

Group test

4.5- TO 5-INCH APO REFRACTOR TUBES FROM £1,099

Astronomica Maxvision ED127

VITAL STATS

- ▶ **PRICE** £1,249
- ▶ **APERTURE** 127mm (5 inches)
- ▶ **FOCAL RATIO** f/7.5
- ▶ **FOCAL LENGTH** 952mm
- ▶ **LENS** FPL-51 triplet
- ▶ **FOCUSER** 2-inch dual speed Crayford
- ▶ **WEIGHT** 8kg (17.6lb)
- ▶ **SUPPLIER** Astronomica
- ▶ **TEL** 01482 216848
- ▶ **WWW** astronomica.co.uk

FOR Superb finderscope
AGAINST Slightly weak focuser

This gloss white tube with its sliding dew shield comes in a sturdy aluminium carrying case, with room for quite a number of accessories. Just as well, because the supplied accessories included a 2-inch diagonal, which places

the eyepiece in a more neck-friendly position, and two wide-field eyepieces of 20mm and 10mm focal lengths. There's also a superb 8x50 finderscope with an erecting eyepiece.

The tube's mounting bracket incorporates a handle – a useful touch – but the focuser wasn't quite as smooth as some and the single screw compression clamp that holds the diagonal was a little hard to tighten. If you don't fancy all these accessories, you can buy the tube on its own for £1,099.

The Maxvision's front objective lens is a triplet with FPL-51 ED glass, a design that can give excellent colour correction. Just as expected, star tests proved this to be the case, showing little out-of-focus colour and virtually none

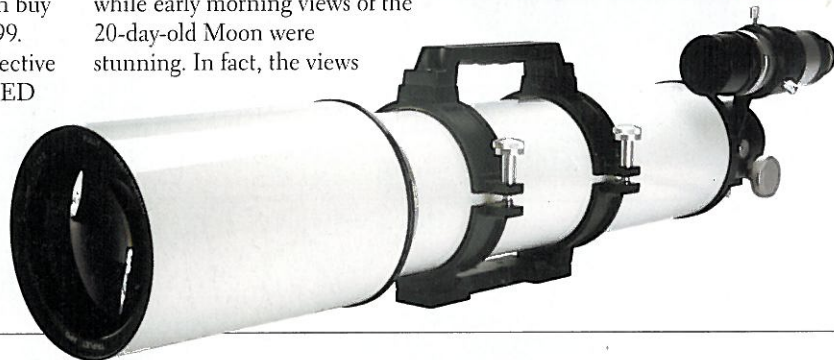
when in focus. However, the three-piece optics weren't quite as good at correcting spherical aberration as the other two-piece doublet lenses on test (see *Glossary*, page 105). This meant that the two double stars in Epsilon Lyrae, also known as the Double Double, weren't as cleanly split as with the doublets.

But this is splitting hairs. Jupiter showed excellent detail and contrast despite its low elevation, while early morning views of the 20-day-old Moon were stunning. In fact, the views

of the region around the crater Plato were some of the best we've seen. Summing up, this is a great telescope package for the price.

VERDICT

BUILD AND DESIGN	88%
EASE OF USE	86%
FEATURES	93%
OPTICS	93%
VALUE FOR MONEY	94%
OVERALL	91%



Vixen ED115S

VITAL STATS

- ▶ **PRICE** £1,769
- ▶ **APERTURE** 115mm (4.5 inches)
- ▶ **FOCAL RATIO** f/7.7
- ▶ **FOCAL LENGTH** 890mm
- ▶ **LENS** FPL-53 doublet
- ▶ **FOCUSER** Single speed rack and pinion
- ▶ **WEIGHT** 4.4kg (9.7lb)
- ▶ **SUPPLIER** Ian King Imaging
- ▶ **TEL** 01892 834004
- ▶ **WWW** iankingimaging.com

FOR Excellent optics and focuser
AGAINST Most expensive on test

Vixen has a reputation for producing high-quality telescopes and the ED115S is no exception. The gloss white tube has a fixed dew shield and a single speed rack and pinion focuser with a very smooth action. Its lens is made of

two optical components, one of which is FLP-53 glass.

With the tube you also get an excellent 7x50 finder and a William Optics 2-inch dielectric-coated diagonal. If you want to mount heavy 2-inch eyepieces there's the option of including a £30 Baader Planetarium 2-inch mounting clamp, which has two grub screws to give a firm grip on the diagonal.

The Vixen's optics were excellent. The scope corrected false colours almost perfectly when in focus and showed just a little red and green fringing when out of focus. Pointing the scope at the stars showed the optics to be pretty much perfectly corrected. As it had the shortest focal length of the

four, it gave a full 3° field of view when used with the 40mm focal length TMB eyepiece.

Our observations fully confirmed the excellence of the optics. We couldn't see any colour fringing around bright stars and got a surprising amount of detail on Jupiter considering how low down it was. Views of the 20-day-old-Moon observed under near-perfect seeing conditions were excellent, with very little colour fringing around the rim. Sitting on the terminator, the crater Maurolycus was

especially memorable. This scope proved itself to be a versatile instrument that was a joy to use.

VERDICT

BUILD AND DESIGN	89%
EASE OF USE	94%
FEATURES	92%
OPTICS	97%
VALUE FOR MONEY	89%
OVERALL	92%

