

Cloudy Nights Telescope Reviews

Your astronomical community

★ [cn reports](#) ★ [reviews](#) ★ [articles](#) ★ [forums](#) ★ [classifieds](#) ★ [about us](#)

Home / William Optics Zenithstar 80

by [Fred Hissink](#) 02/10/05

* [First Impressions](#)



[Voice your opinion about this topic in the forums](#)



[Submit Your Own Review or Article](#)

I have owned several shorttube telescopes in the past, so testing the newborn child in the William Optics-family was a nice task. After a few years of observing without a portable scope to fill in the hours before moonrise or short moments of cloudless evenings, I decided to buy another travel companion.

You could say that the Zenithstar 80 is another version of the well-known family of shorttubes. Yes, you could, but you're in for a surprise if you give this little black one a closer look. When I saw the Zenithstar 80 on the site of my regular telescope supplier, the black glossy tube and the golden rims and knobs made my heart jump. What a beauty! I knew that I could not base the performance on the appearance, but let me be honest: sometimes you need a nice package to get interested in the contents?

For instance: the Zenitstar has no inexpensive looking parts and everything looks solid. The overall construction is very good. The Crayford focuser moves very smoothly and there's no need for turning the knob back and forth; every object snaps into focus. In my case I had to adjust the tension of the focuser because the weight of the Radians and Naglers pulled the tube down.

A scope for low magnifications

The WO Zenithstar has a focal length of 480 mm and is not a telescope for high powers. If you want to examine details on planets, you should buy a telescope with a longer focal length. It's not because this telescope has cheap optics that lacks the ability to keep up with high powers! No, on the contrary, but the power of the Zenithstar lies in the low to medium magnification range. After all, it's a grab-and-go telescope with a high degree of portability. Therefore you could put the Zenitstar on a regular mount with motordrive and/or slowmotion controls. That will make it a real telescope, but you could also enhance the grab-and-go feeling and put it on a camera tripod.

You don't need a motordrive while using low magnifications on the little scope; my 32 mm Tele Vue plossl gives a magnification of 15 and nearly a FOV of 3 degrees. My Nagler 7 provides a magnification of 68 and a FOV of 30°. So there's plenty of room for an object on a very light tripod; take the scope to the store and try different ones.

First light

The Zenithstar delivered his first surprise during the daytime. I observed a white roof and expected to see some blue and yellow around the edges. But, nothing was there. The image was bright and very sharp; it reminded me of the quality optics I used in the army. Yes, this was a good start! I've never had so much pleasure in watching rooftops, chimneys and parked cars. But, there was another surprise at the end of the day! After the clouds were gone I took the Zenithstar into the backyard. A five days old moon stood high in the sky and Saturn was rising above a rooftop. It was not a perfect night for observing deepsky-objects, but since I had not seen any colours during the daytime, the presence of the moon was very welcome?

[Search Cloudy Nights](#)

[Advanced](#)

[Search](#)

Tuesday, April 25, 2006

[Cloudy Nights Supporters](#)

[Astronomics](#)

www.astronomics.com

[Anttlers Optics](#)

[Astro Custom Cases](#)

[ATS Piers](#)

[Agena Astro](#)

[APM Telescopes](#)

[Astronomy Shoppe](#)

[Astronomy](#)

[Technologies](#)

[Backyard](#)

[Observatories](#)

[Barry Crist Miniatures](#)

[BigBinoculars.com](#)

[BigHa](#)

[The Bino Observing Chair](#)

[Burgess Optical](#)

[Cape Instruments](#)

[Cats Eye Collimation](#)

[Celestron](#)

[Christophers, Ltd.](#)

[ClearVue Optics](#)

[Coronado](#)

[DBA Astronomy](#)

[Products](#)

[Denkmeier Optical](#)

[DGM Optics](#)

[Digitec Optical](#)

[DiscMounts Inc](#)

[Dreamscopes](#)

[Eyelight](#)

[Faint Fuzzies](#)

[J&T Telescope](#)

[First Telescope](#)

[Garret Optical](#)

[Helix Observing](#)

[Accessories](#)

[House of Optics](#)

[Germany](#)

[Howtopickatelescope.com](#)

[Infinity Scopes, LLC](#)

[Inspiration Toolworks](#)

[Ken's Rings & Things](#)

Semi-apo or not?

