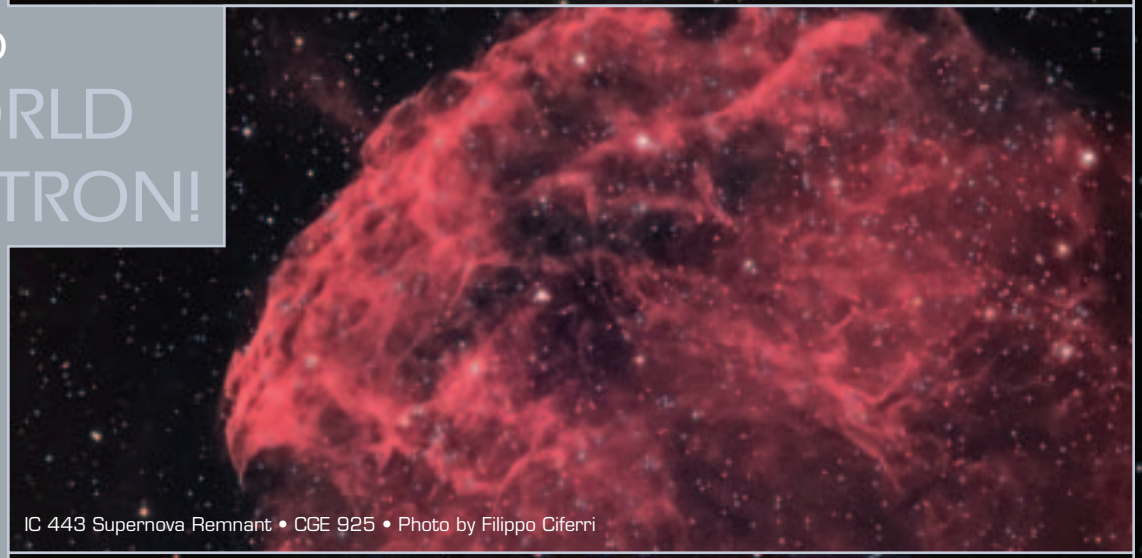
CELESTRON

ASTRONOMY 2007

TELESCOPES • SKYSCOUT • ACCESSORIES

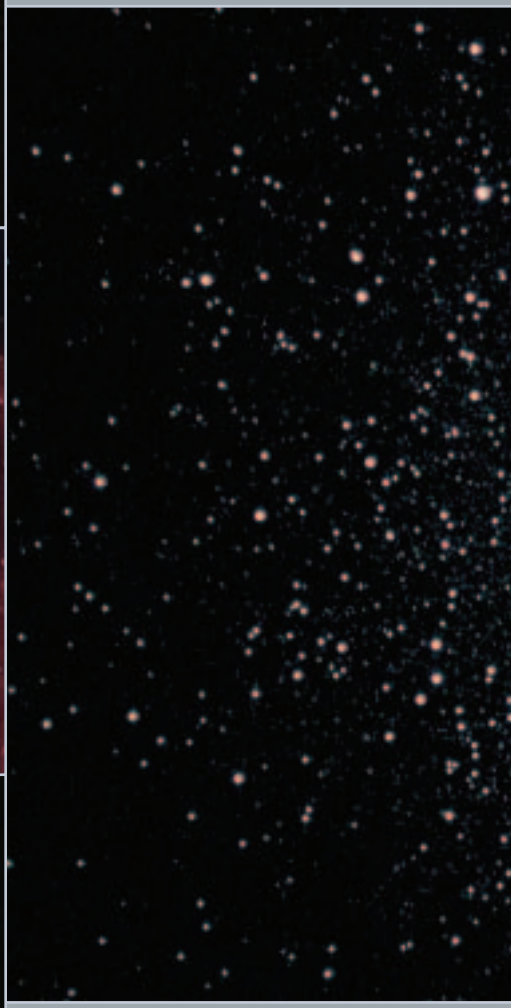
M 42 Orion Nebula • Onyx 80EDF • Photo by Andre Paquette

WELCOME TO THE WORLD OF CELESTRON!



IC 443 Supernova Remnant • CGE 925 • Photo by Filippo Ciferri

M 101 Pinwheel Galaxy • C 14 • Photo by Frederic_Caron



THE SKY WILL NEVER LOOK THE SAME

NGC 104 Globular Star Cluster• C14 • Photo by Sebatian Voltmer

Contents

VISIT US AT

www.celestron.com

FOR COMPLETE INFORMATION ON ALL OF OUR PRODUCTS.

SINCE 1609, when the great Italian scientist Galileo first introduced a rudimentary telescope to astronomy that gave a glimpse of the mysteries lying within the night sky, a fascination to further explore the vast Universe became a constant lure to the curious at heart. By today's standard, that telescope was not much more than ordinary opera glasses. However, that fascination with the mysteries of night skies continued through the ensuing four centuries and triggered immense optic discoveries, culminating in the 21st century, in an ever-growing market not only of professionals but also of serious amateur astronomers and space enthusiasts, young and old alike.

CELESTRON, OVER 40 YEARS OF TELESCOPE HISTORY.

Today, Southern California-based Celestron has captured the enviable worldwide reputation as a leader in designing, manufacturing and importing high-quality optical products, including computerized and non-computerized telescopes and related accessories, binoculars, spotting scopes and microscopes. The Celestron brand is recognized for its superior optics, outstanding design and innovative technology by serious amateur astronomers.

Celestron was first founded in the 1950's as Valor Electronics, an aerospace electronics firm by Tom Johnson, who, while searching for a suitable telescope for his two young sons, decided to build a telescope from scratch. Starting with a 6-inch reflector, he progressed to building increasingly larger and more sophisticated designs. Tom's hobby soon grew into a full-time business, offering Schmidt-Cassegrain telescopes in 4-inch to 22-inch models.

His immediate challenge was to find a way to efficiently produce the Schmidt corrector plate used in the top-of-the-line catadioptric telescopes (hybrid of reflector and refractor telescope design). Although a corrector plate appears flat, it has a "wavy" surface that is difficult to mass-produce using standard equipment and procedures. By 1970 Celestron designers and engineers announced a revolutionary method of producing Schmidt-Cassegrain telescopes at reasonable cost and in volume. This optical breakthrough was incorporated in the first Celestron C8. The popularity of the C8 in the consumer marketplace led to the C5 and then to larger versions including an 11-inch and 14-inch telescope. Today the Celestron product line still features these models and other quality optical products.


NexStar 6SE

Celestron has experienced impressive growth over the years, since Tom Johnson sold the company in 1980. Between 1980 and 2002 there were a couple of changes in ownership of the company. In 2002, three of Celestron's senior management team purchased the assets of Celestron and initiated a whole new era for Celestron. Under their ownership the company expanded distribution channels and product offerings, and launched the observatory-class CGE Series of computerized equatorial telescopes.

In April of 2005 the SW Technology Corporation acquired the company and provided Celestron access to a supply chain network with state of the art technology and many years of technical and manufacturing experience. Backed with these competitive advantages, Celestron is now able to concentrate its resources towards offering an unprecedented level of customer satisfaction and a wide range of products to the market place.

Throughout the world, Celestron telescopes have become the "telescope of choice" for the consumer that can differentiate between brands. Major colleges and universities worldwide use Celestron telescopes in their astronomy programs. Moreover, its solid and esteemed reputation in the scientific community has reached NASA, who selected Celestron's C5 telescope as the telescope to be taken on several space shuttle research missions.

Celestron's newest innovative product, SkyScout, was introduced at the 2006 International Consumer Electronics Show in January. It is a handheld, portable celestial viewing device that can identify and/or locate over 6,000 celestial objects, transforming the night sky into your own personal planetarium. It has recently been named the "Best of Innovations" in the personal electronics category for the annual showcase of new products at the Consumer Electronics Show.

COMMITTED TO DEVELOPING INNOVATIVE PRODUCTS!

Today Celestron sells and markets its products worldwide through a variety of specialty retail outlets and international distributors. A privately held company with corporate offices and manufacturing facilities in Torrance, CA, Celestron provides efficient and effective logistical support to large retailers. For a list of dealers that carry our products please visit us at www.celestron.com.

Sebastian Voltmer setting up at Gornergrat, Switzerland. Check out the Matterhorn in the background. Could this be astronomy's Disneyland?

Jeff Phillips captures his view of Mars from Oregon.

Backyard set-up featuring our C 9.25" carbon fiber tube with XLT coatings, permanent pier, goto mount and self-made dew-cap.

Astronomy can help bridge the gap between fun and education. Just ask these students from Slovakia.

Fabrice Charnay's Image of M51. Job well done!

Advanced 8SGT ready for action.

Transit of Mercury.
Photo by Mike Connelley.

Astronomy Hawaiian style,
on the summit of Mauna Kea.

Somewhere in the Mojave Desert the "Roweville" crew is hard at play under the Orionids meteor showers.

When in Los Angeles don't forget to stop by the remodeled Griffith Observatory for an incredible experience.

A young astronomer learning the ropes from one of the best.

The Celestron Team in action at our Mercury Transit event.

Waiting for darkness to fall over LA.

