters Diagram

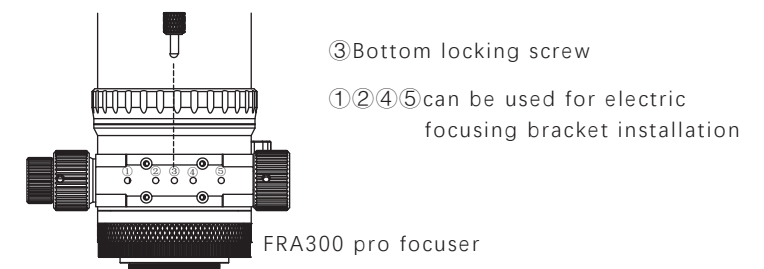


Product Parts Diagram

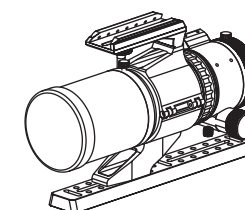


The Locking Screw Position Diagram

Bottom locking screw



Items in FRA300 pro Packaging



a tube ring, a handle, a 300mm Vixen-style dovetail plate, a M54×0.75 adapter, a M42×0.75 adapter, a warranty, a manual



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