What in a name? I've read some articles with definitions about apochromats and semi-versions, but after that I came to the conclusion that the world of colourfree optics is a very hazy one? So I loaded the Zenithstar with a Tele Vue plossl 32 mm and aimed it at the moon. I saw a very satisfying image, far better than the images of the other shorttube refractors I've owned. The image of the moon was razor sharp and even at the edges of the field I could see only a vague distortion of sharpness.

Yes, there is some colour around the edge of the moon, but less colour than a normal doublet would provide. According to William Optics the doublet of the Zenithstar has a 30% better correction than an average achromat; it's not just a statement, it's true. The doublet of the Zenithstar is indeed better than a normal achromat.

There's an increase of colour at a higher magnification, but the image is still better than an average shorttube of the same aperture and focal length.

William Optics recommends a power of 100 as an acceptable limit and that's wise. As I mentioned earlier, the Zenithstar is not a telescope for high powers. But, the image of Saturn at a magnification of 136 was good (Nagler 7 and a Tele Vue barlow). Without the barlow and a magnification of 68 Saturn was very sharp and reminded me of my first view of this planet 25 years ago. Some colour was visible, but Saturn wasn't swimming in blue and yellow like I've seen in some other shorttubes.

The Zenithstar is a perfect instrument for wide field views of deepsky objects, but unfortunately the moon was too bright. I have to wait for that crystalclear and moonless night, but I'm sure my patience will be more than rewarded!

Baffles

The bright moon should have caused some ghosts in the image. A well known annoyance, but the Zenithstar showed no reflections at all. There's a good light distribution and the moon stood like a sharp disk in the image. No wonder, there are 15 dark baffles and these photon-blockers are doing a very good job! The images of the shorttubes I've used in the past always had ghosts, but who needs more than one moon in the field of view?

Summary

The Zenithstar 80 is not an ordinary assembly line telescope. This is definitely a product of craftsmanship! The optics are very good and the doublet has certainly a better (colour) correction than an average shorttube achromat. There's a decent green multicoating and 15 baffles to avoid ghosts. I forgot to mention the retractable dewcap and the ability of the focuser to rotate 360 degrees. You could argue about the weight of this little instrument; instead of a telescope build up from cheap materials William Optics offers a decent telescope with solid parts and superb optics?

- * Peer Review: The peer review process was a voluntary procedure in which the author's article undergoes a detailed review by a body of his/her peers. The articles are checked for veracity and accuracy.
- * First Impressions: A quick look at and through the equipment, not to be confused with an in-depth or detailed evaluation that's taken place over a period of time.

[LXD55.com](#)
[Mag 1 Instruments](#)
[Meade](#)
[Mercury Systems](#)
[Support](#)
[Optical Mechanics](#)
[Particle Wave](#)
[Technologies](#)
[Pier-Tech](#)
[ScopeGuard Cases](#)
[Scope'n'Skies](#)
[Scopes4rent](#)
[ScopeStuff](#)
[Shoestring](#)
[Astronomy](#)
[Software Bisque](#)
[Starbucks](#)
[Starmaster](#)
[Stellar Optical](#)
[Stellarvue](#)
[Sun River Nature](#)
[Center](#)
[Telescope Solutions](#)
[Tele Vue](#)
[Teeter's Telescopes](#)
[Telescope](#)
[Warehouse](#)
[Think Astronomy](#)
[TeleTrade](#)
[TMB Optical](#)
[Tscopes](#)
[Ultra Darklight](#)
[University Optics](#)
[Walt's Observing](#)
[Chairs](#)
[William Optics](#)
[Woden Optics](#)

[Back to Top](#)

Contact Us

[CN Reports](#) | [Reviews](#) | [Articles](#) | [Forums](#) | [Classifieds](#) | [About Us](#)

Copyright?/a> 2004 Ad Libs Advertising.

[Privacy Policy](#)

