

CGE Pro 925 HD



Item no:11092

The CGE Pro 925 HD combines Celestron's state of the art CGE Pro Computerized Equatorial mount with its new EdgeHD optical system. With over 9 inches of aperture and our premium StarBright XLT coatings, the CGE Pro 925 HD gives you over 1000 times the light gathering power than the unaided eye.

New Optical Design

The EdgeHD optical system takes all of the compact power popularized by the Schmidt Cassegrain Telescope (SCT) and combines it with an improved high definition optical system for wide field, astrograph quality images.

As a visual instrument, EdgeHD optics deliver pinpoint images even with your widest field eyepiece. You can search for all of the Messier Catalog objects, and see hundreds of other equally interesting NGC, IC and Caldwell objects with amazing clarity. For astroimaging, the EdgeHD optics produce aberration-free images across your favorite CCD or DSLR camera. All EdgeHD optics are designed to produce an extremely flat focal plane precise enough to match the strict tolerances of the largest commercial CCD detectors, allowing all stars to be in tight focus to the very edge of the chip.

EdgeHD Whitepaper

The Celestron Product Development team has released a whitepaper outlining the technology behind EdgeHD. This paper describes the development goals, design decisions, optical performance, and their practical realization in 8-, 9.25-, 11-, and 14-inch apertures. We include cross-sections of the EdgeHD series, comparative spot diagrams for the EdgeHD and competing coma-free Schmidt-Cassegrain designs, a table with specifications for visual and imaging, graphics showing how to place sensors at the optimum back-focus distance, and details on the construction and testing of the EdgeHD telescope series.

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To view the whitepaper PDF, please see the bottom of the page.

Diffraction Limited

Some companies boast that their telescopes give diffraction limited stars in the very center of the field of view. EdgeHD optics not only produce diffraction limited stars on axis, but maintain diffraction limited stars across the entire field of view of many of the most popular astrophotography cameras. Even at the very edge of a full frame camera chip, the EdgeHD 9.25 delivers diffraction limited stars of only 1 arc seconds.

Along with the newly designed optics, the EdgeHD also has re-designed mechanics guaranteed to help you get the maximum performance from your instrument.

Features Include:

Mirror Locks ? To hold the mirror in place and reduce image shift during imaging.

Tube Vents - Each vent has an integrated 60 micron micro-mesh filter allowing hot air to be released from behind the primary mirror.

Fastar Versatility ? All EdgeHD optical tubes are equipped with a removable secondary mirror for fast f/2 CCD imaging. Not only does imaging in the FASTAR configuration allow for exposure times that are 25 times faster than at f/10, but also yields a field of view five times wider. A perfect combination for imaging your favorite wide field objects in a fraction of the time. (FASTAR imaging requires a third party lens assembly in place of the secondary mirror).

Axiom Eyepiece - EdgeHD 9.25" optical tubes come with Celestron's top of the line Axiom eyepiece. With a 23 mm focal length and 82° AFOV, you get an incredible combination of power and wide field of view. Plus each Axiom eyepiece is optimized to deliver pinpoint images when used with a flat field telescope.

Learn more about the benefits and features of this new optical system by going to the EdgeHD web page.

CGE PRO Mount

In addition to being fully computerized with a database of over 40,000 celestial objects, the CGE Pro German Equatorial mount has been completely redesigned to offer numerous design advantages:

- Increased Payload Capacity - With a maximum payload of 90 lbs, the CGE Pro mount is able to hold the 9.25" telescope more securely even when fully loaded with all your imaging gear.
- All-Star Polar Alignment - Choose any bright alignment star for a software assisted alignment of the mount's polar axis that will have you ready for imaging even if you can't see the North Star.
- No-Tool Polar Alignment - Larger hand knobs for both Altitude and Azimuth adjustments.
- Meridian Tracking - Extended tracking past the Meridian of up to 20 degrees of uninterrupted imaging through the best part of the sky.
- Faster Slew Speed - Improved gearing and motors provide faster slew speeds than ever before with a maximum slew rate of over 5°/per second.
- Accuracy - The hallmark of any telescope mount is its ability to find, center and track celestial objects with the highest degree of accuracy.
- Pointing - With just a standard hand control alignment, CGE Pro has the ability to center a star in your eyepiece or CCD chip to within 5 arc minutes. Using NexStar's advanced pointing features such as Calibration Stars, Sync and Precise GoTo, further improves the pointing accuracy to as low as 1 arc minute in the desired region of the sky.
- Tracking - With larger .75" pitch diameter worm, precision made cut-steel gears in gearboxes, and seven slot skewed armature motors, the CGE Pro delivers smooth +/- 5 arc second tracking accuracy typical unguided periodic error, which can be further reduced with PPEC

- Mount Calibration - Celestron's NexStar hand control has built-in compensation features essential for accurately placing small objects on the center of your CCD chip or high power eyepiece. Aligning on multiple Calibration Stars creates a model of the opto-mechanical inaccuracies inherent in all equatorial mounts. This model is stored within the hand control and is used to compensate for these inaccuracies, thus improving your pointing precision each time you slew your telescope.

