

Sirius Optics Unit 1 26 Darnick Street Underwood, Qld 4119 **Opening Hours**

10am-5:30pm Mon-Fri 9am-2pm Sat

Celestron 11in Rowe-Ackermann Schmidt Astrograph (RASA) OTA V1

Regular Price: AUD \$6,499.00 Special Price AUD \$5,399.00

Product Images



- 11-inch f/2.2 optical design with rare-earth glass for images free of false color, coma, and field curvature
- 43.3 mm optimized image circle maintains pinpoint stars to the far corners of even the largest astroimaging sensors, while the usable field extends even further to 52 mm for larger format sensors.
- Custom engineered linear brass focuser bearing reduces image shift, while dual-speed 10:1 FeatherTouch Micro Focus Knob
 provides the most precise focusing
- Quiet, high-output 12V MagLev fan reduces cooldown time and blocks dust
- Common camera adapters (T-thread and M48) included for easy attachment to popular CCD and DSLR cameras

Description

Capturing impressive deep-sky astroimages is easier than ever with Celestron's new Rowe-Ackermann Schmidt Astrograph, the perfect companion to today's top DSLR or astronomical CCD cameras. This fast, wide-field f/2.2 system offers two huge advantages over traditional f/10 astroimaging: better apparent tracking and shorter exposures. That means you'll create better-looking astroimages in a fraction of the time, even without the use of an autoguider.

The Rowe-Ackermann Schmidt Astrograph builds on the legacy of Celestron's Schmidt Camera, which allowed astrophotographers to produce images on film in the 1970s.

Today, with CCD sensor sizes as large as film—or larger—the Schmidt Astrograph offers a 43.3 mm optimized image circle to capture pinpoint stars on the largest imaging chips. (Note: We previously published 70 mm which is actually the aperture of the last lens in the telescope. The optical design has not changed). Combine this large image circle with a focal length of just 620 mm and you have an instrument suitable for wide-field imaging, creating huge mosaics of the night sky, surveying, and even comet hunting.

Optical Performance

The Rowe-Ackermann Schmidt Astrograph features newly designed optics with 4-element rare-earth glass for images free of false color and aberrations like coma and field curvature. The optical quality and spot size across the entire image circle is unprecedented for an astrograph in this price range—or even that of a much more expensive instrument. The design also provides minimal vignetting.

Advanced Features

Advanced features like a custom engineered linear brass focuser bearing and FeatherTouch Micro Focus Knob allow you to make the fine adjustments you need to capture the perfect shot. Meanwhile, a12V MagLev fan reduces cooldown time and provides optimal airflow through the dust filtered optical tube.

Engineered as a complete astroimaging system, every component of the Rowe-Ackermann Schmidt Astrograph is optimized for peak performance with DSLR and astronomical CCD cameras. Down to the thickness of the glass used in the included fully-multicoated optical window or an optional imaging filter, every component of the system has been taken into careful consideration to work together seamlessly.

Additional Information

	Optical Design	Rowe-Ackermann Schmidt
	Aperture	279 mm (11")
	Focal Length	620 mm (24.4")
	Focal Ratio	f/2.2
	Central obstruction diameter	114 mm (4.48") (41% of aperture diameter)
	Light Gathering Power (Compared to human eye)	1588x
	Resolution (Rayleigh)	0.49 arc seconds
	Resolution (Dawes)	0.41 arc seconds
	Image Circle	43.3 mm (1.7") Ø , 4.0°
	Useable field	52.mm (2.04") Ø , 4.8° only minimal performance loss at edge of FOV
	Wavelength range	400 - 700 nm
	Spot size	< 4.4 µm RMS across FOV
	Optical Coatings	StarBright XLT
Specifications	Off-axis Illumination	83% at 21 mm (.82") off-axis
	Optical Window	68 mm (2.67") Ø
	Back focus with included camera adapter	55 mm (2.16")
	Back focus from top of threaded collar	72.8 mm (2.86")
	Optical Tube	Aluminum
	Optical Tube Length	838.2 mm (33") length, 330.2 mm (13") diameter
	Focuser	FeatherTouch microfocuser, coarse and fine focus
	Finderscope	Not included
	Optical Tube Weight	43 lbs (19.5 kg)
	Other Features	Ventilation fan, dual dovetail mounting bars, mirror support clutches
	Included items	42 mm (1.65") T-thread camera adapter, 48 mm (1.89") camera adapter, fan battery pack
	Dovetail	CGE Dovetail Bar