SkyScout™ Personal Planetarium

THE SKY WILL NEVER LOOK THE SAME

The SkyScout is a revolutionary handheld device that uses advanced GPS technology with point and click convenience to identify thousands of stars, planets, constellations and more.

Comet Neat • Photo by Sebatian Voltmer

Identify: Simply point the SkyScout at any star in the sky and click the "target" button. The SkyScout will tell you what object you are looking at.

Locate: To locate a star or planet, select the object's name from the menu and follow the directional arrows through the viewfinder. SkyScout tells you when you are on target. It's that easy!

Learn: Once you have targeted an object, the real fun begins. The SkyScout provides entertaining and educational audio and text information, including facts, trivia, history and mythology about our most popular celestial objects.

A fun learning tool for all ages, the SkyScout personal planetarium puts the knowledge of an expert astronomer in the palm of your hand.

SKYSCOUT FEATURES:

- Uses GPS technology to identify over 6,000 celestial objects with the click of a button
- Locate stars, planets, constellations and more
- Simple enough for all ages – just turn it on and it's ready to use
- Includes "Tonight's Highlights", a customized list of the 20 best objects to view for your exact date, time and location anywhere in the world
- Audio and in-depth text descriptions provide history, mythology and other information for the most popular objects
- Take a guided tour through all 88 constellations and even see on-screen constellation maps
- Built-in Field Guide includes a six part audio lesson on astronomy, bios about history's greatest astronomers, glossary of popular astronomy terms, information on comets, man-made space objects, extra-solar planets and much more
- Bring it anywhere – durable, compact and light design makes it easy
- Database can be updated with new objects, comets, etc.
- Includes: vinyl carrying case, earphones, battery sleeves, USB cable and CD-ROM w/ user manual and tutorial

NEW

Includes: vinyl carrying case, earphones, battery sleeves, USB cable and CD-ROM with user manual and tutorial

GET THE EXPERIENCE OF AN EXPERT ASTRONOMER AT THE PRESS OF A BUTTON.

INNOVATIONS INTERNATIONAL CES BEST OF INNOVATIONS 2006

HOT PRODUCT 2007 SKY & TELESCOPE

GPS

SD memory card

USB connectivity

Easy to follow menu options appear in the red back-lit LCD display. Audio and in-depth text descriptions provide history, mythology and other information for the most popular objects

MODEL #	DESCRIPTION	BATTERIES	WARRANTY
93970	SkyScout Personal Planetarium	2 AA (user supplied)	2-Year

Celestron takes pride in its reputation for innovation and how we have changed the landscape of amateur astronomy. It all began with the first commercially available Schmidt-Cassegrain telescope over 40 years ago. Below are some of the notable innovations Celestron has introduced over the years.

- 1966 — Introduced the first commercially available Schmidt-Cassegrain telescopes.
- 1969 — First to have an entire line of Schmidt-Cassegrain telescopes; the now famous C6, C8, C10, C12, C16, and C22.
- First to offer commercially available Observatory Class Telescopes, the C16 and C22.
- First to offer commercially available Schmidt Cameras in the late 1960's.
- Popularized the Cold Camera in the early 1970's.
- Popularized piggyback photography.
- 1979 — Popularized the Maksutov-Cassegrain optical design in astronomy with the introduction of the C90 Astro for $495.
- 1979 — Popularized Maksutov-Cassegrains as spotting scopes with the introduction of the C90 Spotter.
- Popularized eyepiece projection with the introduction of tele-extenders for Celestron's line of Schmidt-Cassegrain telescopes.
- Popularized off-axis guiders for long exposure photography.
- 1983 — First to offer enhanced reflectivity and transmission coatings with the introduction of StarBright® coatings.
- First to offer a telescope drive system that utilized 9V batteries.
- 1987 — First to introduce the Compustar 14, a mass-produced fully-integrated computerized GoTo observatory class telescope.
- 1996 — First to offer the Ultima 2000, a computerized telescope that utilized AA batteries as a power source.
- First to introduce a commercially available reducer/corrector for Schmidt-Cassegrain telescopes.
- First and currently the only commercial telescope manufacturer to offer true hand-figured and matched optics in Schmidt-Cassegrain telescopes.
- First to offer a commercially available 8" fork mounted Schmidt-Cassegrain for under $1,000 with the introduction of the Celestar.
- 1997 — First to offer a commercially available Schmidt-Cassegrain telescope capable of f/2 CCD imaging with the introduction of the Fastar® System.
- 2001 — Introduced the first commercially available Schmidt-Cassegrain telescope with carbon fiber optical tube, the NexStar 11 GPS.
- 2001 — First to offer a commercially available fully computerized GoTo telescope with integrated GPS and compass with the introduction of the NexStar 11GPS.
- 2002 — Introduced the NexStar 5i and 8i, the first commercially available telescopes to be GPS compatible.
- 2002 — Introduced the CN16 GPS, a commercially available GPS accessory with an integrated compass that provides GPS functions to Celestron GPS-compatible computerized telescopes.
- 2003 — Celestron reinvents their StarBright coating by introducing its improved maximum throughput StarBright® XLT Coating.
- 2005 — Celestron takes the guesswork out of aligning its computer automated telescopes with the invention of the SkyAlign™ three-object alignment process.
- 2006 — Introduces SkyScout, the first handheld device that uses advanced GPS technology to identify thousands of stars, planets, constellations at a click of a button.

Telescope Table of Contents

Saturn • Photo by Daniel Gasparri

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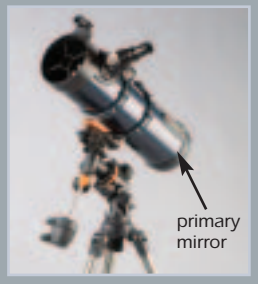
Refractor Telescope



Newtonian Reflector Telescope

What Is A Telescope?

A telescope is a light collector. Its main task is to form the brightest possible optical image of the object on which it is focused. This task is accomplished by the primary optical element, called the "primary" or "objective" inside the telescope's optical tube. "Primary" usually refers to the mirror in a reflecting telescope while "objective" refers to the main lens of a refracting telescope. The image formed by the primary is then magnified by a removable component called an eyepiece. By using different eyepieces, you can change the magnification and the field of view of what you see through the telescope.

When comparing telescopes, there are a number of characteristics that can help identify their differences. The most common ones are: Light Gathering Power, Limiting Magnitude, Resolution, and Magnification. No matter what types of optical designs you compare, these characteristics provide valuable information that will help you determine what you can expect to see through a telescope.

Light Gathering Power The most important characteristic of a telescope is its light gathering ability. The light gathering capability of a telescope is determined by the diameter of its aperture. The larger the aperture, the more light it collects. When looking at a star, nebula, or galaxy it's especially important that as much light be gathered as possible. Fainter celestial objects may be invisible to smaller aperture telescopes. Without enough light, dim objects cannot be seen, no matter how much they might be magnified!

The relationship between a telescope's light gathering power and the diameter of its lens or mirror is not directly proportional. As the diameter gets larger, the amount of light gathered increases by the square of the diameter. So if you double the diameter of the primary lens, its light gathering ability increases by four times!

Limiting Magnitude Astronomers use a system of "magnitudes" to indicate the brightness of a stellar object. An object is said to have a certain numerical magnitude with 0 (the star Vega) as the baseline. The larger the magnitude number, the fainter the object. Each magnitude is a difference in brightness by a factor of 2.51 times. For example, a star that is considered 5th magnitude is 100 times fainter than Vega, a zero magnitude star (2.515). The faintest star you can see with your unaided eye is about sixth magnitude (from dark skies) whereas the brightest stars are magnitude zero (or even a negative number).

The faintest star you can see with a telescope (under excellent seeing conditions) is referred to as the "limiting magnitude". The limiting magnitude of a telescope is directly related to aperture. Larger apertures allow you to see fainter objects. Atmospheric conditions and the visual acuity of the observer will often reduce limiting magnitude.

Resolution The ability of a telescope to render fine detail. Higher resolution lets you see more detail on the surface of a planet or separate stars that are close together. Resolution is measured in terms of degrees of arc (called degrees), minutes of arc (called arcminutes), and seconds of arc (called arcseconds). Thus, something that spans one degree of arc is also 60 arcminutes, or 3600 arcseconds (60 x 60). So, something that is one arcsecond is very small — only 1/3600th of a degree.

Magnification Frequently referred to as "power" and is a function of the focal lengths of both the primary and the eyepiece. The focal length is the distance from the primary lens or mirror to the point where an image is formed. The eyepiece magnifies the image formed by the primary.

The highest magnification you can reasonably achieve with your telescope is once again determined by the size and light gathering ability of the primary. The practical limit is about 60 times the diameter of the primary in inches. So, an 8" telescope should not be expected to produce reasonable images if the telescope/eyepiece combination produces a magnification greater than 480x. In practice, the amount of magnification that can be used will often be reduced by atmospheric conditions.

Since many astronomical objects are relatively large but faint, moderate magnification and a larger diameter primary to gather light is the best combination for viewing most celestial objects. When looking at stars, high power is of little use since they always look like pinpoints (stars are so far away they can not be resolved as anything other than a pinpoint).

