

Sky-Watcher Skyliner-300P FlexTube Dobsonian

Optical Vision Ltd. — +44 (0)1359 244200 — £649



Having used a wide range of Sky-Watcher Newtonians over the years, I've often expressed my pleasure at the consistency and precision with which their mirrors are polished and figured. In my October 2007 *Astronomy Now* review of this instrument's predecessor, the Skyliner-300P, I wrote of its enviable optical performance for the price. I didn't think the 305mm FlexTube would surpass it, but it does. The review FlexTube possessed the finest optics I've yet encountered in a Chinese-made reflector and the build quality is fantastic. The key feature of this thoughtfully designed 12-inch f/5 'scope is a collapsible tube assembly that saves a great deal of space when the instrument is not in use. No messing around attaching trusses like some other designs — the FlexTube just concertinas into and out of itself.

The upper section of the FlexTube containing the secondary mirror assembly and 2-inch Crayford focuser extends with effortless precision on three 24mm diameter rods that are easily locked into position at their greatest extent via three chromed hand-grip bolts. If you wish to

leave the 'scope fully extended then there are three separate locking bolts to tighten down. Fully retracted, the tube assembly is very compact at just 93cm long and 36cm in diameter; ready for use, it's 144cm in length. Initial concerns that the tube extension rods would not retain collimation proved unfounded. Despite repeatedly collapsing and extending the 'scope in the course of prolonged observing sessions, the FlexTube's optics remained in perfect alignment. And despite the name, there's no flexure in this 'scope's OTA when in use.

Like any open tube reflector, one thinks about the mirrors' vulnerability and protection from dewing. Fortunately, the 305mm FlexTube's primary, with its excellent 9-point ventilated cell, is well protected since the lower section of the tube is around 67cm long. The secondary mirror may be the most exposed, but during two extended observing sessions I never encountered any dewing. Nevertheless, I imagine that third-party suppliers will soon be offering shrouds for the FlexTube range. Keen-eyed readers will note that the FlexTube's altazimuth mount has been stiffened by additional side braces. It is noticeably more rigid than that supplied with the former Skyliner-300P. The FlexTube also features a roller bearing on the azimuth axis, making for far easier sweeping in this plane than before.

Saturn is often described as the jewel of the Solar System, but to see it in all its 24-carat splendour you need a 'scope like the 12-inch FlexTube. In recent memory I haven't seen such a sharp and richly rendered image of the ringed planet as that delivered by the 'scope on the night of April 8th, 2008, closely matched by that of April 12th under similarly fine seeing. The planet's retinue of inner moons was clearly seen as pinpricks of light in a field of view that had surprisingly little scattered light — credit the thin vanes of the secondary mirror's spider and good multi-coatings on the supplied 10mm and 25mm Plössl eyepieces. Mars, just 6.6 arcseconds in diameter, revealed its 90% gibbous phase with ease. But what really surprised me was plainly identifying the Syrtis Major near the planet's meridian with higher powers on April 8th with Mars at such a distance from Earth.

I was able to use the 305mm FlexTube on a wide variety of celestial objects under what passed for fine observing conditions from my heavily light-polluted suburban locale. Messier 3, the stunning globular cluster in Canes Venatici, was resolved into a ball of innumerable stars, some held with direct vision right across the core. Messier 82, the starburst galaxy in Ursa Major, easily revealed mottled dusty filaments across its nucleus. Edge-on galaxy NGC 4565 in Coma Berenices showed the dust lane along its slender form. And so the list went on.



This detailed image of lunar craters Aristoteles (largest feature, 87km diameter, subtending 48 arcseconds at the time of capture), Eudoxus (67km diameter) and their environs is a still from a video captured by *holding* my Sony camcorder to the 25mm eyepiece supplied with the 'scope on the night of April 12th, 2008.

It would be easy to pigeonhole the 305mm FlexTube as an innovative, transportable Dobsonian for the deep-sky enthusiast, but it's much more than that. Its stunning planetary prowess will have many observers redefining what larger aperture, short focal ratio Newtonians are capable of. In short, it's a precision instrument that breaks the stereotypical Dobsonian mold to deliver stunning planetary and deep-sky performance in a compact, readily transportable package.

Like it? I *love* it!

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