

Celestron 11 inch Rowe-Ackermann Schmidt Astrograph (RASA) OTA V2

AUD
\$8,499.99

Product Images



Short Description

- Fast, wide-field 11" f/2.2 optical design with rare-earth glass for images free of false color, coma, and field curvature
- Large 43.3mm optimized image circle maintains pinpoint stars to the far corners of even the largest astroimaging sensors, while the usable field extends even further to 52mm for larger format sensors
- **New Ultra-Stable Focus System (USFS)** minimizes focus shift and mirror flop
- Integrated air-cooling system features a quiet, high-output 12V MagLev fan and vents with mesh filters to prevent dust ingress
- 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 Rowe-Ackermann Schmidt Astrograph (RASA) V2, the perfect companion to today's top DSLR or astronomical CCD cameras. This fast, wide-field f/2.2 system allows for shorter

exposure times compared to traditional f/10 astroimaging, without sacrificing resolution. Because shorter sub-exposure times are possible, your equatorial mount won't need to accurately track over extended periods. The short focal length also lessens equatorial tracking demands. In many cases, autoguiding will not be required.

RASA 11 V2 builds on the legacy of Celestron's Schmidt Cameras, which allowed astrophotographers to produce images with much shorter exposure times on film in the 1970s.

Today, with CCD sensor sizes as large as film or larger, the RASA 11 V2 offers a 43.3mm optimized image circle to capture pinpoint stars on the largest imaging chips. Optical performance for huge sensors with diagonals of up to 52mm wide is still excellent.

Combine this large image circle with a focal length of just 620mm 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 RASA 11 V2 features 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 are 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

RASA 11 V2 utilizes the new Ultra-Stable Focus System (USFS). At the heart of this system is a precision linear ball bearing. The bearing serves to minimize focus shift (unwanted lateral motion of the primary mirror during focusing which causes shifting of the image) and mirror flop (movement of the primary mirror when the telescope is pointing to different positions in the sky). The USFS is also compatible with the optional Celestron Focus Motor (#94155-A). The integrated 12V DC 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 RASA 11 V2 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 optional imaging filter, every component of the system has been taken into careful consideration to work together seamlessly. The Dovetail CGE bars on the top of the optical tube provides a connection for use of optional accessories like a guidescope.

OPTICAL TUBE INFO:	
Optical Design	Rowe-Ackermann Schmidt Astrograph
Aperture	279mm (11")
Focal Length	620mm (24.4")
Focal Ratio	f/2.2
Central obstruction diameter	114mm (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	43.3mm (1.7") Ø , 4.0°
Useable field	52mm (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
Off-axis Illumination	83% at 21mm (.82") off-axis
Optical Window	68mm (2.67") Ø
Back focus with included camera adapter	55mm (2.16")
Back focus from top of threaded collar	72.8mm (2.86")
Optical Tube	Aluminum
Optical Tube Length	838.2mm (33")
Optical Tube Diameter	330.2mm (13")
Focuser	Ultra-Stable Focus System
Finderscope	Not included
Optical Tube Weight	43 lbs (19.5 kg)
Other Features	Ventilation fan, dual dovetail mounting bars
Included items	42mm (1.65") T-thread camera adapter 48mm (1.89") camera adapter Dust cover Fan battery pack
Dovetail	CGE Dovetail Bar

Specifications