To calculate magnification:

Magnification = Focal Length of Primary in mm / Focal Length of Eyepiece in mm

So, for a 8" telescope using a 25mm eyepiece:

Magnification = 2000/25 = 80 times the power of the unaided eye.

Celestron's Revolutionary SkyAlign™

Pick three stars, any stars… aligning your telescope is easier and faster than ever. Simply input the date, time and your location (GPS models obtain all this information automatically) and then point the telescope at three bright stars of your choosing. You do not need to know the names of the stars — you could even pick the moon or bright planets! The NexStar computer system will figure out which stars were chosen and then align the telescope. SkyAlign is standard with NexStar SLT™, NexStar® SE and CPC™ computerized telescopes.

There is no need to point the telescope north or to level the optical tube. The initial position of the telescope is irrelevant. This makes for a fast and very easy method for aligning the telescope.

How does it work? The NexStar® software with SkyAlign calculates the angles measured between the objects and then compares them to the known angles between objects. Using this method, the telescope determines what objects were chosen. The display will tell you which three objects you aligned to for confirmation.

StarBright® XLT — An Optical System Breakthrough!

One of the most important factors in the evaluation of a Schmidt-Cassegrain telescope's optical system performance is its transmission — the percentage of incoming light that reaches the focal plane. The design of the XLT System accomplishes two crucial objectives – 1. To develop a coating system that is optimized for visual use and, 2. To optimize the coating system and optics for CCD/Photographic imaging.

The StarBright® XLT High Performance Optical System design consists of:

1. **Unique enhanced multi-layer mirror coatings** Our mirror coatings are made from precise layers of Aluminum (Al), SiO2 (Quartz), TiO2 (Titanium Dioxide), and Si02. Reflectivity is fairly flat across the spectrum, optimizing it for both CCD imaging and visual use.
2. **Multi-layer anti-reflective coatings** Made from precise layers of MgF2 (Magnesium Fluoride), and HfO2 (Hafnium Dioxide), which costs nearly $2000 per kilogram, Hafnium results in a wider band pass than Titanium, used in competitive coatings.
3. **High Transmission Water White glass** Our Schmidt-Cassegrain optical systems with StarBright® XLT coatings use Water White glass instead of Soda Lime glass for the corrector lens. Water White glass transmits about 90.5% without anti-reflective coatings. That is 3.5% better transmission than uncoated Soda Lime glass. When Water White glass is used in conjunction with StarBright® XLT's anti-reflective coatings, the average transmission reaches 97.4% — an 8% improvement!

These three components of our StarBright® XLT coatings result in one of the finest coatings available. The peak transmission for the systems is 89% at 520 nm. The overall system transmission is 83.5% averaged over the spectrum from 400 to 750 nm.

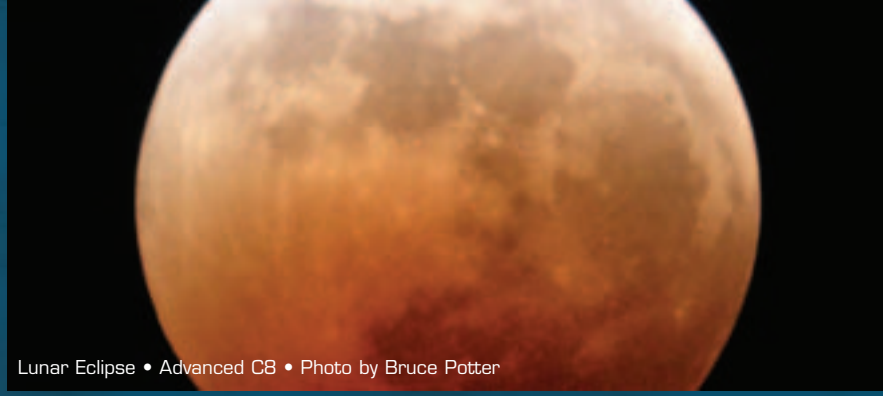
NexRemote® Remote Control Software

Celestron has been in the forefront of computerized telescope technology for over two decades. We have taken this expertise one step further by introducing the NexRemote Telescope Remote Control Software. NexRemote allows the user to control their Celestron computerized telescope from a personal computer. Every function that can be done using the telescope's hand control can now be duplicated remotely from a PC or laptop. This software was developed for Celestron's telescopes that use the NexStar control system. These include the NexStar® SLT Series, Advanced Series, CPC Series and CGE Series (NexRemote ships standard with CPC and CGE Series models).

NexRemote provides full emulation of every aspect of the Celestron Computerized Hand Control plus these additional powerful features:

- NexRemote voice output - Allows you to keep your eyes on the stars instead of the LCD by enabling speech support.
- Select the objects you want to see and the order that you want to see them.
- Create and save custom tours using the NexTour feature.
- Reduce the effect of the laptop screen illumination on your eyes using Night Vision Mode.
- Wireless control of the telescope with optional game pad support.
- Use your personal GPS device to interface with NexRemote® using NexGPS.
- Download the latest NexRemote updates online.

AstroMaster™ Series



Lunar Eclipse • Advanced C8 • Photo by Bruce Potter

DESIGNED FOR THE FIRST TIME BUYER

Offering exceptional value, the AstroMaster series features a compact and portable design with ample optical performance to excite any newcomer to the world of amateur astronomy.

Which AstroMaster model best fits your needs?

If you're looking for a dual-purpose telescope appropriate for both terrestrial and celestial viewing, then the AstroMaster Series is for you. Each AstroMaster model is capable of giving correct views of land and sky. The AstroMaster Series produce bright, clear images of the Moon and planets. It is easy to see the moons of Jupiter and the rings of Saturn with every one of these fine instruments. For views of the brighter deep space objects like galaxies and nebulae, we recommend the larger aperture and light gathering ability of the Newtonian reflectors.

If your interest is strictly watching whales, spotting birds, viewing nature, or checking out your favorite star or planet the altazimuth-mounted models are ideal. Alt-Az models have a convenient pan handle with built-in clutch for easy targeting and smooth motion. Models featuring the German Equatorial mount are a good choice for viewing stars, nebulae, star clusters, and planets. Built-in setting circle aids in locating these objects.

When used for astronomical viewing, AstroMasters yield breathtaking views of the Moon, Saturn with its ring structure, Jupiter and its belts and moons, nebulae and star clusters.

Every instrument features all glass optical elements as well as smooth operating steel tripod mountings featuring manual motion controls. All models feature coated optics for enhanced image brightness and clarity.

ASTROMASTER FEATURES:

- Quick and easy no-tool setup
- Permanently mounted StarPointer
- Erect image optics – Ideal for terrestrial and astronomical use
- Quick release dovetail attachment – no tool setup
- Pan handle Alt-Az control with clutch – for smooth and accurate pointing (21061, 21063 & 31043)
- German Equatorial Mount with Setting circles – to accurately locate and track sky objects (21062, 31035, 21064, 31042 & 31045)
- Rugged pre-assembled tripod with 1.25" steel tube legs – Provides a rigid and stable platform
- All coated glass optics for clear, crisp images
- Deluxe accessory tray for convenient storage of accessories
- "The Sky" Level 1 planetarium software with 10,000 object database and enhanced images


AstroMaster 90EQ


AstroMaster 130EQ

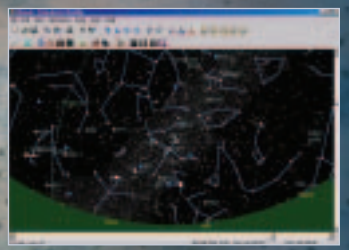

AstroMaster 90AZ

ENGINEERED FOR
EASY SET-UP AND GREAT VALUE,
PERFECT FOR THE FIRST TIME USER!

Alt-Az models have a convenient pan handle with built-in clutch for easy targeting and smooth motion. This style of mount is great for viewing nature and celestial objects.

