



FF70 APO

User Manual

WARNING

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

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English

Please read this user manual carefully before using the product.

The FF70 APO is an OTA with an aperture of 70mm, a focal length of 490mm, and a native focal ratio of F7.0. The FF70 APO is versatile and can be used for both visual observation and astrophotography.

The FF70 APO adopts a quadruplet air-spaced APO lens design, including one piece of ED glass. The FF70 APO supports 44mm full-frame imaging.

The FF70 APO is a self-flattened design that allows to avoid calculating the backfocus, after attaching the imaging accessories, users can directly use it for imaging after the OTA is in focus. (The maximum accessory connection from the base of M48×0.75 male thread is 82.5mm).

The FF70 APO OTA weighs only 2.5kg and the gross weight is 3kg (including the tube rings and dovetail plate).

The FF70 APO 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 imaging connections.

The dew shield of the FF70 APO is a retractable design, further shortening the overall length and increasing portability. The entire lens tube of FF70 APO is crafted using high-quality CNC machining. All the inner of the FF70 APO's dew shield is covered with matting paint to effectively reduce stray light reflections.

On the handle bar of FF70 APO, 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 FF70 APO is equipped with a dual-speed R&P 2.4-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 FF70 APO'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.

FF70 APO Specifications:

Aperture size: 70mm
Focal length: 490mm
Focal ratio: f/7.0
Objective lens: Quadruplet air-spaced APO(including one ED glass)
Image circle: 44mm

Maximum allowable optical path length (from rear thread to sensor, when focuser is fully racked in)

Imaging mode:
82.5mm (from the base of M48×0.75 male thread)
100.5mm (from the base of M54×0.75 male thread)

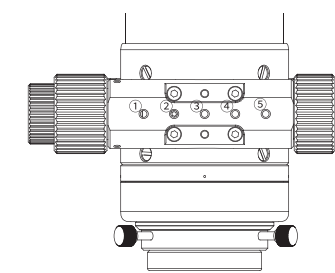
Visual Mode:
117mm (from the end of 1.25" eyepiece holder)
127mm (from the end of 2" eyepiece holder)

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 extension tube as dew shield contracted)
473.4mm(including the photographic extension tube as dew shield fully stretched)

Net weight: 2.5kg
Gross weight(Including tube ring&dovetail plate):3.0kg

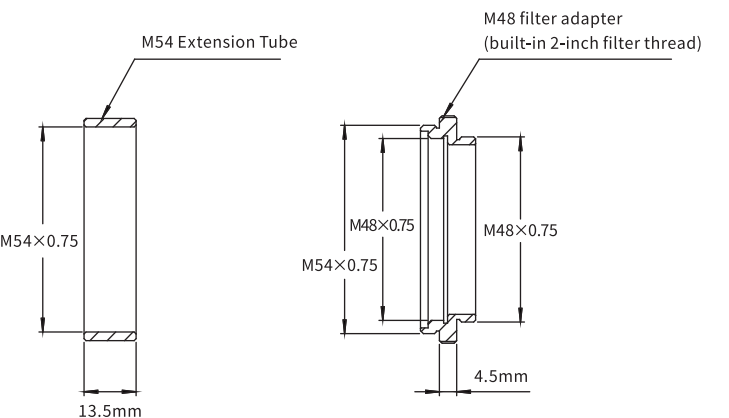
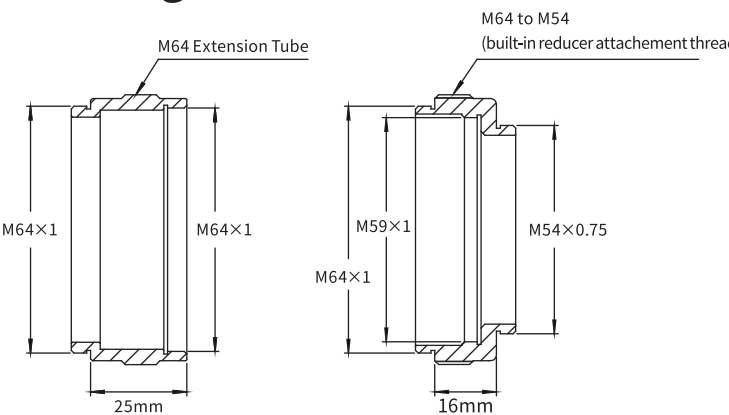
Rear-end thread type:
M64×0.75-M54×0.75
M54×0.75-M54×0.75
M54×0.75-M48×0.75 (includes built-in M48×0.75 filter thread)

