

Celestron 8 Inch EdgeHD HEQ5 Bundle

AUD
\$4,249.00

Product Images



Short Description

The HEQ5 Pro Mount with Steel Tripod provides the precision and stability needed for serious observing, while Celestron's EdgeHD optics produce aberration-free images across a wide visual and photographic field of view.

- EdgeHD's aplanatic, flat field Schmidt-Cassegrain optics
- Aluminum optical tube with tube vents featuring an integrated 95-micron mesh filter
- Mirror support knobs
- 3 achievable focal ratios
- Celestron's premium StarBright XLT coatings
- Easy-to-control heavy-duty mount
- Adjustable steel tripod with an accessory tray
- Fine adjustments of latitude and azimuth for precise polar alignment

- Bubble level for perfect levelling
- Aluminium setting circle dials allow for quick target acquisition via celestial coordinates
- Worm gear tracking controls provide full 360° manipulation of the RA and DEC axis
- Minimal vibrations

Description

Celestron EdgeHD 8 SCT

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.



The **HEQ5 PRO Go-To Mount** represents the ultimate evolution of the EQ5 mount. With a mount head weight of 10 kg this professional mount is ideal to be carried anywhere in search of dark skies and solar eclipses. The integrated bubble level and the adjustable tripod legs make the levelling easy, the azimuth and altitude axis can be fine adjusted for a precise polar alignment. On top of that, the included polar scope included allows an extremely precise polar alignment that helps to drastically improve the quality of tracking, especially for astrophotography.

The exceptional SynScan Go-To system allows full control of both R.A. and Dec. axes with 9 slew speeds and 5 arcminute pointing precision, allowing you to quickly and accurately locate objects across the night sky. The Go-To system can automatically slew the telescope on command toward planets, stars, nebulae, galaxies, clusters and much more. The SynScan has 42,900 memorised celestial objects for an amazing journey in the night sky. The Deep Sky Tour function suggests a list of the most interesting deep sky objects currently visible, so even the novice astronomer can easily observe faint objects at the touch of a button.

The **HEQ5 Pro Mount with Steel Tripod** features and includes the following:

- A user friendly Synscan hand controller
- 2x 5.1Kg counter weight
- Wall-to-wall large accessory tray
- 1.75" stainless steel tripod legs
- Retractable counterweight shaft
- 1.8 degree step angle and 64 micro steps driven
- Motor resolution at 0.144arc sec (or 9.024,000 steps/rev.)
- Slew speeds from 2x, 8x, 18x, 32x, 64x, 400x, 500x, 600x, and up to 3.4°/sec (800X)
- Sidereal, Solar and Lunar tracking rates
- One, Two and Three star alignment options
- Auto guider interface for astrophotography
- Guiding speed from 0.25x, 0.50x, 0.75x, or 1x
- Minimal vibration for steady long-exposure astrophotography
- Payload Capacity 13.7Kg
- Containing over 42,900 objects with complete Messier, NGC and IC Catalogues.
- Positioning accuracy up to 1 arc minute. Accuracy enhanced by software collimation error (mount mechanical error) compensation
- Periodic error correction
- Firmware upgradeable via internet download
- PC Compatibility
- Car power supply adapter included

- Requires 11 to 15V DC 2A power supply (not included).

SynScan Features:

- Database with 42,900+ objects
- Messier, Caldwell, NGC, IC & SAO catalogues, Named Stars, Double Stars, Variable Stars, Named Stars
- One, Two and Three Stars or Brightest Star Alignment
- Autoguiding feature for astrophotography
- Pointing Accuracy Enhancement feature (PAE)
- Permanent Periodic Error Correction (PPEC)
- Unknown Object Identification feature
- Pointing accuracy up to 5 arc min
- Tracking rates: Sidereal, Lunar, Solar
- Slewing speeds: 1x, 2x, 16x, 32x, 64x, 128x, 400x, 500x, 600x, 800x (3.4°/sec)
- Motor type: DC Servo Motors

Specifications

Optical Tube Specifications

Optical Design	EdgeHD
Aperture	203.2mm (8")
Focal Length	2032mm (80")
Focal Ratio	f/10
Focal Length of Eyepiece 1	40mm (1.57")
Magnification of Eyepiece 1	51x
Finderscope	9x50
Star Diagonal	1.25" Star Diagonal
Optical Tube	Aluminum
Highest Useful Magnification	480x
Lowest Useful Magnification	29x
Limiting Stellar Magnitude	14
Resolution (Rayleigh)	0.69 arc seconds
Resolution (Dawes)	0.57 arc seconds
Light Gathering Power (Compared to human eye)	843x
Secondary Mirror Obstruction	64mm (2.5")
Secondary Mirror Obstruction by Diameter	31%
Secondary Mirror Obstruction by Area	9.77%
Optical Coatings	StarBright XLT
Optical Tube Length	432mm (17")
Optical Tube Diameter	238mm (9.37")
Optical Tube Weight	14 lbs (6.35 kg)
Dovetail Type	CGE Wide Dovetail

Mount specifications

Mount Type	German Equatorial Go-To
Tripod Material	Steel
Dovetail Compatibility	Vixen and CGE Wide Dovetail
Payload	10kg
Mount Head Weight	10kg
Tripod Weight	5kg
Tripod Height	185-121cm
Counterweight Bar Diam.	18mm
Counterweight Bar Length	21.5cm
Power Supply	DC 12~16V - 3A
Pointing Accuracy	up to 5 arc. min.
Slewing Speed	up to 3.4°/sec (800X)
Guiding Speed	0.25X, 0.50X, 0.75X, or 1X
Motors Resolution	0.144 Arc. Sec.
Power Requirement	12 to 15V - 2A