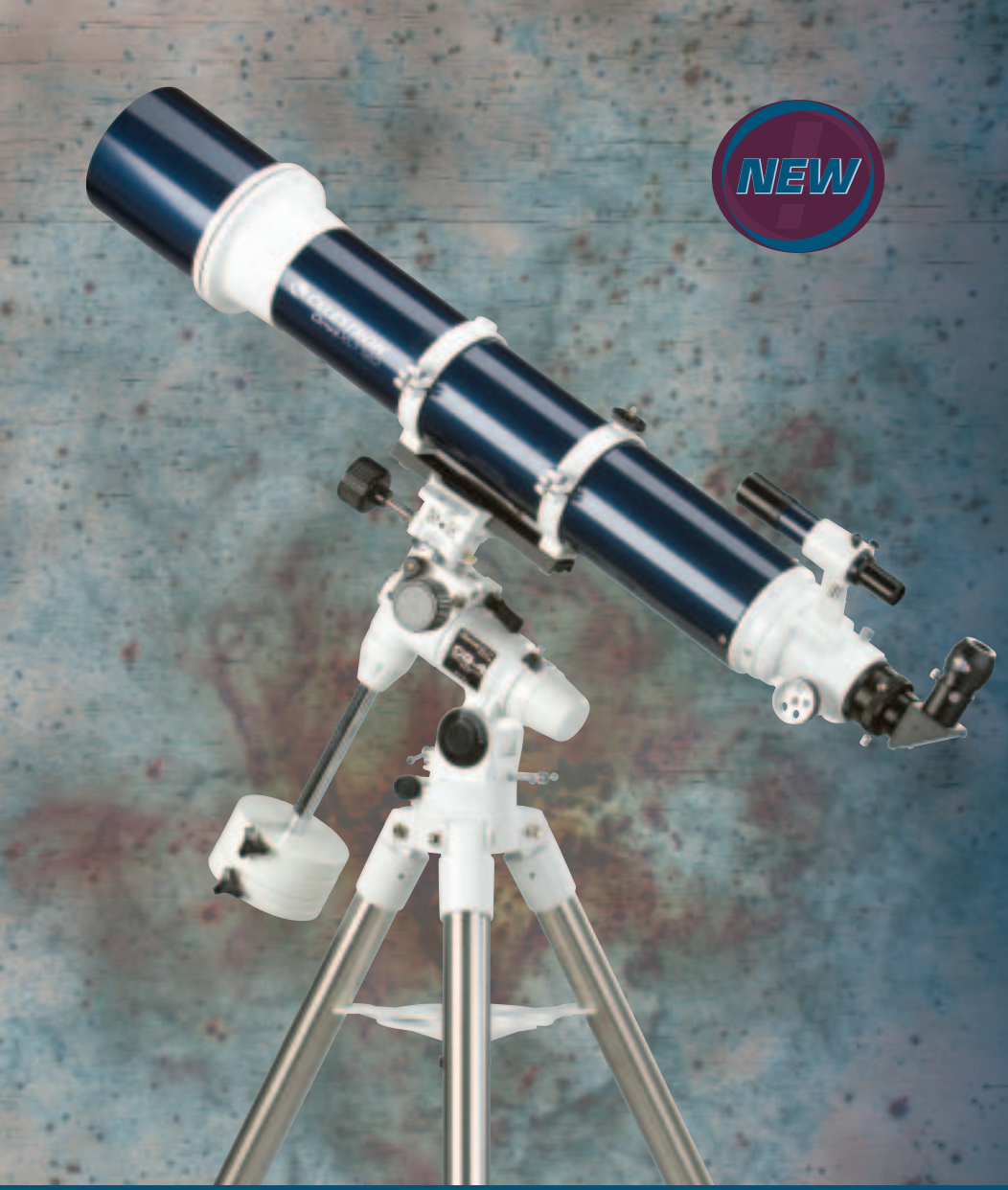
The German Equatorial mount is a good choice for viewing stars, nebulae, star clusters, and planets. A built-in setting circle aids in locating these objects.

Locate and identify thousands of celestial objects on your laptop or PC with "The Sky" Level 1 software included FREE with every AstroMaster model.



Model	Item #	Aperture	Type	Focal Length	Eyepieces	Mount	Coating	Weight
AstroMaster 70AZ	21061	70mm (2.8")	Refractor	900mm f/13	20mm (45x), 10mm (90x)	Altazimuth	Fully Coated	18 lbs
AstroMaster 70EQ	21062	70mm (2.8")	Refractor	900mm f/13	20mm (45x), 10mm (90x)	CG-2 Equatorial	Fully Coated	18 lbs
AstroMaster 76EQ	31035	76mm (3")	Reflector	700mm f/9	20mm (35x), 10mm (70x)	CG-2 Equatorial	Aluminum	16 lbs
AstroMaster 90AZ	21063	90mm (3.5")	Refractor	1000mm f/11	20mm (50x), 10mm (100x)	Altazimuth	Multi-coated	20 lbs
AstroMaster 90EQ	21064	90mm (3.5")	Refractor	1000mm f/11	20mm (50x), 10mm (100x)	CG-3 Equatorial	Multi-coated	23 lbs
AstroMaster 114EQ	31042	114mm (4.5")	Reflector	1000mm f/9	20mm (50x), 10mm (100x)	CG-2 Equatorial	Aluminum	17 lbs
AstroMaster 114AZ	31043	114mm (4.5")	Reflector	1000mm f/9	20mm (50x), 10mm (100x)	Altazimuth	Aluminum	17 lbs
AstroMaster 130EQ	31045	130mm (5")	Reflector	650mm f/5	20mm (33x), 10mm (65x)	CG-3 Equatorial	Aluminum	24 lbs

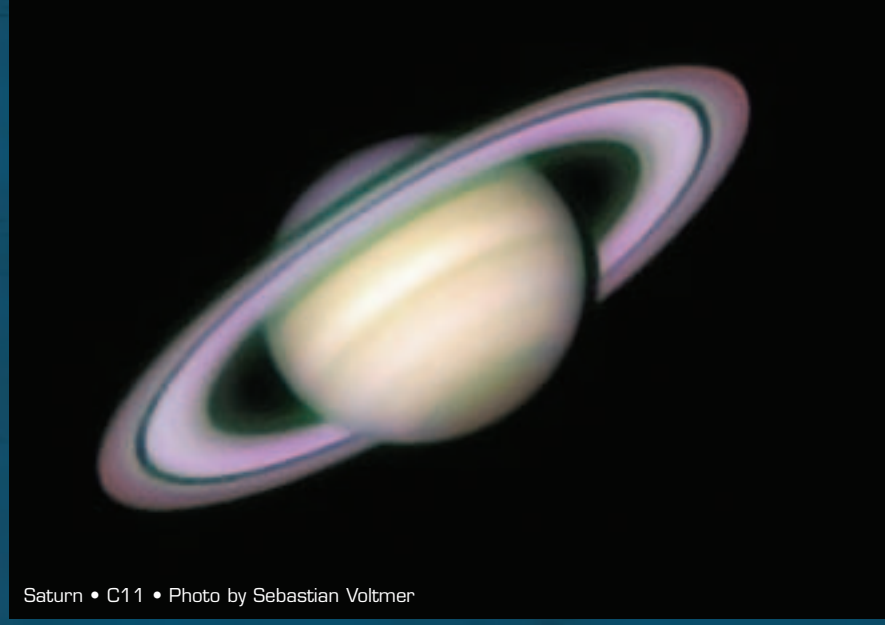
For complete specifications and product information, visit: www.celestron.com



Omni™ XLT Series

A PREMIUM OPTICAL SYSTEM TO EXPLORE THE UNIVERSE

The Omni XLT family of telescopes was designed to offer a selection of models with the quality optics and stable platform that serious amateurs can appreciate.



Saturn • C11 • Photo by Sebastian Voltmer

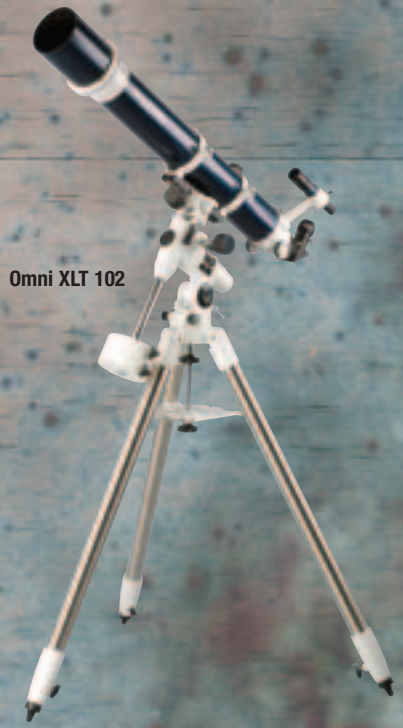
The new Omni™ XLT Series features refractor, reflector and Schmidt-Cassegrain optical designs coupled with our new Omni CG-4 heavy-duty German Equatorial mount and sturdy tripod featuring 1.75" stainless steel legs and center tray for superior rigidity and vibration dampening.

Along with the stable platform of the CG-4 mount the Omni XLT series features high quality optics. Using aspheric shaping technology in conjunction with hand-figuring the optics the Omni XLT presents an image with virtually no spherical abberation. We also added our famous StarBright XLT coating system to further enhance light transmission.

With superior optics and a stable platform the Omni XLT series is a great choice for astrophotography. Use the optional dual-axis motor drive (#93522) and polar axis finder (#94221) to track objects for long exposure photography.

