PlaneWave INSTRUMENTS

www.planewaveinstruments.de



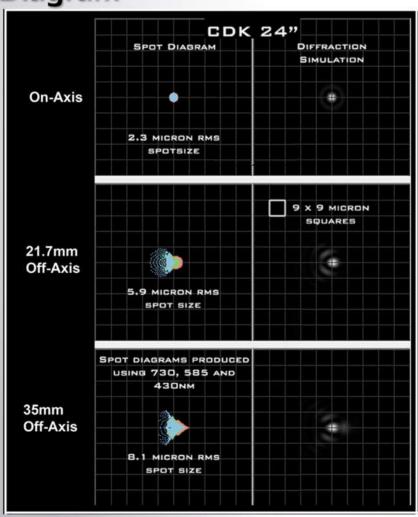
Introducing the PlaneWave Instruments CDK24, a 24 inch (0.61 m) f/6.5 Corrected Dall-Kirkham Astrograph telescope. The CDK24 has a dual truss design, with 3 cooling fans for the back of the primary mirror and 4 fans for the front surface of the primary mirror. The CDK24 covers a 70 mm field of view without any field curvature, off-axis coma, or astigmatism.

The instrument weight is 240 lbs (109 kg) and comes standard with a back plate retaining ring ready to accept the focuser of your choice. The CDK (Corrected Dall-Kirkham) Optical Design is an innovative solution for unsurpassed astroimaging quality at an affordable price. The CDK telescope design provides excellent imaging with large format CCD cameras while remaining superb for visual use. The CDK design far exceeds the off-axis performance of most commercial telescope designs including the Ritchey-Chrétien design. This no-compromise design is unique in making the optical alignment forgiving and collimation very easy. This guarantees the user the best possible performance from the telescope. The end result at the image plane of the CDK design is no off-axis coma, no off-axis astigmatism, perfectly flat field (no off-axis defocus). The CDK design will give you pinpoint stars from the center to the corner of the field of view.

Specification

Aperture	24 inch (610 mm)
Focal Length	3962 mm (155.98 inch)
Focal ratio	F/6.5
Central Obstruction	22% by Surface Area
Back Focus from Mounting Surface	14.1 inch (358 mm)
Back Focus from Racked in Focuser	5.81 inch (148 mm)
Weight	240 lbs (108.9 kg)
OTA Length	56 inch (1,422 mm)
Upper Cage	Carbon Fiber Truss
Lower Cage	Carbon Fiber Truss with Aluminum Light Shroud
OTA Width	31 inch (787 mm)
OTA Height	35 inch (889 mm)
Optimal Field of View	70 mm (58 arcminute)

Spot Diagram



CDK24 delivers a
diffraction limited
spot size over
the entire
70mm field of view

Features

Carbon Fiber Truss Design - Lightweight and stiff carbon fiber truss design minimizes thermal expansion which causes focus shift with changes in temperature



Dovetail Expansion Joint - Allows for the difference in thermal expansion between carbon fiber and aluminum. The expansion joint allows the aluminum dovetail to expand and contract without stressing the carbon fiber lower truss



Cooling Fans - Three cooling fans ejecting air from the back of the telescope and four fans blowing across the boundary layer of the mirror surface. This helps the telescope to reach thermal equilibrium quickly. The fans are controlled via PC when used with the optional Electronic Focus Accessory (EFA Kit)



Mount Options

The CDK24 comes ready to mount on either a German Equatorial mount or dual fork arm.

Attach the CDK24 to the Ascension 200 with built-on Hi Res Axis encoders or MI1000 fork mount. MI1000 can also be fitted with axis encoders for high precision pointing and tracking.





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Upper left corner

Center of Image



Image By Mark Manner with CDK 24



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