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Celestron CGX Equatorial 1100 EdgeHD Telescope

AUD $11,749.00

Product Images

Short Description

- 11" HD Optical Tube Assembly
- CGX EQ Mount and Tripod
- Celestron’s premium StarBright XLT coatings provide maximum light transmission
- A 9x50 finderscope, 2” mirror diagonal for more comfortable viewing, and wide-angle 23 mm Luminos 2" eyepiece are all included

Description

CGX 1100 HD combines Celestron's all-new state of the art CGX computerized equatorial mount with its acclaimed EdgeHD optical system. With an optical tube assembly weighing only 28 lbs., this telescope is still portable enough to be taken to dark skies, and has 89% more light gathering power than an 8" telescope and 40% more than the 9.25". For astrophotography, the CGX mount offers a sturdier, stouter platform, with a smoother, heavy-duty belt drive system, new electronic and ergonomic features that favor worry free remote operation, plus all new advanced software.

See the Universe in HD
EdgeHD is an aplanatic, flat field Schmidt-Cassegrain telescope that produces aberration-free images across a wide visual and photographic field of view. The optical system was designed to reduce more than just off-axis star coma; it also provides an astrograph-quality flat focal plane all the way to the edge of the field of view.

True Astrograph Quality
Many optical designs that advertise themselves as "astrographs" actually only produce pinpoint stars across a curved focal plane. While this may be acceptable for some visual observing, stars will appear out of focus at the edge when used with the flat chip sensor of a digital camera. EdgeHD optics produce a focal plane more than three-times flatter than a standard Schmidt-Cassegrain telescope and dramatically flatter than competing coma-free designs. This guarantees you visibly sharp stars across some of the largest CCD chips available today.

Improved Performance
Superior edge performance not only creates rounder, more pleasing stars, but actually improves the resolution and limiting magnitude when compared to telescopes of equal aperture. With Celestron’s StarBright XLT optical coatings on every surface, EdgeHD optics gives you maximum light throughput across the widest visual and photographic spectrum.

Mechanical Features
In addition to EdgeHD’s optimized optical design, the telescope tube has been redesigned to make sure you get the most from your optics each and every night.

- **Mirror clutches** - Flexible tension clutches hold the mirror in place and reduce image shift when taking long exposure astro-images. Once focused, the flexible rods allow the mirror to be held in place without putting any force or pressure on the mirror assembly, keeping the image centered in the eyepiece (or on the sensor).
- **Tube vents** - Cooling vents located on the rear cell allow hot air to be released from behind the primary mirror. Each vent has an integrated 95-micron micromesh filter guaranteed to let warm air out without letting dust in.
- **Fastar versatility** - EdgeHD is the most versatile imaging telescope available today. At its native f/10, you can achieve the image scale necessary to capture the smallest of deep sky objects. Add the optional reducer lens—custom-designed for your size EdgeHD tube—and you can increase your field of view without sacrificing optical performance. A Barlow gives you added power for high-resolution planetary, lunar and solar imaging. All EdgeHD optical tubes are Fastar-compatible, allowing the secondary mirror to be removed and replaced with a third party lens accessory for ultra-fast f/2 wide field imaging.

Individually Tested
Every EdgeHD that ships has been tested not only for the surface quality of each optical component, but also with a camera and artificial star to ensure the imaging system meets our rigid quality assurance. This “final acceptance test” confirms the EdgeHD will perform in the field and deliver high-quality astroimages.

CGX Mount

Celestron’s workhorse CGEM mount lineup has been the German Equatorial backbone for telescopes ranging from 6 to 11 inches of

aperture. Since that time, many more astro-imagers and planetarium controlled setups have emerged as backyard telescope technology has evolved. Celestron’s engineering team applied their years of experience designing German Equatorial mounts to the all-new CGX EQ, a culmination of all the advancements made to our technologies, value, and ease-of-use.

The new CGX was designed to better support your telescope for both visual and astro-imaging pursuits. Key design goals included a lower profile EQ head, which provides a more compact and therefore more stable setup; a better drive system; remote operation-friendly with home and limit optical sensors; easier polar alignment adjustments; and better cable management. In addition to that, we’ve made mechanical and ergonomic improvements throughout to make the mount sturdier, easier to use, and transport. The CGX is our new Equatorial backbone to support a wide range of telescopes.

Additional Information

Specifications

OPTICAL TUBE INFO:	
Optical Design	EdgeHD
Aperture	279.4mm (11")
Focal Length	2800mm (110")
Focal Ratio	f/10
Focal Length of Eyepiece 1	23mm (0.91")
Magnification of Eyepiece 1	122x
Finderscope	9x50
Star Diagonal	2" with 1.25" adapter
Optical Tube	Aluminum
Highest Useful Magnification	660x
Lowest Useful Magnification	40x
Limiting Stellar Magnitude	14
Resolution (Rayleigh)	0.5 arc seconds
Resolution (Dawes)	0.42 arc seconds
Light Gathering Power (Compared to human eye)	1593x
Secondary Mirror Obstruction	95mm (3.75")
Secondary Mirror Obstruction by Diameter	34%
Secondary Mirror Obstruction by Area	12%
Optical Coatings	StarBright XLT
Optical Tube Length	610mm (24")
Optical Tube Diameter	312.42mm (12.3")
Optical Tube Weight	28 lbs (13 kg)
Dovetail	CGE Dovetail Bar
MOUNT INFO:	
Mount Type	Computerized Equatorial
Instrument load capacity	55 lbs (25 kg)
Height adjustment range (includes mount and tripod)	1200.15mm - 1968.5mm (47.25" - 77.5")
Tripod Leg Diameter	50.8mm (2") Steel tripod with graduated markings on lower section
Latitude adjustment range	3° - 65°
Mount Head Weight	44 lbs (20 kg)
Accessory Tray	Yes
Tripod Weight	19.2 lbs (8.7 kg)
Weight of Counterweights	3 x 11 lbs
Slew Speeds	9 slew speeds - max speed 4°/second
Tracking Rates	Sidereal, Solar and Lunar
Tracking Modes	EQ North & EQ South
GPS	N/A
Dovetail Compatibility	Dual saddle plates (Vixen and CGE saddle)
Number of Auxiliary ports	2 Aux ports (Hand Control can use either Aux port)
Autoguide port	Yes
USB Port	Yes, input for Mount and Hand Control
Power Requirements	12V DC, 4 amps
Motor Drive	DC servo motors
Alignment Procedures	2-Star Align, 1-Star Align, Solar System Align, Last Alignment, Quick Align
Periodic Error Correction	Yes
Computerized Hand Control	2 line x 18 character backlit Liquid Crystal Display, 19 LED backlit buttons, USB 2.0 port for PC connection
NexStar+ Database	40,000+ objects, 100 user defined programmable objects. Enhanced information on over 200 objects
Software	PWI Telescope Control Software, Celestron's Starry Night Special Edition Software, SkyPortal App
Total Kit Weight	124.2 lbs (56.33 kg)
Included Items	CGX Equatorial Head | CGX Tripod | Accessory Tray | 3 x 11 lbs counterweights | NexStar+ Hand Control | 8mm Allen Wrench | 12V DC Power Cable | Hand Control Holster