

# 107PHQ

## ■ 使用说明书

## ■ User's Manual

### 警告 WARNING!!

请不要通过本望远镜直接观察太阳，这样做可能导致瞬间失明，  
请购买专用太阳观测滤镜或滤膜，来获得最安全的观测指导。通过  
寻星镜，也可以造成眼睛的严重损害。

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

欢迎使用ASKAR 107PHQ  
www.askarlens.com

中文版（简体）

使用产品前请仔细阅读本使用说明书。

107PHQ 作为Askar 第一款长焦比、自平场摄星镜，有着它特殊的使命。不管是刚入门的小白还是资深爱好者，都能轻松简单的使用它。入门爱好者再也不必出于拍摄目的去购买必须附加的平场镜，也不需要计算平场镜的后截距以及繁琐的连接达到匹配的距离，直接接上任意成像附件，合焦后就是最佳的拍摄状态，轻松搞定，让您有更多时间投入到其他拍摄工作中。

ASKAR 107PHQ 是一个真正的全能型选手。  
一台几乎适用于所有用途的望远镜，而这也正是107PHQ制造的目的。

107PHQ采用f/7焦比，四片式光学镜片组合，其中两片为ED玻璃。因此，107PHQ有着非常好的色差控制能力，即使目视放大到300倍也能有效纠正色差问题。

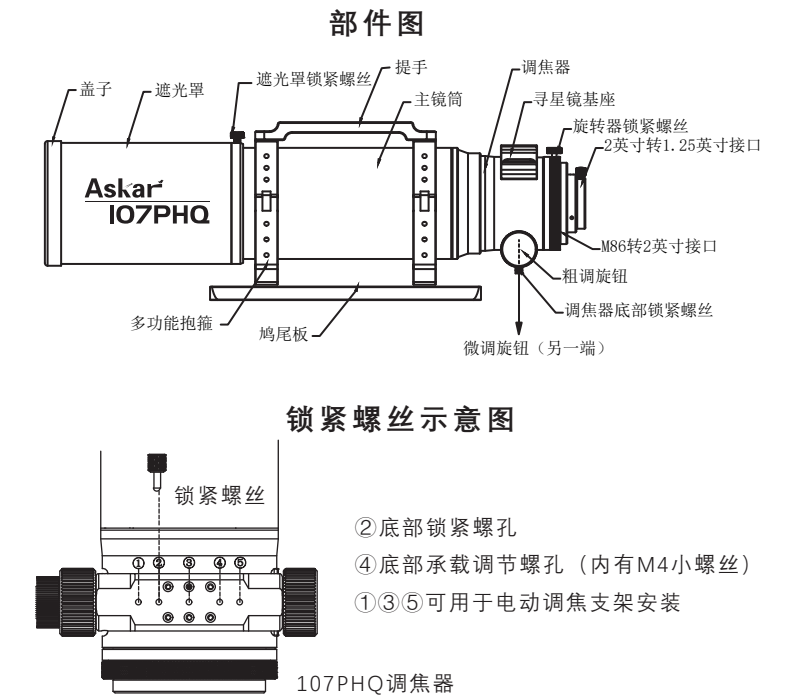
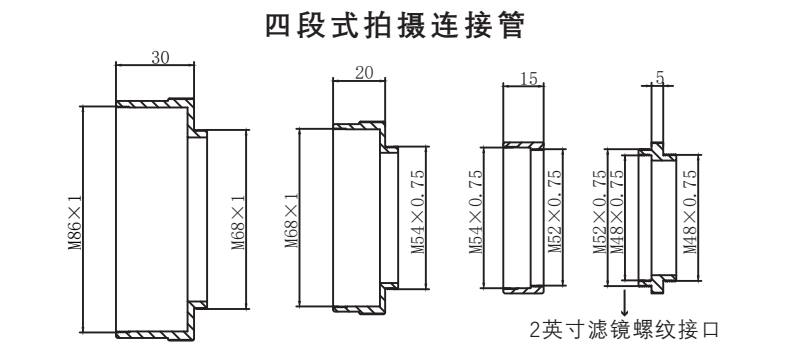
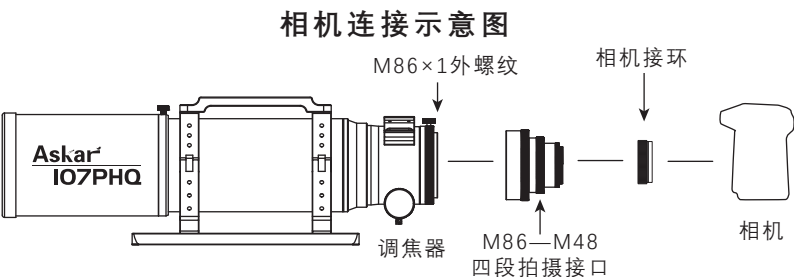
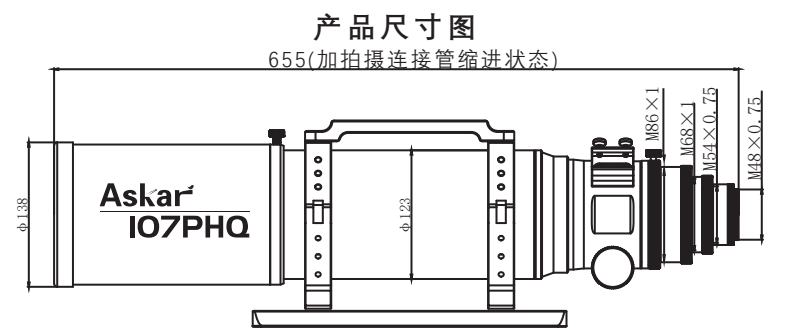
由于采用自平场设计，107PHQ在天文拍摄中具有很强的优势。它不仅支持全画幅44mm影像圈，而且周边星点变形极小。视场中央星点RMS半径只有3微米左右，星点细腻，可以满足严苛的资深玩家对星点的要求。像场整体非常平坦，周边减光也非常优秀。