A detailed description of EdgeHD technologies can be [found here](#)

[Click here to read a feature article on the EdgeHD system on Universe Today](#)

General Features

- 9.25" EdgeHD Optics
- Celestron premium StarBright XLT coatings
- CGE PRO computerized Equatorial mount
- 9x50 finderscope with quick release bracket to help accurately find objects
- 2" Star diagonal provides more comfortable viewing position when observing objects that are high in the sky
- Heavy Duty stainless steel tripod adjustable from 38 - 55"

HD Features

- New aplanatic Schmidt telescope design produces aberration-free images across a wide field of view
- Focus adjustment is supported by two pre-loaded ball bearings to minimize the "mirror flop" typical of bushing focus mechanisms
- Flexible tension mirror locks hold the mirror in place and reduces image shift
- Cooling vents located on the rear cell allows warm air to be released from behind the primary mirror
- Fastar ready optics for ultra wide f/2 imaging

Computerized Mount Features

- Proven NexStar computer control technology
- 40,000 object database with over 100 user-definable objects and expanded information on over 200 objects
- New All-Star Polar Alignment routine for both Northern and Southern Hemispheres
- Software Features include: Database Filter Limits, Hibernate, five alignment methods and user-defined slew limits
- Custom Rate 9 feature allows you set maximum slew rate
- Tandem mode allows you to star align the mount even when positioned for tandem scope use
- Flash upgradeable hand control software and motor control units for downloading product updates over the Internet
- Custom database lists of all the most famous deep-sky objects by name and catalog number; the most beautiful double, triple and quadruple stars; variable stars; solar system objects and asterisms
- Double line, 16-character Liquid Crystal Display Hand Control with backlit LED buttons for easy operation of Go-To features
- 12 VDC Servo Motors with integrated optical encoders
- Permanent Programmable Periodic Error Correction (PEC) - corrects for periodic tracking errors inherent to all worm drives
- Drive Motors - High quality motors with seven slot skewed armature to minimize magnetic cogging for quiet operation and long life. Precision made cut-steel gears in gearbox for improved tracking precision
- Bearing and Shaft - Main shafts are made from 1.57" diameter steel tubing with .40" wall thickness with two preloaded 2.68" O.D. tapered roller bearings on each axes
- Precision worm drive system - .75" pitch dia. precision made steel worm preloaded with two .87" OD ball bearings to

minimize run-out (a source of periodic error). 255 tooth 6" pitch dia. precision made worm wheel with enveloping brass teeth

- Spring loaded DEC worm to minimize backlash and makes guiding easy
- 4 point RA and DEC clutch system for no-slip pointing precision
- Autoguide port, PC port and Auxiliary ports located on the electronic pier for long exposure astrophotography
- Latitude range: 10° to 65° Northern or Southern Hemispheres
- RS-232 communication port on hand control to control the telescope via a personal computer
- Includes NexRemote telescope control software, for advanced control of your telescope via computer
- GPS-compatible with optional SkySync GPS Accessory (93969)

SPECIFICATIONS:

Optical Design: EdgeHD

Aperture (mm): 235 mm (9.25 in)

Focal Length: 2350 mm (93 in)

Focal Ratio: 10

Focal Length of Eyepiece 1 (mm): 23 mm (0.91 in)

Magnification of Eyepiece 1: 102 x

Finderscope: 9x50

Star Diagonal: 2"

Mount Type: CGE Pro Computerized Equatorial

Tripod: Adjustable, 2.75" Stainless Steel legs

Power Requirements: Car battery adapter

Highest Useful Magnification: 555 x

Lowest Useful Magnification: 34 x

Limiting Stellar Magnitude: 14.4

Resolution (Rayleigh): 0.59 arc seconds

Resolution (Dawes): 0.49 arc seconds

Light Gathering Power (Compared to human eye): 1127 x

Apparent Field of View: 0.8 °

Linear Field of View (@1000 yds): 28 ft (8.53 m)

Secondary Mirror Obstruction: 3.35 in (85 mm)

Secondary Mirror Obstruction by Diameter: 36%

Secondary Mirror Obstruction by Area: 13%

Optical Coatings: Starbright XLT Coating

Optical Tube Length: 22 in (559 mm)

Optical Tube Weight: 21 lbs (9.53 kg)

Counterweight Bar: 5 lbs (2.27 kg)

Weight of Counterweights: 1 x 22 lbs

Slew Speeds: Nine slew speeds 5.5 deg/s, 2 deg/s, 0.5 deg/s, 64x, 16x, 8x, 4x, 1x, 0.5x

Tracking Rates: Sidereal, Solar and Lunar

Tracking Modes: EQ North and EQ South

Alignment Procedures: 2-Star Align, Solar System Align, Last Alignment, Quick Align, 1-Star Align

Database: 40,000+ objects, 100 user defined programmable objects. Enhanced information on over 200 objects

Internal Clock: Yes

GPS: Optional SkySync GPS Accessory

Warranty: 2-year Telescope Warranty

To discover more and to find your local Celestron dealer please visit our [Dealer Page](#)



Recommended Accessories



CGE Pro 925
£0.00



CGE Pro 1100 HD
£0.00



CGE Pro 1400 HD
£0.00



PowerTank 17ah
£0.00



SkyQ Link WiFi Adapter
£0.00



StarSense AutoAlign

£0.00



SkySync GPS Accessory

£0.00



SkyPortal Wi-Fi Module for iOS
and Android

£0.00



Ultima Duo 10mm Eyepiece

£0.00



Luminos 2 Inch 2.5x Barlow
Lens

£0.00



Eyepiece & Filter Kit 1.25 in

£0.00



NightScape CCD Camera

£0.00



NexImage Burst Monochrome
£0.00