# Askar

# 71F Flat-Field

User's Manual

#### **WARNING!**

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

www.sharpstar-optics.com

### English

#### Instructions for use

The Askar 71F is an OTA with an aperture of 71mm, a focal length of 490mm, and a native focal ratio of F6.9.The Askar 71F is versatile and can be used for both visual observation and astrophotography.

The Askar 71F adopts a quadruplet air-spaced APO lens design, including one piece of ED glass. The Askar 71F supports 44mm full-frame imaging.

The Askar 71F is a self-flattened design that allows to avoid calculating the backfocus, 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 M48×0.75 male thread is 82.5mm).

The Askar 71F OTA weighs only 2.5kg and the gross weight is 3kg (including the tube rings and dovetail plate).

The Askar 71F comes with three accessories: a 60x 8mm eyepiece, a 25x 20mm eyepiece, and a 1.25" 45° erecting prism.

The Askar 71F 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 dew shield of the Askar 71F is a retractable design, further shortening the overall length and increasing portability. The entire lens tube of Askar 71F is crafted using high-quality CNC machining. All the inner of the Askar 71F's dew shield is covered with matting paint to effectively reduce stray light reflections.

On the handle bar of Askar 71F, 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 71F is equipped with a dual-speed R&P 2.4-inch rigid focuser, which has a 1:10 fine adjustment and a  $360^\circ$  scale field rotator at the rear end for precise angle adjustment.

The Askar 71F'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.

Aperture size:71mm Focal length:490mm Focal ratio:f/6.9

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

Image circle:44mm

Maximum accessory connection (with the focuser fully retreated):

Imaging mode:

82.5mm (from the base of M48×0.75 male thread)

100.5mm (from the base of M54×0.75 male thread)

Observing mode:

117mm (from the end of 1.25" eyepiece holder)

127mm (from the end of 2" eyepiece holder)

Total length:

722mm(when the dew shield is contracted)

804mm(when the dew shield is stretched)

Total length:

372.5mm(including 1.25" adapter as dew shield contracted)

430.9mm(including 1.25" adapter as dew shield fully stretched)

415mm(including the photographic adapter as dew shield contracted)

473.4mm(including the photographic adapter as dew shield fully stretched)

Net weight:2.5kg

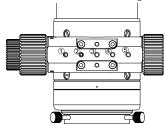
Gross weight(Including tube ring&dovetail plate) :3.0kg

Rear-end thread type:M64×0.75-M54×0.75

 $M54 \times 0.75 - M54 \times 0.75$ 

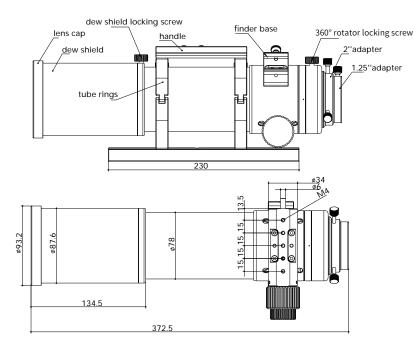
 $M54\times0.75$ - $M48\times0.75$  (with  $M48\times0.75$  filter thread)

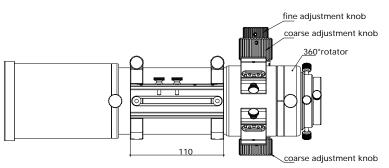
## The Locking Screw Position Diagram



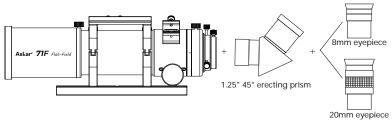
- (2) Bottom Load Adjustment Screw
- 3 Bottom Locking Screw
- ①345can be used for electric focusing bracket installation

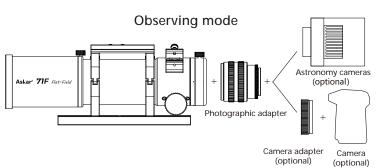
# Product Parts and the Size Diagram



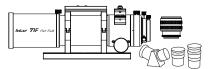


#### Imaging mode





#### Items in 71F Packaging



A 71F OTA, a pair of tube rings, a handle, a Vixen 230mm dovetail plate, a set of photographic adapters, a 1.25" 45° erecting prism, an 8mm eyepiece, a 20mm eyepiece



Instruction manual







Qualified certificate



Check list



