

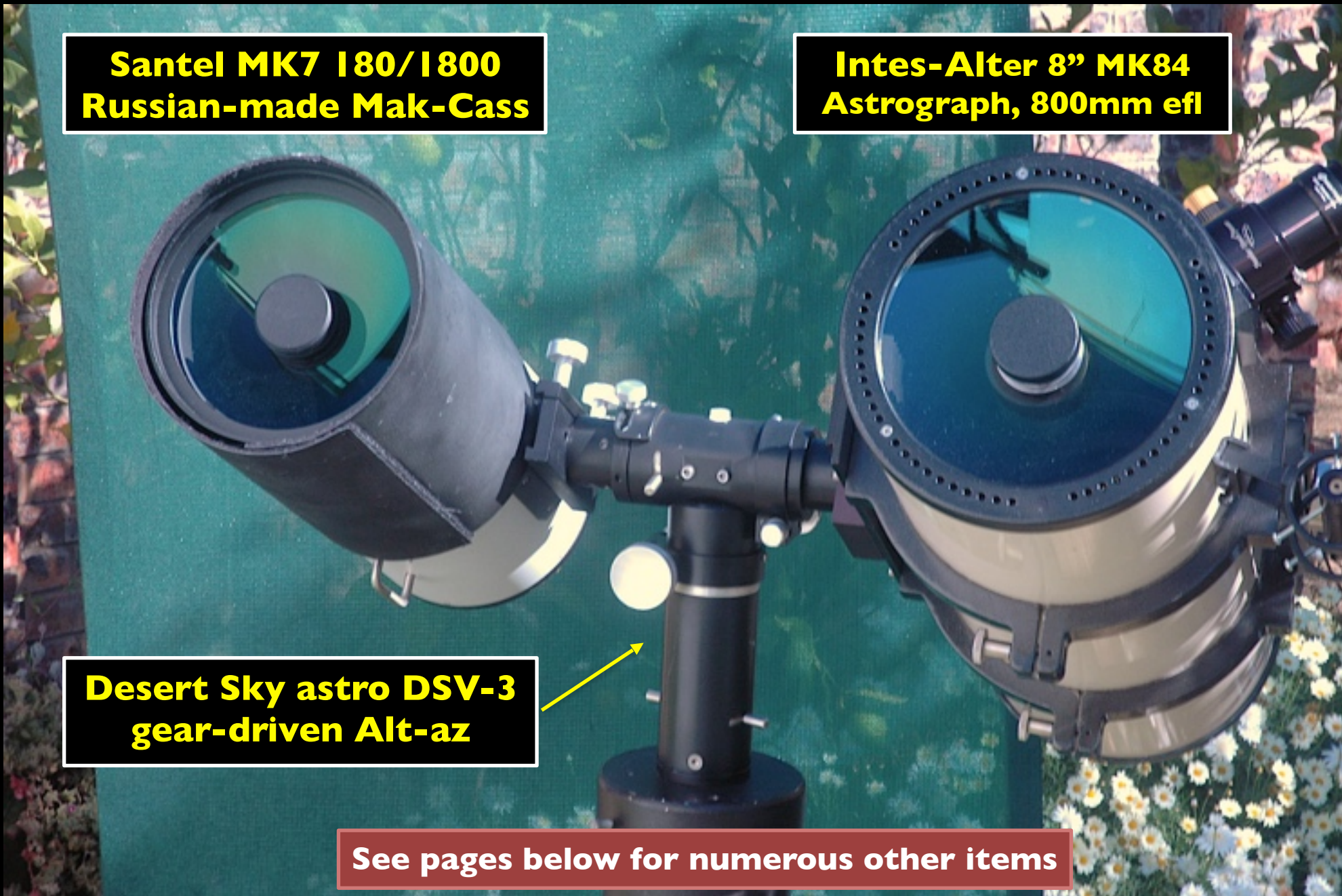
Astronomy Equipment Sale

**Santel MK7 180/1800
Russian-made Mak-Cass**

**Intes-Alter 8" MK84
Astrograph, 800mm efl**

**Desert Sky astro DSV-3
gear-driven Alt-az**

See pages below for numerous other items



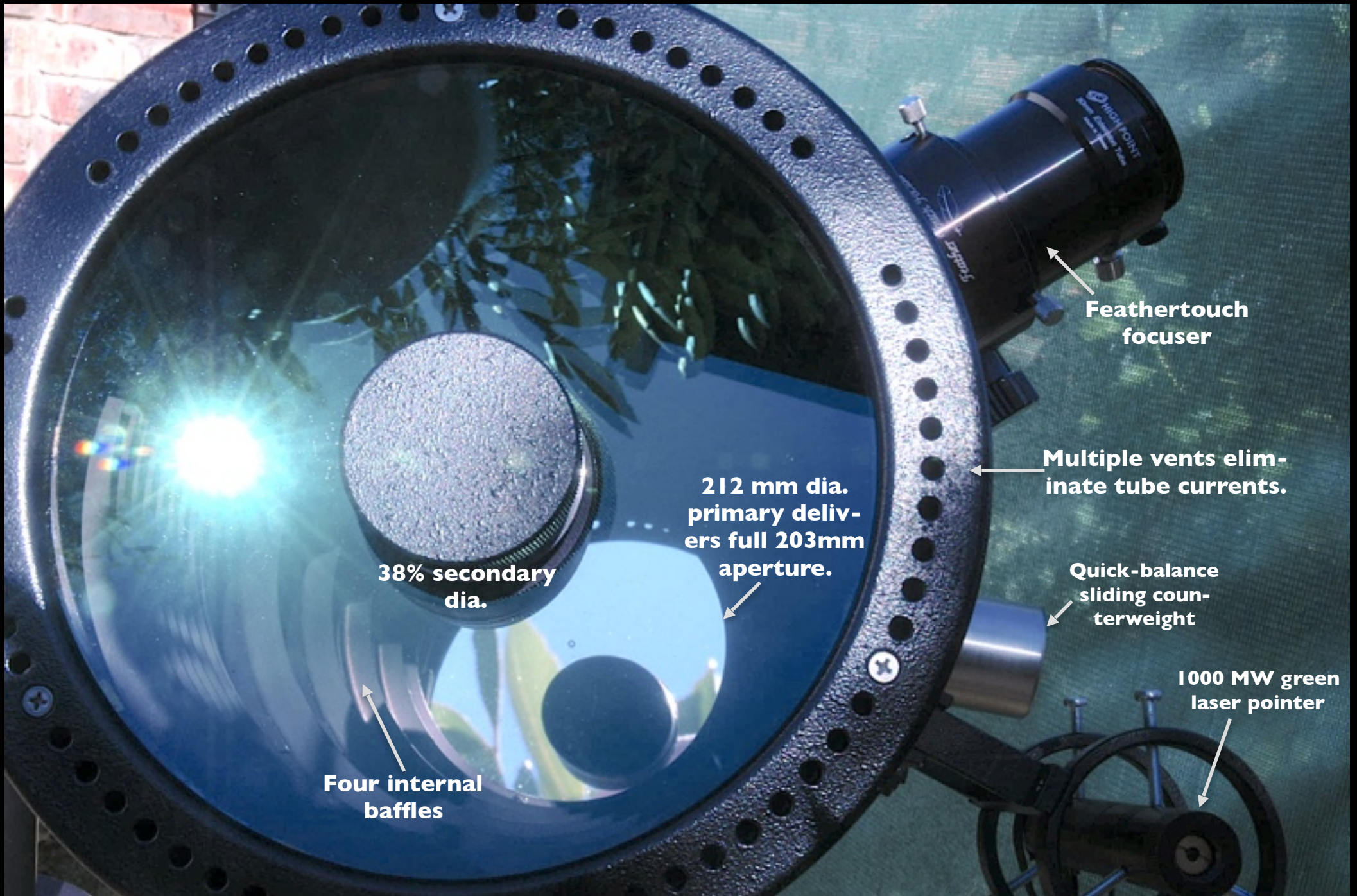
Intes-Alter 8" f/4 Maksutov

This is a rare bird and an astrophotographer's dream scope. The Russian optical fabricator Intes Alter made only 100 of these, specifically designed for astrophotography. This is the only one in S Africa and the only one put onto the amateur sales market since 2016, when I acquired it. Includes a Feathertouch focuser, Losmandy D plate, Desert Sky QBS sliding counterweight for balancing, and a 1000 MW green laser pointer in an APM comminatable bracket. I had a new secondary holder machined to keep the secondary from jarring out of collimation. The base of the original secondary holder was 4 mm aluminium, now beefed up to 12 mm Dural. Primary is adjustable using 3 screws and lock-down nuts. Collimated once in 2016 and hasn't needed it since. At 300x the Airy disc is sharp with one diffraction ring.

The scope has been used for visual observing only. It is a superlative performer. Optics >1/6 wave, sharp flat field from edge-to-edge in 100° ultrawide eyepieces. No vignetting, no coma, no pillowing.



ZAR 30,000
US\$ 3,000



Feathertouch
focuser

Multiple vents elim-
inate tube currents.