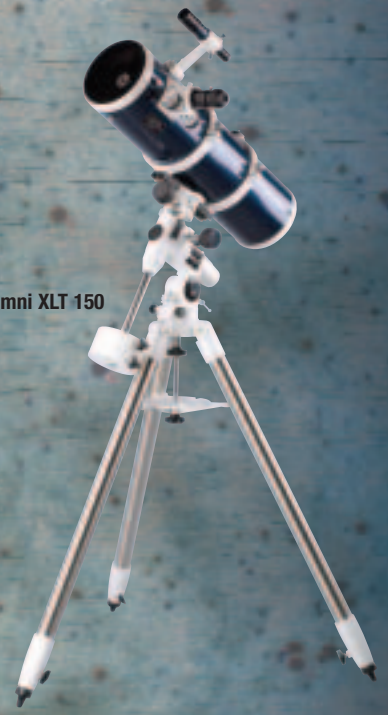
OMNI XLT FEATURES:

- High quality optics start with each lens and/or mirror being hand selected so only the finest grade of optical glass is used
- StarBright XLT coatings provide maximized light transmission
- 25mm multi-coated eyepiece – 20mm eye relief, 50° FOV
- 1.25" star diagonal (except #31057)
- CG-4 German Equatorial Mount with setting circles and slow motion controls – to accurately locate and track sky objects
- Ball bearings in both axis of the mount for smooth performance
- Heavy-duty pre-assembled stainless steel tripod featuring 1.75" legs, accessory tray and bubble level
- Easy no-tool setup
- "The Sky" Level 1 planetarium software with 10,000 object database and enhanced images


Omni XLT 102

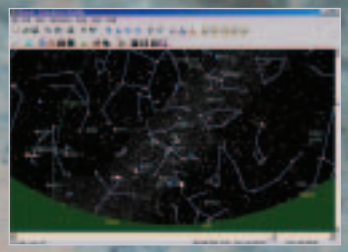

Omni XLT 120


Omni XLT 127


Omni XLT 150

FOUR APERTURES AVAILABLE
102MM 120MM 127MM 150MM
WITH STARBRIGHT® XLT COATINGS

Locate and identify thousands of celestial objects on your laptop or PC with "The Sky" Level 1 software included FREE with every Omni XLT model.



Tall finderscope mount for easier viewing through finderscope. Machined focus knobs for fine tuning focus.

The CG-4 German Equatorial mount has a refined style and provides the stability you would expect from our CG mounts.

Model	Item #	Aperture	Type	Focal Length	Eyepieces	Finderscope	Coating	Weight
Omni XLT102	21088	102mm (4")	Refractor	1000mm f/10	25mm (40x)	6x30	StarBright® XLT	43 lbs
Omni XLT120	21090	120mm (4.7")	Refractor	1000mm f/8.3	25mm (40x)	6x30	StarBright® XLT	46 lbs
Omni XLT127	11084	127mm (5")	Schmidt-Cassegrain	1250mm f/10	25mm (50x)	6x30	StarBright® XLT	40 lbs
Omni XLT150	31057	150mm (6")	Newtonian Reflector	750mm f/5	25mm (30x)	6x30	StarBright® XLT	46 lbs

For complete specifications and product information, visit: www.celestron.com

NexStar 130 SLT

NexStar SLT™ Series

Jupiter • C11 • Photo by Damian Peach

NexStar SLT telescopes can be set up in a matter of minutes — with no tools required! Each model comes with a pre-assembled, adjustable stainless steel tripod, a quick release fork arm mount and an optical tube.

You can see details of the lunar surface, Venus and its phases, Mars resolved as an orange disc, Jupiter and its four moons, Saturn with its rings plainly visible and much more! Most NexStar SLT's can also be used as a land-based spotting telescope.

Intelligent Design

Powered by 8 AA user supplied batteries or an optional AC adapter (#18776) these NexStar GoTo's love to travel. High precision servo motors provide rigid low-vibration performance.

With the NexStar's ergonomically-designed hand control, the user is free to remove the hand control from its holder for remote use or leave it cradled for hands-free operation. With a touch of a button you can select the object catalog, change the slew speed, view fascinating information about an object, or simply know if a desired object is visible in the sky.

Celestron's Revolutionary SkyAlign™

Using Celestron's patented SkyAlign, simply input the date, time and location into the hand control then slew the telescope to any three bright celestial objects in the sky. You do not need to know the names of the stars — you could even pick the moon or bright planets!

NEXSTAR SLT™ FEATURES:

- Computerized hand control with 4,000+ object database
- Quick-release fork arm mount, optical tube and accessory tray for quick no tool set up
- SkyAlign allows you to align on any three bright celestial objects, making for a fast and easy alignment process
- Comes with "The Sky" Level 1 planetarium software and NSOL telescope control software for controlling your telescope via computer
- Internal battery compartment to prevent cord wrap during use
- Sturdy stainless steel tripod
- StarPointer finderscope to help with alignment
- Auxiliary port for additional accessories such as GPS accessory
- Motorized altazimuth mount and fully computerized hand control
- U.S. and International city database to easily set your location
- Flash upgradeable hand control software and motor control units

OUR ENTRY LEVEL
COMPUTERIZED STAR LOCATING TELESCOPE

Designed to be an affordable entry to mid-level computerized GoTo telescope, the NexStar SLT refractors and reflectors are available in the most popular sizes and are loaded with valuable design features.

REVOLUTION AND EVOLUTION,
THE STAR LOCATING TELESCOPE
FEATURES STYLISH DESIGN AND SKYALIGN TECHNOLOGY

Computerize single fork arm design with an auxiliary port for additional accessories.

NexStar SLT telescopes feature Celestron's SkyAlign technology. Simply input the date, time and your location into the hand control then point the telescope at any three bright celestial objects in the sky. SkyAlign does the rest. No guessing or knowledge of the night sky is needed.

Model	Item #	Aperture	Type	Focal Length	Eyepieces	Finderscope	Mount	Weight
NexStar 60SLT	22076	60mm (2.4")	Refractor	700mm f/12	25mm (28x), 9mm (78x)	StarPointer	Altazimuth	9.5 lbs
NexStar 80SLT	22086	80mm (3.1")	Refractor	900mm f/11	25mm (36x), 9mm (100x)	StarPointer	Altazimuth	14 lbs
NexStar 102SLT	22096	102mm (4")	Refractor	660mm f/6.5	25mm (26x), 9mm (73x)	StarPointer	Altazimuth	14 lbs
NexStar 114SLT	31143	114mm (4.5")	Reflector	1000mm f/9	25mm (40x), 9mm (111x)	StarPointer	Altazimuth	15 lbs
NexStar 130SLT	31145	130mm (5")	Reflector	650mm f/5	25mm (26x), 9mm (72x)	StarPointer	Altazimuth	18 lbs

For complete specifications and product information, visit: www.celestron.com

NexStar® SE Series

ASTRONOMY MADE SIMPLE

In the tradition of Celestron's famous orange optical tubes, the new NexStar SE Family combines the classic heritage of the original orange tube telescopes with state-of-the-art features including a fully computerized operating system, flash upgradeable hand control, superior coatings, our revolutionary SkyAlign™ alignment software and much more.

Dumbell Nebula • C14 • Photo by Sebastian Voltmer

With the NexStar SE, you are in the driver's seat. Simply choose an object from the menu and the telescope will find it for you. Using our NexStar® technology, the SE scopes have the ability to locate nearly 40,000 objects. All you have to do is look through the eyepiece and enjoy the view!

Don't know what object to choose? Let the intelligent NexStar SE give you a guided tour of the night sky! The "Tour" feature offers a customized list of the best objects in the sky to view for your exact time and location anywhere in the world!

Not only can your NexStar SE find objects, it can teach you about them as well. Information on the most popular objects can be viewed in the LCD screen of your hand control.

Whether you are a seasoned astronomer looking for a portable scope with advanced features, or just starting your astronomy adventure and want an easy way to enjoy the night sky, a NexStar SE will help you take a closer look.

Celestron's Revolutionary SkyAlign™

Using Celestron's patented SkyAlign, simply input the date, time and location into the hand control then point the telescope at any three bright celestial objects and the telescope does the rest. You do not need to know the names of the stars, you can even pick the moon or bright planets.

NEXSTAR® SE FEATURES:

- Set up in a matter of minutes with no tools required
- Computerized hand control with nearly 40,000 object database & motorized altazimuth mount
- Quick release optical tube for easy no-tool setup
- StarBright® XLT coatings for maximum light transmission and clarity
- SkyAlign™ allows you to align on any three bright objects, for a fast & easy alignment process
- StarPointer finderscope to aid in alignment and accurately locate objects
- Flash upgradeable hand control; update your telescope's operating software via the internet
- Internal battery compartment to prevent cord wrap during use
- Includes NexRemote™ telescope control software, for advanced control of your telescope via computer
- "THE SKY®" Planetarium software – with 10,000 object database, printable sky maps & enhanced images

USE THE NEXSTAR SE TO FIND THOUSANDS OF STARS, PLANETS, GALAXIES & MORE AT THE TOUCH OF A BUTTON!

Exclusive Features Of The NexStar 4SE & 5SE

- Tripod features built-in wedge which allow them to be used for astrophotography!
- Includes a camera control feature that allows you to remotely take a series of timed exposures using your digital SLR camera.

NexStar 4SE with tripod wedge in use.

Align your NexStar SE telescope in minutes with our SkyAlign technology. Just point the telescope at three bright stars and let the computer do the rest. You don't even need to know the names of the stars!

Model	Item #	Aperture	Optical Design	Focal Length	Eyepieces	Finderscope	Mount	Weight
NexStar 4SE	11049	4″ (102mm)	Maksutov-Cassegrain	1325mm f/13	25mm (53x)	StarPointer	Altazimuth	21 lbs.
NexStar 5SE	11036	5″ (125mm)	Schmidt-Cassegrain	1250mm f/10	25mm (50x)	StarPointer	Altazimuth	28 lbs.
NexStar 6SE	11068	6″ (150mm)	Schmidt-Cassegrain	1500mm f/10	25mm (60x)	StarPointer	Altazimuth	30 lbs.
NexStar 8SE	11069	8″ (203mm)	Schmidt-Cassegrain	2032mm f/10	25mm (81x)	StarPointer	Altazimuth	33 lbs.

