Askar

91F *Flat-Field*

User's Manual

WARNING

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

English

Instructions for use

The Askar 91F is an OTA with an aperture of 91mm, a focal length of 609mm, and a native focal ratio of F6.7. It is designed for both visual observation and astrophotography.

The Askar 91F features a four-element optical lens design (three elements in the front and one in the rear), including one piece of ED glass, which can effectively reduce chromatic aberration. The Askar 91F supports 44mm full-frame imaging with great performance of the surrounding star points.

The Askar 91F is a self-flattened design that allows to avoid calculating the back focus, after attaching the imaging accessories, users can directly use it for shooting after the OTA is in focus. (The maximum accessory connection from the base of M54×0.75 male thread is 93mm).

The Askar 91F OTA weighs only 3.92kg and the gross weight is 4.52kg (including the tube rings、dovetail plate、handle).

The Askar 91F comes with three accessories: a 76x 8mm eyepiece, a 30x 20mm eyepiece, and a 1.25-inch 45°erecting prism.

The Askar 91F also comes standard with a photographic extension tube, which includes M48*0.75&M54*0.75 adapters, it also contains a built-in 2-inch filter thread for easy shooting connections.

The Askar 91F features a retractable dew shield, further reducing overall length and enhancing portability. The inside of the tube is pasted with matting felt to better eliminate stray light, while the exterior sports a sleek blue-and-white color scheme with high-quality CNC machining and paint finish.

On the handle bar of Askar 91F, it designs a finder base slot. Besides, there are two finder bases on both sides of the focuser, which not only eliminates the need for disassembling when changing the position of the finder scope but also provides additional mounting positions for other astronomical accessories.

In terms of the focuser, the Askar 91F is equipped with a dual-speed R&P 3-inch rigid focuser, which has a 1:10 fine adjustment and a 360° scale field

rotator at the rear end for precise angle adjustment.

The Askar 91F's dovetail plate is a 230mm standard Vixen dovetail plate, which slotted 1/4 screw holes as well as 3/8 screw holes for direct tripod attachment.

The rear interface of the Askar 91F includes both 2-inch and 1.25-inch adapters, enabling compatibility with a wide range of observing accessories.

91F Specifications:

Aperture size: 91mm

Focal length: 609mm

Focal ratio: F6.7

Objective lens: Quadruplet air-spaced APO (including one ED glass)

Image circle: 44mm

Maximum accessory connection (with the focuser fully retreated):

Imaging mode:
75mm (from the base of M48×0.75 male thread)
93mm (from the base of M54×0.75 male thread)

Observing mode:
112mm (from the end of 1.25" eyepiece holder)
122mm (from the end of 2" eyepiece holder)

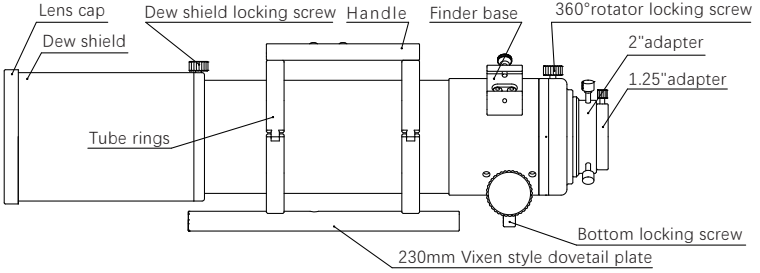
Total length:
513mm (including 1.25" adapter as dew shield contracted)
599mm (including 1.25" adapter as dew shield fully stretched)
550mm (including the photographic adapter as dew shield contracted)
636mm (including the photographic adapter as dew shield fully stretched)

