



FF65 APO

■ 使用说明书

■ User's Manual

警告 WARNING!

请勿通过本望远镜或寻星镜直接观测太阳，否则可能导致眼睛受到严重损害甚至失明。若有观测太阳的需要，请使用专用太阳观测滤镜或滤膜并在安全指导下观测。

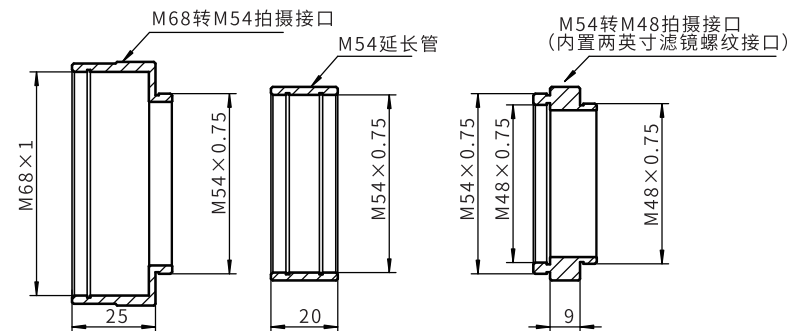
**DO NOT LOOK AT SUN THROUGH TELESCOPE.
IT WILL CAUSE IRREVERSIBLE DAMAGE TO YOUR EYE.**

欢迎使用ZWO FF65 APO
www.zwoastro.com

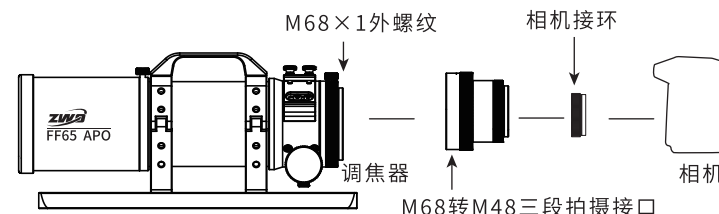
有效口径:65mm
焦距:416mm
焦比:f/6.4
物镜类型:五片式全分离APO(包括两片ED玻璃)
成像圈:44mm
调焦筒缩进状态下后端最长连接长度:

1. 拍摄模式:
85mm(从M48×0.75外螺纹算起)
114mm(从M54×0.75外螺纹算起)
139mm(从M68×1外螺纹算起)
 2. 观测模式:
121mm(从2英寸目镜基座算起)
- 全长:
328mm(含1.25英寸接口缩进状态) 360mm(加拍摄连接管缩进状态)
388mm(含1.25英寸接口伸长状态) 420mm(加拍摄连接管伸长状态)
- 本体重量:2kg
标准装重量:2.8kg
末端接口:
M68×1-M54×0.75
M54×0.75-M54×0.75
M54×0.75-M48×0.75(内置2英寸滤镜螺纹)
- 三段式拍摄连接管末端接口:M48×0.75
- 标配:FF65 APO本体一个,抱箍一对,提手一个,Vixen窄型鸠尾板一个,三段式拍摄连接管一套,说明书一份