For complete specifications and product information, visit: www.celestron.com

Cocoon Nebula • C14 • Photo by Frederic Caron

NGC 1977 • CGE 925 • Photo by Filippo Ciferri

NGC 7380 • C11 • Photo by Franco Sgueglia

Veil Nebula • Onyx 80EDF • Photo by Andre Paquette

Flame Nebula • C14 • Photo by Sebastian Voltmer

Whirlpool Galaxy • CGE 925 • Photo by Mike Dodd

AFFORDABLE AND PORTABLE

The Advanced Series family of computerized GoTo telescopes was designed to offer the novice or more advanced user a selection of models with the features and quality that serious amateurs can appreciate.

Trifid Nebula • C8 • Photo by Sebastian Voltmer

Advanced telescopes come on heavy-duty German Equatorial mounts with ultra-sturdy 2" stainless steel legs and center tray for superior rigidity and vibration dampening.

CG-5 Mount
Precision Engineered For Stability

Our new CG-5 German Equatorial mount has precision worm gears on both axes for extremely smooth operation. The key component that makes this system the most stable in its class is the heavy-duty tripod. It features larger and more substantial legs that offer excellent damping characteristics for more stable views. The CG-5 also has a convenient latitude scale for easier alignment and an optional polar finderscope for the ultimate in precision alignments.

GoTo Convenience and GPS Compatibility For Precision Accuracy

We are proud to offer the Advanced Series on a computerized GoTo CG-5 mount. Couple this solidly-built mount with the included NexStar® computerized control system to utilize many of the same functions and features as Celestron's most advanced GoTo telescopes. The Advanced Series is upgradeable to GPS with the optional CN16 GPS Accessory (#93966). This accessory allows your telescope to pinpoint your location on the Earth, the date and time, and makes the alignment process faster and easier than ever before! The Advanced Series also comes loaded with new software features and over 40,000 database objects. Capable of holding over 35 lbs of payload and slewing at 3° per second, you will be able to instantly point to any of the celestial objects in the database.

ADVANCED SERIES FEATURES:

- Computerized CG-5 German Equatorial Mount
- Ultra sturdy adjustable tripod with 2" stainless steel legs
- "The Sky" Level 1 software
- 40,000+ object database
- DC servo motors with encoders on both axes
- Hand control with double line, 16 character LCD display; red night vision backlighting
- RS-232 communication port on hand control; Auxiliary Port and Autoguider port on motor drive


Advanced C100ED-RGT


Advanced C130-MGT


Advanced C6-RGT


Advanced C8-NGT


Advanced C11-SGT

THE ADVANCED SERIES FEATURES
FOUR OPTICAL DESIGN CHOICES
ON ONE ULTRA STABLE VIEWING PLATFORM

CG-5 German Equatorial mount has precision worm gears on both axes for extremely smooth operation. Additional auxiliary ports for accessories such as the CN16 GPS kit.

Model	Item #	Aperture	Type	Focal Length	Eyepieces	Finderscope	Coatings	Weight
C80ED-RGT	21022	80mm (3.1″)	Refractor	600mm f/7.5	20mm (30x)	6x30	Fully Multi-coated	42 lbs
C100ED-RGT	21027	100mm (4″)	Refractor	900mm f/9	20mm (45x)	9x50	Fully Multi-coated	50 lbs
C130-MGT	31064	130mm (5″)	Maksutov	2000mm f/15	32mm (63x)	10x50	Multi-coated	51 lbs
C6-NGT	31054	150mm (6″)	Reflector	750mm f/5	20mm (38x)	6x30	Aluminum	54 lbs
C6-RGT	21020	150mm (6″)	Refractor	1200mm f/8	20mm (60x)	9x50	Multi-coated	68 lbs
C6-SGT (XLT)	11079-XLT	150mm (6″)	Schmidt-Cassegrain	1500mm f/10	25mm (60x)	6x30	StarBright® XLT	54 lbs
C8-NGT	31062	200mm (8″)	Reflector	1000mm f/5	20mm (50x)	9x50	Aluminum	67 lbs
C8-SGT (XLT)	11026-XLT	203mm (8″)	Schmidt-Cassegrain	2032mm f/10	25mm (81x)	6x30	StarBright® XLT	54 lbs
C91/4-SGT (XLT)	11046-XLT	235mm (9¼″)	Schmidt-Cassegrain	2350mm f/10	25mm (94x)	6x30	StarBright® XLT	74 lbs
C10-NGT	11048	254mm (10″)	Reflector	1200mm f/4.7	20mm (60x)	9x50	Aluminum	93 lbs
C11-SGT (XLT)	11067-XLT	279mm (11″)	Schmidt-Cassegrain	2800mm f/10	40mm (70x)	9x50	StarBright® XLT	91 lbs

For complete specifications and product information, visit: www.celestron.com

CPC™ GPS Series

THE TELESCOPES OF TOMORROW ARE HERE TODAY!

SkyAlign technology, advanced engineering, and a bold new design at a price that is out of this world! Celestron's CPC™ Series with revolutionary SkyAlign Alignment Technology re-defines everything that amateur astronomers are looking for — quick and simple alignment, GPS, unsurpassed optical quality, ease of set-up and use, ergonomics, enhanced computerization and, most important, affordability.

Andromeda Galaxy • C8 • Photo by Sebastian Voltmer

Internal GPS automatically downloads the date and time from orbiting satellites and pinpoints its exact location on Earth. This eliminates the need for you to manually enter the date, time, longitude and latitude.

Then use our revolutionary SkyAlign™ technology to align your telescope. Simply locate and manually point (slew) the telescope to three bright celestial objects. You do not need to know the names of the stars – you may even pick the moon or bright planets!

Celestron's NexStar® software technology will model the night sky to determine the position of every star, planet and celestial object above the horizon. Once aligned, the computerized hand control allows direct access to each of the celestial catalogs in its user-friendly database.

With the CPC Series, Celestron has "gone back to the drawing board" and re-designed, re-engineered, and re-invented a telescope family that provides superior quality, unsurpassed ease of use, and incomparable value. All CPC models ship standard with our NexRemote telescope control software and StarBright® XLT High Performance Optical Coatings.

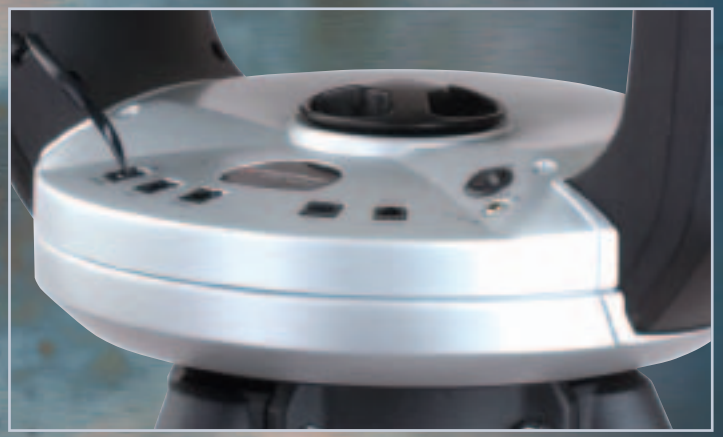
CPC GPS FEATURES:

- Re-designed drive base and drive mechanics — quiet operation; large drive gears, quick release clutch; Auxiliary ports for AutoGuider, PC; easily mounts to tripod
- SkyAlign™ Alignment Technology — simply choose three bright celestial objects, the telescope does the rest
- Convenient hand control holder — allows you to view information hands-free while using the scope
- 40,000+ object database
- Flash upgradeable hand control software and motor control units
- Easy to locate over-sized clutching knobs on both axes for manual use
- All metal quick release finderscope bracket with spring loaded pivot and easy to use x-y adjustment screws
- Ultra-wide 9.8" bearing track drive base provides smooth stable tracking at any rate
- Ergonomic design — comfortably lift and move the telescope from location to location
- Permanent Periodic Error Correction (PEC)
- NexRemote™ Included
- Heavy-duty steel leg tripod with accessory tray/center leg support bracket for rock solid stability; spring-loaded mounting screws and recessed mounting platform for quick setup

The CPC Series is ergonomically designed for easy one person transport and assembly.

THREE APERTURES AVAILABLE
8.00INCH 9.25INCH 11.00INCH

Drive base and drive mechanics feature quiet operation, large drive gears, quick release clutch, auxiliary ports for expandablility and easy attachment to tripod



Model	Item #	Aperture	Type	Focal Length	Eyepieces	Finderscope	Coating	Weight
CPC 800 (XLT)	11073-XLT	203mm (8″)	Schmidt-Cassegrain	2032mm f/10	40mm (51x)	8x50	StarBright® XLT	61 lbs
CPC 925 (XLT)	11074-XLT	235mm (9.25″)	Schmidt-Cassegrain	2350mm f/10	40mm (59x)	8x50	StarBright® XLT	77 lbs
CPC 1100 (XLT)	11075-XLT	279mm (11″)	Schmidt-Cassegrain	2800mm f/10	40mm (70x)	8x50	StarBright® XLT	84 lbs

For complete specifications and product information, visit: www.celestron.com

CGE Series

AN OBSERVATORY CLASS TELESCOPE WITH A ROCK SOLID REPUTATION.