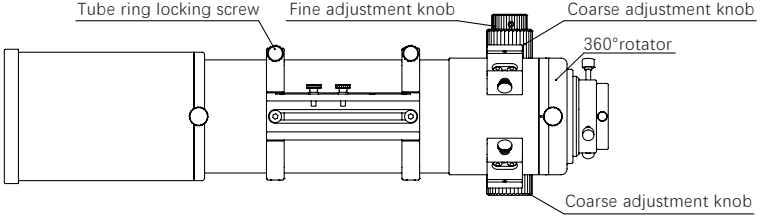
Net weight: 3.92kg

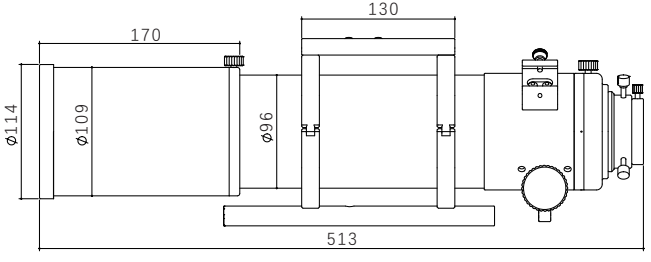
Gross weight (Including tube ring&dovetail plate): 4.52kg

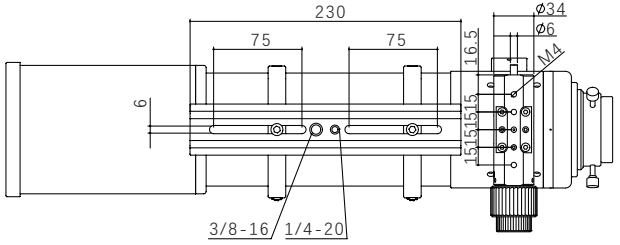
Rear-end thread type: M64×1-M54×0.75
M54×0.75-M54×0.75
M54×0.75-M48×0.75 (with M48×0.75 filter thread)

