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## 6.25x Double Barlow Overview

The APM Photo-Visual Barlow was designed to be extremely versatile. On its own, a single barlow lens cell has a magnification factor of 2.7x and will provide a fully illuminated imaging field of 26mm at a back focus of 104.1mm (measured from the shoulder of the lens cell). It is optimised for F4 Newtonian type telescopes and when used with such also offers coma correction. This is particularly useful for manual Alt-Az Dobsonian users who can enjoy a coma free view of objects as they drift across the field of view.

The design of the Barlow follows APM's usual principles of outstanding optical quality. It features a cemented doublet lens group using an FK61 ED element. Together with broadband multi-coating, the Barlow offers 99% light transmission from 400-700nm wavelengths, is fully Apochromatic in use and diffraction limited.

When combined with a second APM 2.7x Barlow at a specific distance, the magnification factor is increased to 6.25x. Coma correction is retained as is the corrected flat field. This is however reduced to 14mm at a distance of 83.1mm from the shoulder of the lens cell (84mm from the centre of the last element)

In this configuration, the double Barlow permits very high magnification with Newtonian telescopes for planetary imaging while still retaining a respectably low F ratio needed for high frame rates.





## Optical arrangement of double 2.7x barlow



Image scale with single 2.7x Barlow vs double 2.7x Barlow

To use the barlow in a 6.25x configuration, simply add a second 2.7x lens cell to the other end of the extension so there is a lens at each end. You now only need to set your camera sensor back 83.1mm from the shoulder of the last lens cell (see below) to have the correct back focus for imaging.



## Specifications

Туре	Coma Correcting ED Barlow
Lens	Doublet, FK61 ED Element
Coating	Broadband Multi-Coated
Magnification	6.25x (as double barlow)
Back Focus	83.1mm from Shoulder of Lens Cell
Flat Field diameter	14mm
Components included	1 x 2.7x Lens Cell, 1 x 1.25" Extension



For additional info please contact info@apm-telescopes.co.uk