凭借749毫米的焦距和强大的像场修正，搭配高分辨率相机进行天文拍摄时，天体的精细细节也可以被轻松捕捉到。

用107PHQ进行目视观测也是非常理想的选择，无论是连接1.25英寸，2英寸天顶镜还是各种目镜，都能轻松合焦，甚至超高倍观测行星也不在话下。

107PHQ镜筒全部使用高质量CNC加工工艺以及喷涂涂装，独有的绿色装饰零件醒目美观，刚性极高的3.4英寸大型调焦器完全满足观测和拍摄的使用需求。调焦器特别针对摄影进行了优化，可以承载高达8公斤的负荷。调焦行程范围非常大，最高为95毫米。

有效口径：107mm  
焦距：749mm  
焦比：f/7  
物镜类型：四片式全分离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：（调焦器完全缩进状态）  
1. 拍摄模式：  
79mm（从M48×0.75外螺纹算起）  
99mm（从M54×0.75外螺纹算起）  
119mm（从M68×1外螺纹算起）  
149mm（从M86×1外螺纹算起）  
2. 观测模式：  
120mm（从2英寸目镜基座算起）  
全长：603mm（含2英寸接口缩进状态） 655mm(加拍摄连接管缩进状态)  
754mm（含2英寸接口伸长状态） 806mm(加拍摄连接管伸长状态)  
本体重量：5.7kg  
标准装重量：6.9kg  
四段式拍摄连接管接口：M86×1-M68×1  
M68×1-M54×0.75  
M54×0.75-M52×0.75  
M52×0.75-M48×0.75 (内置M48×0.75滤镜接口)  
标配：107PHQ本体一个，抱箍一对，提手一个，Askar 300mm Vixen窄型鸠尾板一个，四段式拍摄连接管一套，铝箱一个，说明书一份



English

Instructions for use

As the first long-focal-ratio Flatfield astrograph from Askar, 107PHQ is born with a special mission: whether you are just getting started in astrophotography, or an enthusiast who has been quite familiar with all equipment and devices, you can always find Askar 107PHQ a useful astrograph which is functionally practical and physically attractive. It's especially amateur or beginner friendly since you don't need to attach an extra field flattener to get a satisfactory picture. And for the fact that you don't need a flattener and you can easily get over back-focus calculation and confusing connection steps, all you need to do is to equip your 107PHQ with any possible imaging devices, make the target stay at the focus, and then the whole optical system is perfect for imaging.

Askar 107PHQ, a versatile all-rounder.  
Askar 107PHQ can literally be applied in any conceivable situations, and that's the top reason why 107PHQ is produced: to slash as much trouble for users as possible.

Askar 107PHQ, an f/7 astrograph, contains four pieces of lenses including two pieces of ED glass, which can better reduce chromatic aberration. It can achieve excellent color correction even with the magnification mounting to 300× in visual observation.

The built-in Flatfield lens is a great contribution to Askar 107PHQ's imaging ability. It supports 44mm full-frame imaging. The stars around the corner of the images seldom suffer from distortion or deformation. At the center of its field of view, the RMS radius is merely 3um. Even a fastidious user can also be satiated when it comes to the shape of stars. Askar 170PHQ can effectively handle with problems of field curvature and vignette.

Askar 107PHQ can capture tiny star objects due to its 749mm focal length and astonishing field flattening capacity. When used Askar 107PHQ and a high-resolution camera, it can still bring out lots of detailed information of your target.

Askar 107PHQ is also a nice choice for your visual observation. It fits 1.25", 2" diagonal as well as various eyepieces and can achieve a perfect focus. It can even be used to observe planets with a super-high magnification eyepiece.

The sleek 107PHQ is assembled with high-quality CNC-machined components and wrapped with smooth coating. The calm and seriousness is offset by the bright green decorative rings or knobs. The 3.4" rigid focuser is capable of handling a load of 8kg. It's designed with a long travel distance of 95mm, which is suitable for visual observation. And it's been optimized especially for astrophotography.

**Aperture size:** 107mm  
**Focal length:** 749mm  
**Focal ratio:** f/7  
**Objective lens:** Quadruplet air-spaced APO (including two ED glass)  
**Image circle:** 44mm  
**Maximum accessory connection (with the focuser fully retreated):**  
1. Imaging mode:  
79mm (from the base of M48×0.75 male thread)  
99mm (from the base of M54×0.75 male thread)  
119mm (from the base of M68×1male thread)  
149mm (from the base of M86×1 male thread)  
2. Observing mode:  
120mm (from the end of 2" visual back)  
**Total length:** 603mm (when the dew shield is contracted)  
754mm (when the dew shield is stretched)  
655mm (plus 4-piece adapter and with dew shield contracted)  
806mm (plus 4-piece adapter and with dew shield stretched)

**Net weight:** 5.7kg  
**Gross weight:** 6.9kg  
**Four-piece photographic adapter:** M86×1 to M68×1  
M68×1 to M54×0.75  
M54×0.75 to M52×0.75  
M52×0.75 to M48×0.75 (with M48×0.75 filter thread)

**Standard package items:** a 107PHQ OTA, a pair of tube rings, a handle, an Askar 300mm Vixen dovetail plate, a set of four-piece photographic adapters, a high-quality aluminum suitcase, a manual