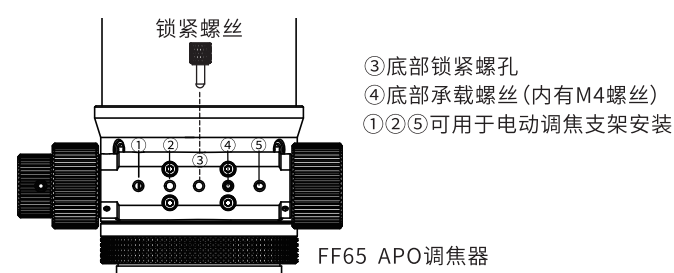
三段式拍摄连接管



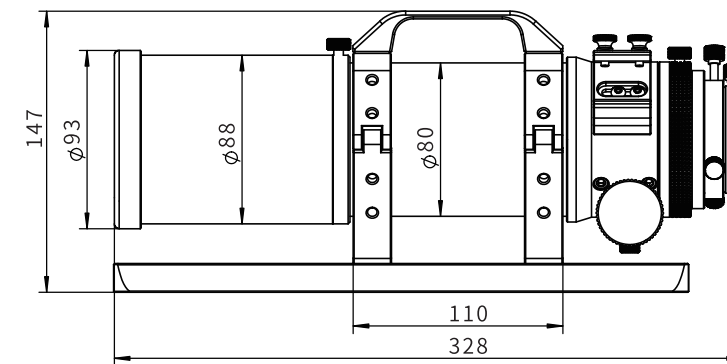
相机连接示意图



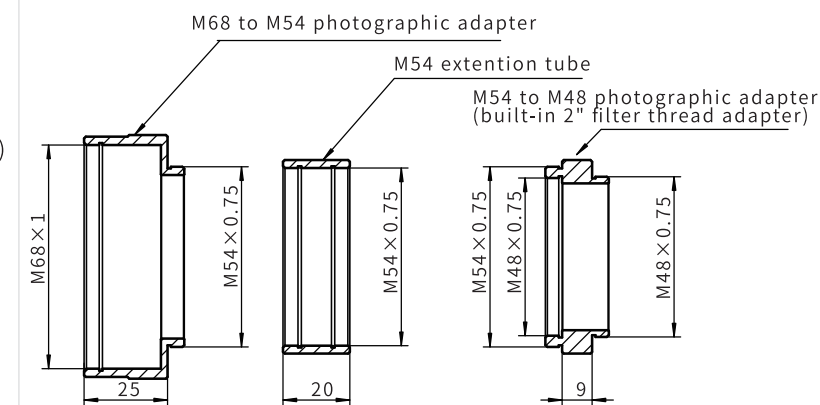
锁紧螺丝示意图



Product Size Diagram



Three-piece Adapters Diagram



aberrations. With its self-flattening design, FF65 APO offers strong advantages in astronomical shooting. It supports the full-frame image circle and has a fine spot diagram with tiny distortions of the peripheral stars.

FF65 APO comes with a telescopic lens hood, a high-quality CNC machined, painted tube, and attractive decorative parts. The OTA weighs 2kg, and the full package with tube rings, etc. weighs 2.8kg. The 2.5" rigid focuser comes with a new-type 360° rotator with scales and a finder base. M68, M54, and M48 camera adapters are also attached, and the M48 adapter has a 2" female thread for installing filters.

It is also a nice choice for your visual observation. With different diagonals and various eyepieces and it can also achieve a perfect focus. It can even be used to observe planets with a super-high magnification eyepiece. The FF65 APO contains a multifunctional handle, a Vixen dovetail plate, and sturdy double tube rings. It is small in size and light in weight, which perfectly caters to your need for viewing and shooting.

- Aperture size:65mm
Focal length:416mm
Focal ratio:f/6.4
Objective lens:Quintuplet air-spaced APO (including two ED glasses)
Image circle:44mm
Maximum accessory connection (with the focuser fully retreated):
1. Imaging mode:
85mm (from the base of M48×0.75 male thread)
114mm (from the base of M54×0.75 male thread)
139mm (from the base of M68×1 male thread)
 2. Observing mode:
121mm (from the end of 2" eyepiece holder)

中文版(简体)

使用产品前请仔细阅读本使用说明书。

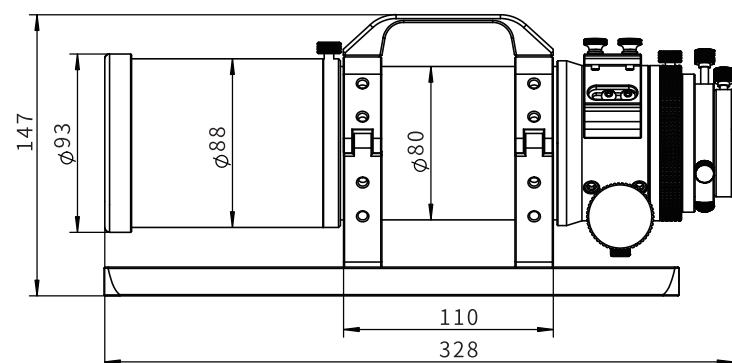
FF65 APO是自平场摄星镜,无需额外购买平场镜,避免计算平场镜的截距或是进行繁琐的连接以达到匹配的距离,可直接接上任意成像配件,合焦后即是最佳拍摄状态,方便快捷,让天文爱好者有更多时间投入到拍摄工作中。用FF65 APO进行目视观测也是非常理想的选择,连接天顶镜配合各种目镜,都能轻松合焦,甚至超高倍观测行星也不在话下。