The CGE series is Celestron's line of observatory class Schmidt-Cassegrain telescopes. Offered in 8", 9¼", 11" and 14" apertures, all are mounted on the state of the art CGE GoTo German Equatorial mount. The German Equatorial mount has long been the favored choice of astronomy buffs and astrophotographers because of its stability and portability.

The CGE Series features the precision optics of Celestron's famous Schmidt-Cassegrain design. All models come standard with our StarBright® XLT coating for improved light transmission.

CGE Mount Design Advantages

Designed For Portability Set up and transportation of the CGE telescopes is made easy by separating the CGE instruments into individual, easy-to-carry components. The CGE's optical tube can be quickly removed from its mount, making even the CGE 1400 easily assembled by one person.

Recognized For Superior Stability German Equatorial mounts place the center of gravity directly over the tripod legs making the system extremely stable and virtually eliminates all vibration. An improved Super HD Tripod supports the CGE mount. The tripod is made from the finest cold rolled carbon steel and can be raised to a height of 50". The tripod uses a dual leg support for maximum rigidity with an upper leg brace to provide an outward preload and a lower leg brace providing inward tension.

Easy To Balance Balancing the weight of camera equipment and other visual accessories is accomplished by simply sliding the counterweight for Right Ascension and moving the optical tube along its dovetail mounting for Declination. No additional weight is needed.

Clearance For Accessories CGE mounts support their tubes at a single contact point allowing the tube to move freely around its polar axis without making contact with the mount. This is useful when adding photographic and CCD instruments that extend from the rear of the telescope.

GPS Compatible All CGE mounted telescopes are compatible with Celestron's CN16 GPS accessory (Item #93967).

CGE SERIES FEATURES:

- Carbon Fiber Tube – Strong and lightweight (CGE 925 and 1400 feature aluminum optical tubes)
- Autoguide port, PC port and auxiliary ports located on the electronic pier
- Drive Motors offer smooth, quiet operation and long life
- Precision Bronze Worm Gear, which minimizes total composite error and backlash
- Bearing and Shaft – Stainless steel worm shaft has 0.4375 pitch diameter and is preloaded with two ball bearings; the single piece steel worm is made to minimize run-out, which is a source of periodic error
- No-slip clutch system for pointing precision
- Primary mirror focusing mechanism is supported by two preloaded ball bearings, minimizing the "mirror flop" typical of bushing focusing mechanisms
- GoTo system is precision accurate to 1.5 arcminutes
- 40,000+ object database with 400 user-defined objects
- Hibernate – maintains alignment even while powered down
- Polar alignment routines for northern and southern hemispheres
- Displays only objects above the horizon, also allows for user-defined limits
- Permanent programmable periodic error correction (PEC) – corrects for periodic tracking errors inherent to all worm drives
- NexRemote™ Included
- #11064-XLT is Fastar compatible to reduce astrophotography exposure time

THE CGE MOUNT PROVIDES A ROCK SOLID BASE FOR THE SCHMIDT-CASSEGRAIN OPTICAL DESIGN.

Mars Rotation • C14 • Photos by Sebastian Voltmer

The CGE Mount features CNC machined components and expandablility with the Autoguide port, PC port and auxiliary ports located on the electronic pier.

Model	Item #	Aperture	Type	Focal Length	Eyepieces	Finderscope	Coating	Weight
CGE 800 (XLT)	11058-XLT	200mm (8″)	Schmidt-Cassegrain	2032mm f/10	25mm (81x)	6x30	StarBright® XLT	113 lbs
CGE 925 (XLT)	11059-XLT	235mm (9¼″)	Schmidt-Cassegrain	2350mm f/10	25mm (94x)	6x30	StarBright® XLT	134 lbs
CGE 1100 (XLT)	11061-XLT	279mm (11″)	Schmidt-Cassegrain	2800mm f/10	40mm (70x)	9x50	StarBright® XLT	142 lbs
CGE 1400 (XLT)	11063-XLT	355mm (14″)	Schmidt-Cassegrain	3910mm f/11	40mm (90x)	9x50	StarBright® XLT	184 lbs
CGE 1400 Fastar	11064-XLT	355mm (14″)	Schmidt-Cassegrain	3910mm f/11	40mm (90x)	9x50	StarBright® XLT	184 lbs

For complete specifications and product information, visit: www.celestron.com

StarHopper® Series

StarHopper 10

10" & 12" StarHoppers have cooling fans built-in to the rear cell to decrease cooling times.

Moon with Saturn • C8 • Photo by Sebastian Voltmer

LARGE APERTURE LOW PRICE

Celestron's StarHopper® series of Dobsonian telescopes are available in 6", 8", 10" and 12" apertures. Dobsonian telescopes are recognized by amateur astronomers as an excellent value for the aperture size, and our StarHopper line is as rich in features as it is in value.

This optical system is characterized by a large primary mirror at the bottom of the tube which collects light and concentrates it onto a small secondary mirror. The light is then reflected out the side of the tube and into the eyepiece. Best of all, StarHopper Dobsonians are easy to observe with. The user navigates through the night sky by simply moving the tube up or down, or side to side, by hand.

Celestron StarHoppers use optical quality BK-7 glass. The same high-quality glass used in most binocular prisms and refractor telescope lenses. All StarHoppers use a roller track bearing on the azimuth surface providing dozens of support points for smooth swivel motion. They also use a variable tension clutch system for proper balance and control in both altitude and azimuth. The 10" & 12" StarHoppers have cooling fans built into the rear cell to decrease cooling times.

STARHOPPER FEATURES:

- Adjustable roller track bearing on the azimuth surface provides a smooth motion
- Variable tension clutch system for proper balance and control in both altitude and azimuth
- Optical quality BK7 annealed glass provides better thermal expansion properties than standard plate glass mirrors
- Built-in cooling fan improves mirror cooling time and reduces damaging tube currents (for StarHopper 10" and 12" models)
- 9-point flotation mirror cell gives equal support of the primary mirror to minimize mirror deflection (for StarHopper 12" model)
- Quick release finder bracket with spring loaded pivot and x-y adjustments
- Carrying handle and eyepiece holder for convenience

Model	Item #	Primary Mirror	Type	Focal Length	Eyepieces	Finderscope	Focuser
StarHopper 6	10600	6″	Dobsonian	48″	25mm-1.25″	6x30	1¼″
StarHopper 8	10800	8″	Dobsonian	48″	25mm-1.25″	9x50	2″ with 1¼″ adapter
StarHopper 10	10110	10″	Dobsonian	50″	32mm E-Lux® 2″	9x50	2″ with 1¼″ adapter
StarHopper 12	10112	12″	Dobsonian	60″	32mm E-Lux® 2″	9x50	2″ with 1¼″ adapter

For complete specifications visit: www.celestron.com

Introducing Celestron's Onyx 80EDF Premium Refractor. With Fluoro-ED glass and Celestron's StarBright® XLT Coatings, the choice couldn't be more clear.

- Premium 80mm refractor with StarBright® XLT high transmission coatings
- Made from Fluoro-ED glass to deliver razor-sharp images
- Celestron combines a Fluorite based, low dispersion glass with high density crown glass for virtually color-free images across the visible spectrum
- 2" Crayford style focuser minimizes image shift
- Rotatable focuser for easy framing of objects for photography
- Extendable lens shade reduces glare and protects lens from moisture
- Built-in sighting scope to help accurately locate objects
- Integrated dovetail compatible with Celestron Computerized "GoTo" Advanced CG-5 Mount (#91518)
- Aluminum case for convenient storage and protection

Onyx 80EDF
Shown With Optional XLT Diagonal

Model	Item #	Aperture	Focal Length	COATING	LENGTH	WEIGHT
Onyx 80EDF	52285	80mm	500mm	StarBright® XLT	16 in.	6.1 lb.

Celestron Optical Tube Assemblies

Celestron Schmidt-Cassegrain Optical Tube Assemblies (OTA) are available individually for use with your favorite mount. Each OTA is made to the same exacting standards as those used on all our high quality telescopes. All optical surfaces are coated with Celestron's high efficiency StarBright® multi-layered coating group. These tube assemblies are equipped with the same dovetail mounting bar used on the CGE and Advanced Series for easy attachment to a variety of popular mounts. Every tube assembly is quality control tested at our manufacturing facility in Torrance, California.

