

Askar

151PHQ

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

151PHQ is a long-focal-ratio, flatfield astrograph newly launched after 130PHQ and also the biggest refractor of Sharpstar products till now. Instead of buying extra flatteners, calculating the backfocus of the flattener, or making a tedious connection to match the distance, astrophotographers can simply equip it with any possible imaging devices, make the target stay at the focus, and then the whole optical system is perfect for imaging.

151PHQ has a focal ratio of $f/7$ and a focal length of 1057mm. The aperture is 151mm, which is the largest of Askar refractors so far. The quadruplet lens with two ED glasses offers excellent control of chromatic and other aberrations. With its self-flattening design, 151PHQ offers strong advantages in the astronomical shooting. It supports a medium frame 60mm image circle, has a fine spot diagram with tiny distortion of the peripheral stars, and its central RMS radius is less than 2 microns.

151PHQ comes with a telescopic lens hood, a high-quality CNC machined and painted tube, and attractive decorative parts. The 3.4" R&P focuser comes with M68/M54/M48 adapters (2"

filter thread adapter) , 360°rotator and a finder base. When used with the 3" 0.7 x flat field reducer, the telescope can reach a focal ratio of $f/4.9$ and a focal length of 740mm, effectively reducing exposure time. A standard 300mm Losmandy dovetail plate, together with a sturdy double tube ring, is perfectly suited for viewing and shooting.

Specification

Aperture size:151mm

Focal length:1057mm

Focal ratio: $f/7$

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

Image circle:60mm

Maximum accessory connection(with the focuser fully retreated)

Imaging mode:78mm (from the base of M48×0.75 male thread)

Observational mode:119mm (from the end of 1.25" eyepiece holder)

Total length:

Observational mode:930.3mm (with the dew shield contracted)
1117.8mm (with the dew shield fully stretched)

Imaging mode:976.8mm (with the dew shield contracted)
1164.3mm (with the dew shield fully stretched)

OTA Weight:11.6kg

Total Weight (Including tube ring&dovetail plate):13.7kg

Rear-end thread type:

M86×1-M68×1

M68×1-M54×0.75

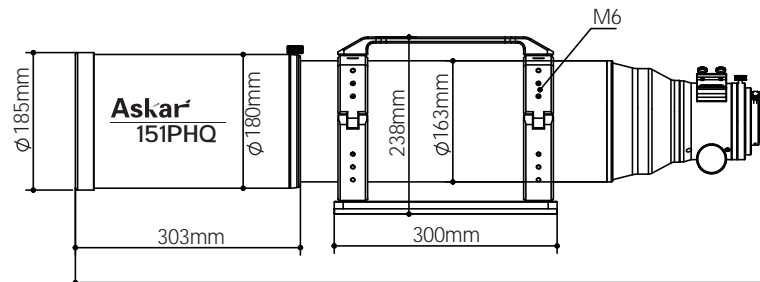
M54×0.75-M54×0.75

M54×0.75-M48×0.75 (built-in M48×0.75 filter thread)

Four-piece photographic end adapter:M48×0.75

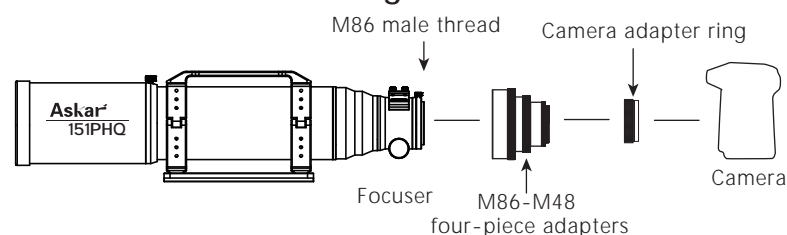
Standard package items:An 151PHQ OTA, a pair of tube rings, a handle, an Askar 300mm losmandy dovetail plate, a set of 4-piece photographic adapters, an aluminum box, a manual

Product Size Diagram

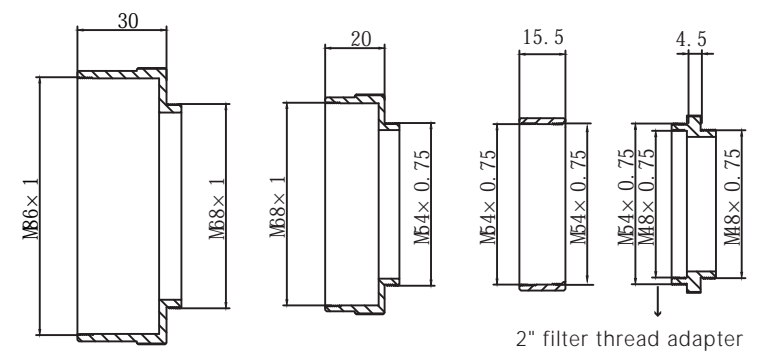


Observational mode:930.3mm (with the dew shield contracted)
1117.8mm (with the dew shield fully stretched)
Imaging mode:976.8mm (with the dew shield contracted)
1164.3mm (with the dew shield fully stretched)

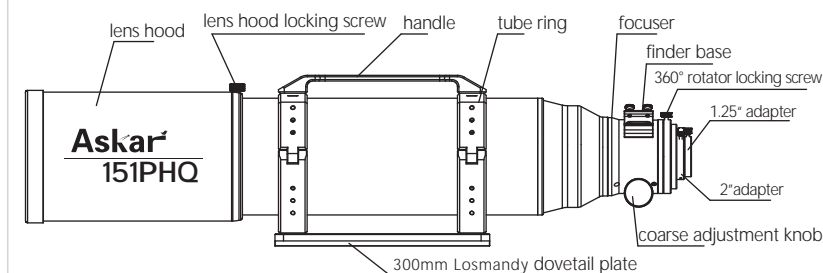
Connection Diagram of Camera



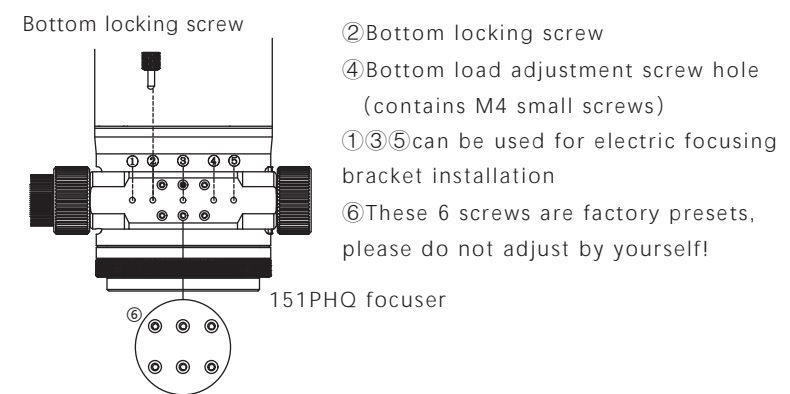
4-piece Photographic Adapter Diagram



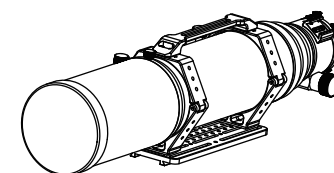
Product Parts Diagram



The Locking Screw Position Diagram



Items in 151PHQ Packaging



An 151PHQ OTA, a pair of tube rings, a handle, an Askar 300mm losmandy dovetail plate, a set of 4-piece photographic adapters, an aluminum box



a manual