与FF系列其他望远镜相比,FF65 APO尺寸更加小巧。FF65 APO采用f/6.4焦比,焦距为416mm。不同于其他FF系列望远镜的四片式结构,FF65 APO为五片式光学镜片组合,前三片中有两片为ED玻璃,有着非常好的色差及其他像差控制能力。由于采用自平场设计,FF65 APO在天文拍摄中具有很强的优势。它支持全画幅影像圈,点阵图细腻,周边星点变形极小。

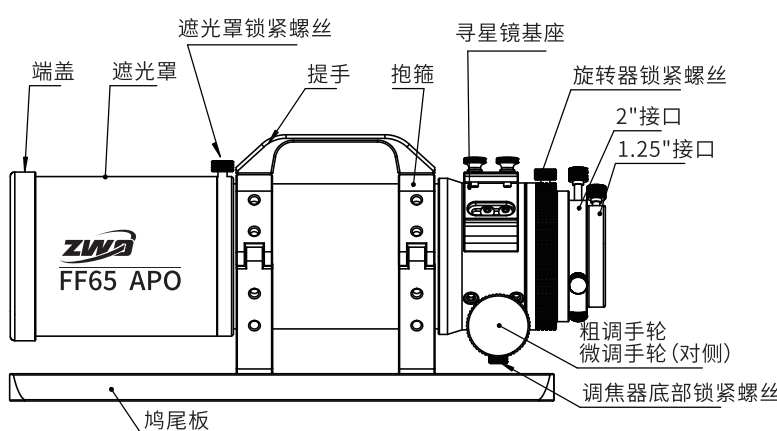
FF65 APO附有伸缩遮光罩,镜筒全部采用高质量CNC加工工艺以及喷涂涂装,装饰零件醒目美观。望远镜本体净重2kg,标准装重量2.8kg。刚性2.5英寸调焦器带新型含刻度的360°旋转器以及寻星镜基座。附有M68/M54/M48拍摄接环,其中M48接环内置带有2英寸滤镜螺纹。

用FF65 APO进行目视观测也是非常理想的选择,连接天顶镜配合各种目镜,都能轻松合焦,甚至超高倍观测行星也不在话下。多功能提手,Vixen窄型鸠尾板体积小、重量轻、十分便携,配合结实的双抱箍,完全满足观测和拍摄的使用需求。

