

Group test

5-INCH ACHROMATIC REFRACTORS FROM £369

Overall winner Bresser Messier R127L

The refractors on test here all have two things in common. Firstly, they are all incredible value for money, and secondly, their focal lengths are all shorter than is really needed on an achromatic refractor to reduce chromatic aberration to a negligible level. However, with the purchase of a minus violet filter, you can reduce those coloured haloes.

So, if you're fairly new to astronomy and are looking for a straightforward, rugged, fun-to-use instrument, which is the best buy?

With only £30 between them, the Celestron and Sky-Watcher have much in common. You do get much more for the extra £30 with the Sky-Watcher, but if looks and lightweight components are important then you may well be swayed by the Celestron. Otherwise the extra eyepiece, bigger findscope and star diagonal will lead you to the great-value Sky-Watcher.

The Astronomica is an instrument for low-power wide-field observers who want to look at deep-sky objects such as nebulae, galaxies and star clusters, for example. It's also an option for those who need a very portable setup, but the drawback is its focal ratio of f/6.5. At f/6.5 you'd need a pricey apochromatic scope to deliver good colour images.

That leaves the Bresser Messier R127L, which is definitely the best investment. Its longer focal length delivers better colour performance and, with six different magnifications from 48x right up to 240x with the Barlow lens, you'll have the night sky covered. With the best all-round package, the Messier R127L is this month's Group test winner. ★

Next Month

We put some high-end 25x100 binoculars through their paces



At-a-glance guide

	Celestron	Sky-Watcher	Bresser	Astronomica
MANUFACTURER	Celestron	Sky-Watcher	Bresser	Astronomica
MODEL	Omni XLT 120	Evostar-120	Messier R127L	Astronomica 127
PRICE	£369	£399	£469.99	£479
APERTURE	4.75 inches (120mm)	4.75 inches (120mm)	5 inches (127mm)	5 inches (127mm)
FOCAL LENGTH	1,000mm (f/8.33)	1,000mm (f/8.33)	1,200mm (f/9.4)	820mm (f/6.5)
FINDER	6x30mm	9x50mm	8x50mm	8x50mm
EYEPIECES	25mm	25mm, 10mm	25mm, 12.5mm, 10mm	20mm, 6.5mm
MOUNT	CG4	EQ5	Mon 2	Astro-5
VERDICT	83%	84%	88%	79%