Quick-balance
sliding coun-
terweight

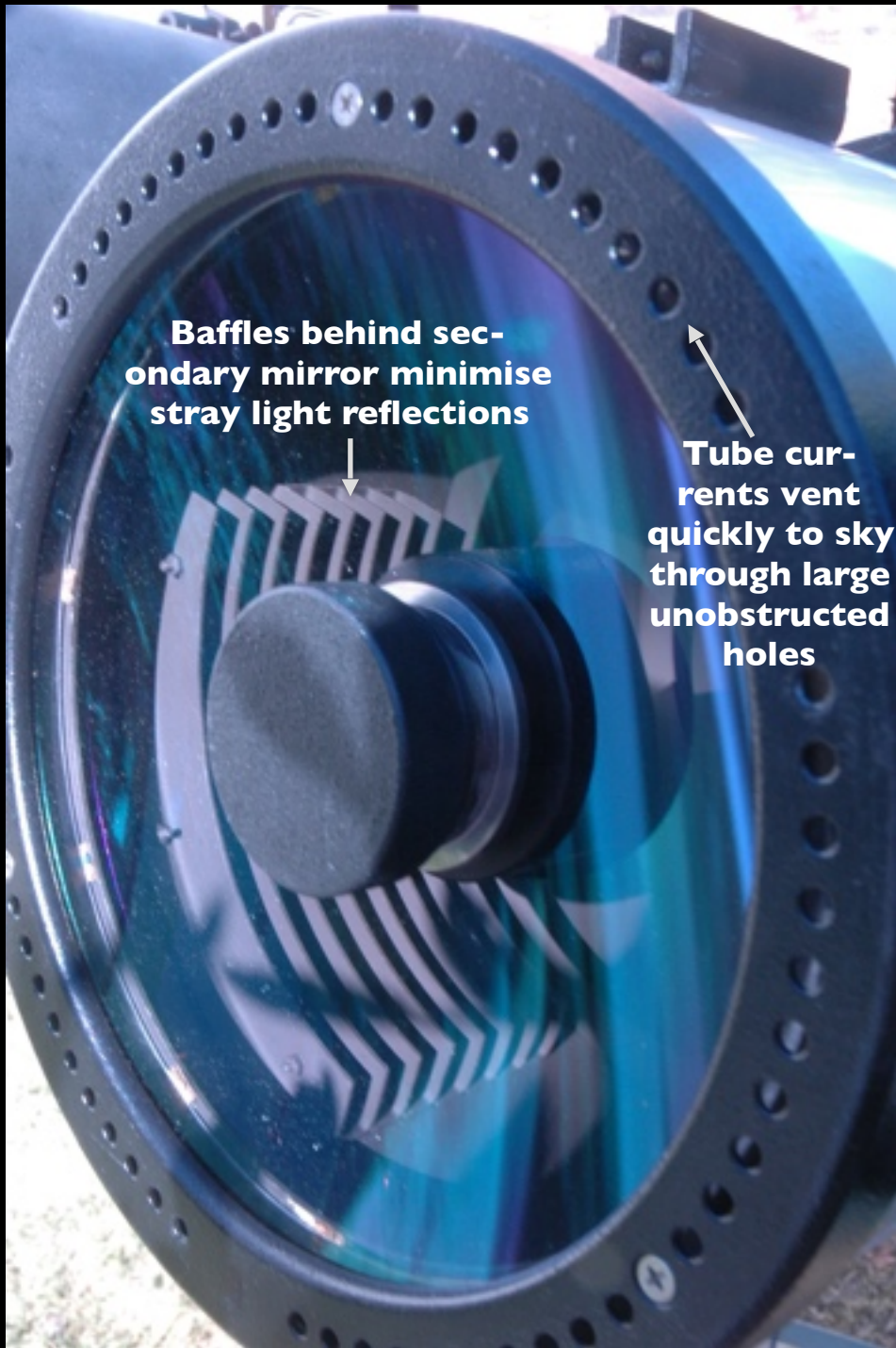
1000 MW green
laser pointer

212 mm dia.
primary deliv-
ers full 203mm
aperture.

38% secondary
dia.