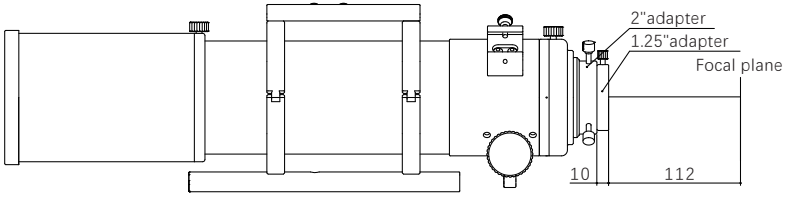
Product Parts and the Size Diagram

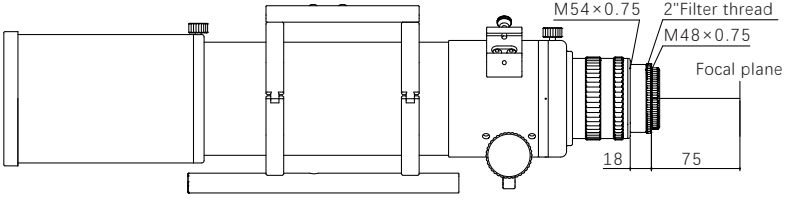




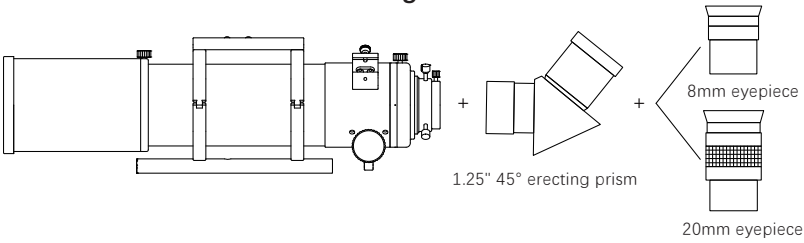



230
75
75
ϕ34
ϕ6
M4
16.5
15
15
15
15
6
3/8-16
1/4-20

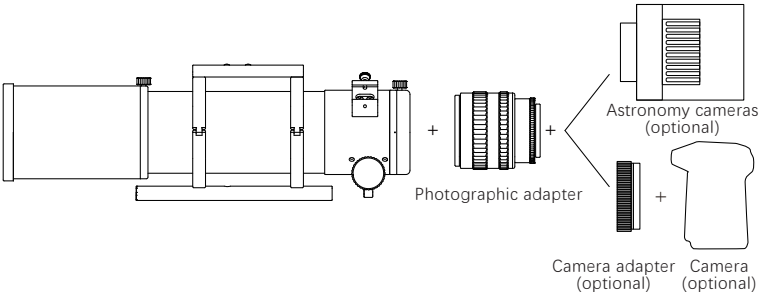

2"adapter
1.25"adapter
Focal plane
10
112


M54×0.75
2"Filter thread
M48×0.75
Focal plane
18
75

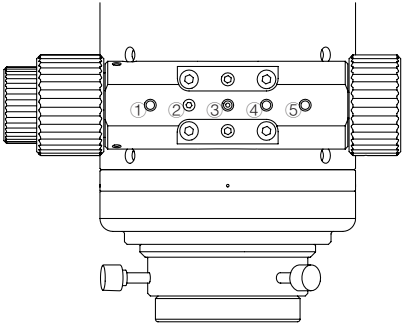
Observing mode



Imaging mode

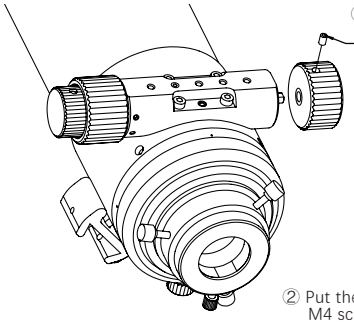


The Locking Screw Position Diagram



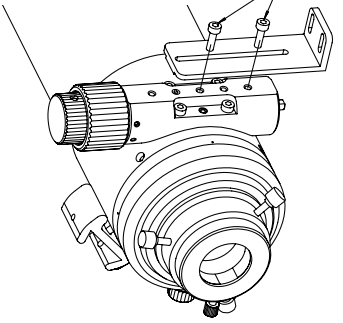
② Bottom Load Adjustment Screw
③ Bottom Locking Screw
①③④⑤ Can be used for electric focusing bracket installation

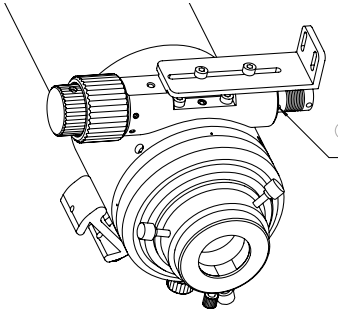
Steps of Installing EAF



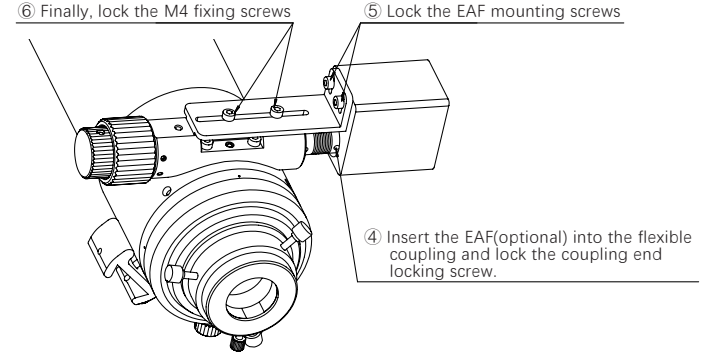
① Use a 2mm wrench to loosen the screw and remove the coarse adjustment knob

② Put the motor bracket on and screw the standard M4 screws into the hole shown, but please do not lock them now.

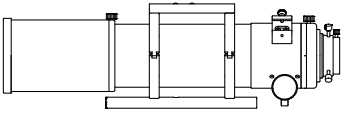




③ Choose the 5-6mm flexible coupling and lock this screw.



Items in 91F Packaging



91F OTA



a set of photographic adapters,
a 1.25" 45° erecting prism,
a 8mm eyepiece, a 20mm eyepiece



Instruction manual



Warranty card



Check list



Qualified certificate



Official site



Facebook



YouTube



Ins



Twitter