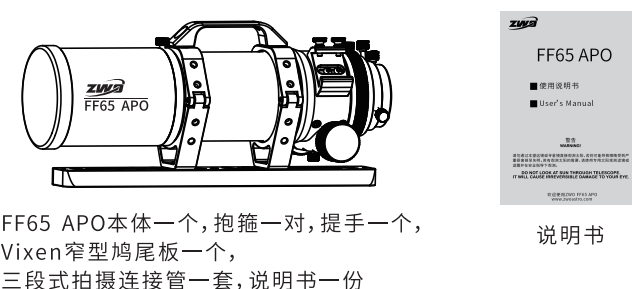
产品尺寸图



部件图



包装含有



FF65 APO本体一个,抱箍一对,提手一个,Vixen窄型鸠尾板一个,三段式拍摄连接管一套,说明书一份

English

Instructions for use

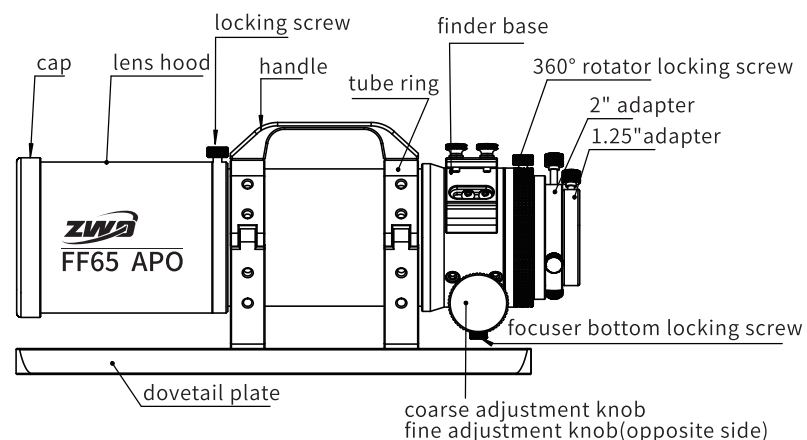
The FF65 APO is a refractive astrograph with the powerful flatfield optical design which saves you from the expensive cost of a field flattener. It eliminates the trouble of calculating the back focus distance of the flattener and connecting various accessories to achieve that distance. You can just connect any possible accessories you need as long as the target is focused. This makes the whole setting up process much more convenient, and saves your time, allowing you to pay more attention to the image shooting itself. It will also be an ideal telescope if you want to do visual astronomy. Directly connect the star diagonal to the eyepieces, you'll see focusing is such an easy thing then. Planetary observation in high magnification is also piece of cake!

FF65 APO has a smaller size than other FF astrographs. FF65 APO has a focal ratio of f/6.4 and a focal length of 416mm. Instead of the quadruplet structure of other FFs, the FF65 APO is a quintuplet with two ED glasses which offers excellent control of chromatic and other

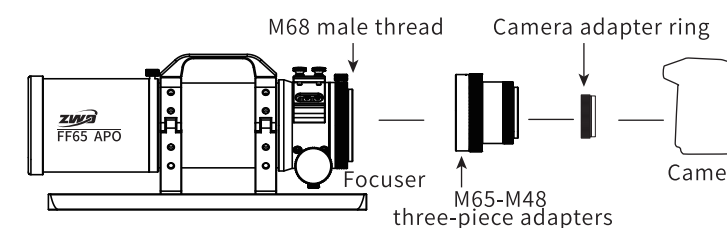
- Total length:
328mm (including 1.25" eyepiece holder as dew shield contracted)
388mm (including 1.25" eyepiece holder as dew shield fully stretched)
360mm (including the 3-piece adapter as dew shield contracted)
420mm (including the 3-piece adapter as dew shield fully stretched)

- Net weight:2kg
Gross weight:2.8kg
Rear-end thread type:
M68×1-M54×0.75
M54×0.75-M54×0.75
M54×0.75-M48×0.75 (built-in 2" filter thread)
Rear end of the 3-piece photographic adapters:M48×0.75
Standard package items:an FF65 APO OTA, a pair of tube rings, a handle,a Vixen-style dovetail plate, a set of 3-piece photographic adapters, a manual

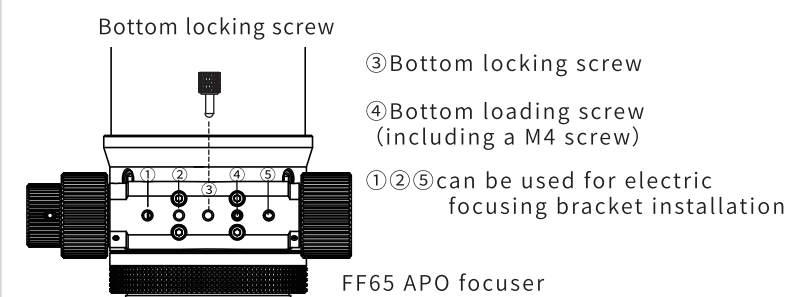
Product Parts Diagram



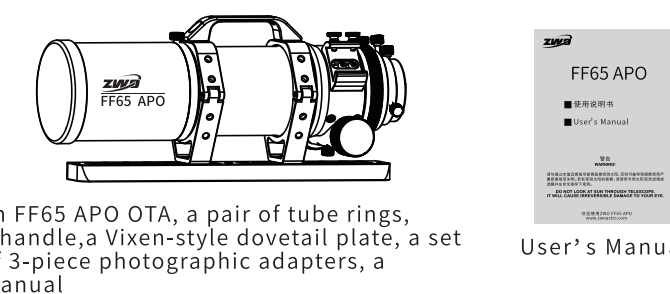
Connection Diagram of Camera



The Locking Screw Position Diagram



Items in FF65 APO Packaging



an FF65 APO OTA, a pair of tube rings, a handle,a Vixen-style dovetail plate, a set of 3-piece photographic adapters, a manual

User's Manual