Four internal
baffles

Full OTA weight with all equipment shown = 16.8 kg



Baffles behind secondary mirror minimise stray light reflections

Tube currents vent quickly to sky through large unobstructed holes



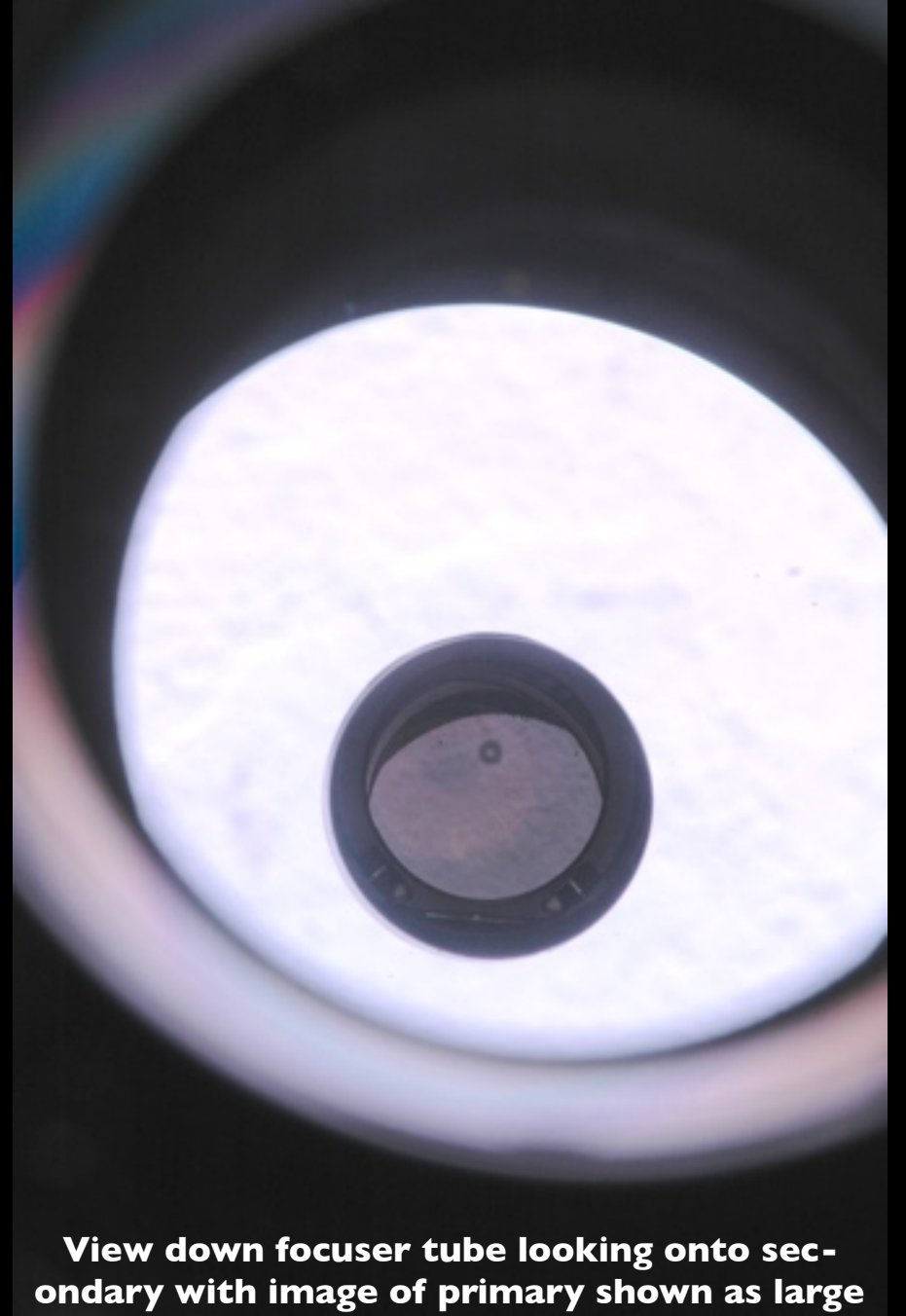
Input plug for 9 V fan; back plate detaches while in use



Losmandy D plate w/numerous mounting holes, some threaded, some slightly oversize



Equipment included but not shown: (a) Large-volume Orion padded telescope carry-bag w/ full-length zippers. (b) 1 extra QBS steel counterweight, total 3 kg. (c) Two 2-inch dia. focuser extension tubes. (d) Heavy OTA tube front cover.



View down focuser tube looking onto secondary with image of primary shown as large white disc. Image taken to indicate relative size of secondary obstruction. Reflection of secondary seen inside darkannulus in centre. Primary is fully visible inside secondary at full back focus 4.5" above OTA tube.