Focuser Screw Functions Overview

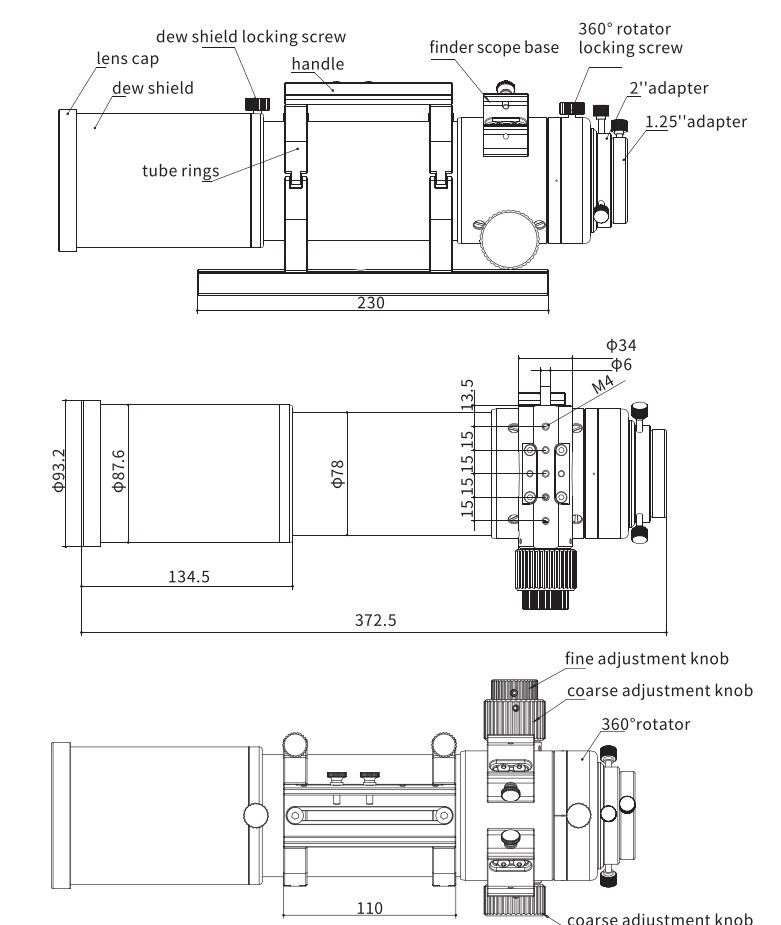


- ② Support Screw (bottom)
- ③ Main Locking Screw (bottom)
- ①③④⑤ Used for EAF Bracket Installation

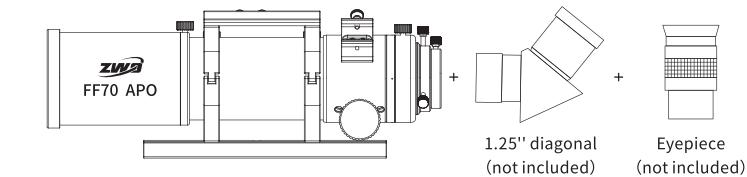
Photographic Extension Tube - 4-Stage Structure



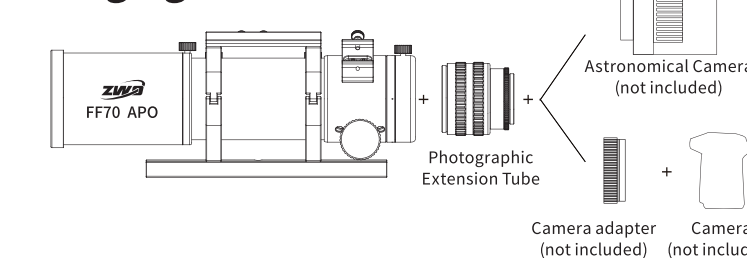
Product Overview and Dimensional Diagram



Observing mode



Imaging mode



What's in the box

- FF70 APO main unit ×1
- Carrying Handle ×1
- 230 mm Narrow Dovetail Plate ×1
- Tube Rings ×1 pair
- Extension Tube Set ×1
- User Manual
- Warranty card
- Inspection Certificate



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