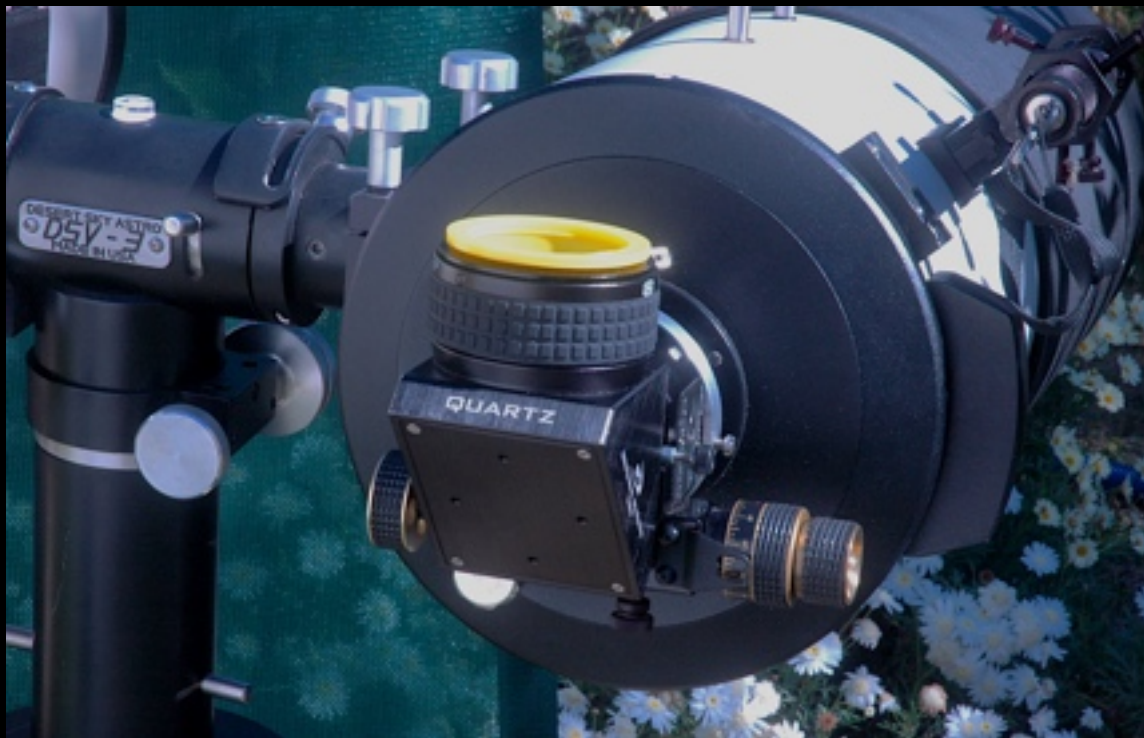
Santel 180 mm dia 1800 mm efl Mak-Cass.



ZAR 14,000
US\$ 1500

Santels are very rare Maks that were produced by Alaxei Santel in 152, 180, & 229 mm apertures (7, 8, 9") for about three years in the early 2000s. His craftsmanship was meticulous. Despite the solid all-metal build, this scope weighs only 8 kg. The built-in focuser is shift-free and ultra-precise.

Information about Santel and his scopes is scanty. [See the original 2005 ad here](#) (priced at \$2097 in 2005 dollars). The only recent vendor's web page to list this Santel model was this undated listing from [ENS Optical in the U.K.](#), priced at £800 (today R14,800) but also listed as 'out of stock'. The only advert for a Santel [was the one from which I bought this scope](#) in 2008 or 2009 for US\$ 1200 (today R18,000).



Alexei Santel was an early employee of the original Intes Micro firm in Russia before it went through several ownership & name changes. Santel tried his own hand at Maksutovs for the hobbyist market, making about 100 MK6, MK7, and MK9 before he went on to large-aperture compound scopes for the Russian Defence Ministry. An internet search raises only one Santel classified listing, on the USA amateur site Astro-mart in 2008 or 2009. That is the telescope I bought and is shown here. It is a superb scope optically for both planetary and deep-sky observing, and has been the primary instrument used for some 15 object reports in Cloudy Nights (US) and Ice In Space (AU).



Intes-Micro MN6 1152 mm f.5.9 Mak-Newt



In the early 2000s the vendor Orion Telescopes USA ordered 25 Intes MN61 Mak-Newts to be sold under the Orion Argonaut badge. The first order came with a 19% central obstruction. Orion later ordered another 25, which came with a 21% CO for astrophotography. This scope was purchased by me in 2007 in the USA and imported into S Africa by me in 2011. It may be the only one in S Africa. A superb planetary instrument.

21% diameter secondary mirror visible @ 4:30 position on primary mirror image. Black circle centres primary in secondary image as seen through focuser during collimation. The scope was collimated in 2011 and has never needed it since. Superb optically, in dark high-elevation skies with no jet stream aloft it delivers sharp images at 50x per inch, or 300x.

1000 mW laser pointer & foam dew shield included (eyepiece, alas, is not).



Price: R9000 for everything except the eyepiece.