OTA FEATURES:

- Carbon fiber or aluminum tube available on 8" through 11" tubes
- 14" models available only in aluminum
- Optional StarBright® XLT coating is available on all models
- Item #s 91023 and 91038 are FASTAR compatible

Model	Item #	Aperture	Type	Focal Length	Eyepieces	Finderscope	Dovetail	Coatings	Weight
C8-A (XLT)	91024-XLT	200mm (8")	Aluminum	2032mm f/10	25mm (81x)	6x30	CGE	StarBright® XLT	12 lbs
C8-A (XLT)	91020-XLT	200mm (8")	Aluminum	2032mm f/10	25mm (81x)	6x30	CG-5	StarBright® XLT	12 lbs
C8-CF (XLT)	91023-XLT	200mm (8")	Carbon Fiber	2032mm f/10	25mm (81x)	6x30	CGE	StarBright® XLT	12 lbs
C91/4-A (XLT)	91027-XLT	235mm (9.25")	Aluminum	2350mm f/10	25mm (94x)	6x30	CGE	StarBright® XLT	20 lbs
C91/4-A (XLT)	91025-XLT	235mm (9.25")	Aluminum	2350mm f/10	25mm (94x)	6x30	CG-5	StarBright® XLT	20 lbs
C91/4-CF (XLT)	91026-XLT	235mm (9.25")	Carbon Fiber	2350mm f/10	25mm (94x)	6x30	CGE	StarBright® XLT	20 lbs
C11-A (XLT)	91036-XLT	279mm (11")	Aluminum	2800mm f/10	40mm (70x)	9x50	CGE	StarBright® XLT	27 lbs
C11-CF (XLT)	91035-XLT	279mm (11")	Carbon Fiber	2800mm f/10	40mm (70x)	9x50	CGE	StarBright® XLT	27 lbs
C11-A (XLT)	91067-XLT	279mm (11")	Aluminum	2800mm f/10	40mm (70x)	9x50	CG-5	StarBright® XLT	27 lbs
C14-A (XLT)	91037-XLT	355mm (14")	Aluminum	3910mm f/11	40mm (98x)	9x50	CGE	StarBright® XLT	45 lbs
C14-A (XLT)	91038-XLT	355mm (14")	Aluminum	3910mm f/11	40mm (98x)	9x50	CGE	StarBright® XLT	45 lbs

For complete specifications and product information, visit: www.celestron.com

CG-5 COMPUTERIZED MOUNT FEATURES

The CG-5 Computerized German Equatorial mount has precision worm gears on both axes for extremely smooth operation. The key element that makes this system the most stable in its class is the heavy-duty tripod with larger and more substantial legs that offer excellent damping characteristics for more stable views.

CG-5 Computerized — GoTo convenience and GPS compatibility for precision accuracy

Couple this solid mount with the included computerized control system to utilize many of the same functions and features — like the NexStar computer control system and an Autoguider port for long exposure deep sky astrophotography — as Celestron's most advanced GoTo telescopes. GoTo models are also upgradeable to GPS with the optional CN16 GPS Accessory (#93966) allowing your telescope to pinpoint your position on the earth, the date and time, making the alignment process faster and easier than ever before!

CGE MOUNT FEATURES

Recognized For Superior Stability An improved Super HD Tripod supports the CGE mount. This fully extendable tripod is made from the finest cold rolled carbon steel and can be raised to a height of 50". The tripod uses a dual leg support for maximum rigidity with an upper leg brace to provide an outward preload and a lower leg brace providing inward tension.

CGE Equatorial Mounts Can Easily be Balanced on Both Axes Balancing the weight of camera equipment and other visual accessories is accomplished by simply sliding the counterweight for Right Ascension and moving the optical tube along its dovetail mounting for Declination. This means that no additional weight needs to be added to balance the telescope when additional accessories are added.

Clearance For Accessories CGE mounts support their tubes at a single contact point allowing the tube to move freely around its polar axis without making contact with the telescope's mount. This is particularly useful when adding photographic and CCD instruments that extend from the rear of the telescopes.

GPS Compatible All CGE mounts are compatible with Celestron's CN16 GPS accessory (Item #93967). Combine the GPS and built-in Hibernate mode and these mounts will keep track and remember their exact location and time without the need to re-enter the information into the computerized hand control.

Model	Item #	Description	Weight
CG-5 Computerized Mount	91518	With dual-axis slew motors and computerized hand control w/ 40,000+ object database	42 lbs
CGE Computerized Mount	91524	German Equatorial Mount and Tripod. Includes one 25lb. weight	114 lbs


Photo by Richard Hedrick

VISIT US AT
www.celestron.com
FOR MORE INFORMATION ON ALL CELESTRON ACCESSORIES.

PowerTank™ 17

- 17 amp hour, 12V D.C.
- 2 x 12V DC output car jack socket
- DC 3, 6, 9V output jacks
- Built-in AM/FM radio and siren with removable red filtered flashlight
- Multi-angle 800,000cp halogen spotlight
- Jump-start system - 250 cranking AMPS (5 sec.)
- Switchable 110v-220v AC adapter

Item # **18777**

PowerTank 7

- 7 amp hour, 12V D.C.
- 2 x 12V DC output car jack socket
- DC 3, 6, 9V output jacks
- Built-in flashlight with red filter cap

Item # **18774**

CN16 GPS Kit

- Improves the accuracy of your initial star alignments
- The CN16 will link up and automatically download the exact time, date longitude and latitude from one of many global positioning satellites.
- Kit contains the CN16 GPS Accessory and appropriate mount hardware for each application

Item #	Description
93963	For use with NexStar® 5i and 8i telescopes
93966	For use with Advanced GT computerized mount
93967	For use with CGE series mount

Focus Motor

- Focus Motor w/ separate hand control for all 8" & 11" SCT Optical Tubes

Item # **94142**

NexImage™ Solar System Imager

- Complete CCD solar system imager
- View and capture live video with your computer
- Software automatically filters out poor video frames, leaving the sharpest frames to be stacked and aligned into one quality image
- Easy to follow quick start guide and tutorial
- Camera control software allows you to adjust the gain, contrast, exposure time, frame rate and color saturation manually on your PC
- Compatibility – 1.25" adapter barrel makes NexImage compatible with most any telescope
- Versatility – 1.25" adapter is threaded for standard eyepiece filters and can be removed and replaced with optional focal reducer lens

Item # **93712**

NexImage™ Reducer Lens

- Increase your field of view by over two times for wide field lunar and filtered solar imaging
- Replaces the 1.25" barrel and threads directly into the NexImage housing

Item # **94178**

Radial Guider

- For use in prime focus, deep-sky imaging or astrophotography with Schmidt-Cassegrain telescopes
- Simultaneously photograph and guide through the optical tube assembly of your telescope
- Guiding eyepiece, camera T-Ring and drive corrector (dual axis preferred) required

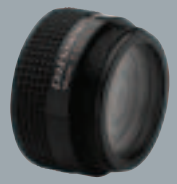
Item # **94176**

Heavy Duty Wedge

- For All CPC Series (and Nexstar GPS or Ultima 2000) telescopes, this heavy-duty wedge is available for the astrophotographer
- Increases the rigidity of the telescope while giving a 0° to 90° range of operation
- An upgrade kit with a deluxe latitude adjuster and azimuth controls for easy polar alignment is available (#93662)

Item # **93655**

Focal Reducer/ Field Corrector Lens F6.3



- For Celestron 5", 8", 9.25", 11" and 14" Schmidt-Cassegrain telescopes
- Possible to have a dual focal ratio instrument, without sacrificing image quality
- Wide fields of view, reduces astrophotography exposure time by a factor of 3

Item # **94175**

12.5mm Micro Guide Eyepiece – 1.25″

- Multi-function guiding eyepiece features a laser-etched reticle with a built-in battery illuminator
- Multi-coated 12.5mm Abbe (4-element) Orthoscopic
- Use for direct guiding on stars outside the center of the field of view; greatly improved off-axis guiding to capture much fainter, sharply focused guide stars without reducing limiting magnitude; and measuring position angles and separation of double stars
- Includes: eyepiece, built-in cordless illuminator with brightness control, batteries and instructions

Item # **94171**

Digital Camera Adapter

- Allows you to attach a digital camera to most telescopes and spotting scopes
- Compatible with 1.25" or even 2" eyepieces.
- Dual axis fine adjustments

Item # **93626**

VSP (Vibration Suppression Pads)

- Set of three Vibration Suppression Pads will reduce vibration time by almost 100% and decrease vibration amplitude
- Place between the bottom of the tripod legs and the ground, a simple and functional solution to the problem of image disturbance

Item # **93503**

Celestron Sky Maps

- The ideal teaching guide for learning the night sky
- More than a thousand stars and deep-sky objects are listed and charted

Item # **93722**

Omni™ Series Eyepieces

- 4-element premium symmetrical Plössl optical design
- Blackened lens edges to minimize internal reflection and maximize contrast
- Multi-layer coating group on each lens
- Two-step anodizing process to prevent reflection from the top eyepiece barrel
- Threaded barrels accept 1¼" thread-in filters

Item #	Description
93316	1¼" – 4mm; angular FOV 52°
93317	1¼" – 6mm; angular FOV 52°
93318	1¼" – 9mm; angular FOV 52°
93319	1¼" – 12mm; angular FOV 52°
93320	1¼" – 15mm; angular FOV 52°
93321	1¼" – 20mm; angular FOV 52°
93322	1¼" – 25mm; angular FOV 52°
93323	1¼" – 32mm; angular FOV 52°
93325	1¼" – 40mm; angular FOV 43°
93326	2x Barlow Lens

X-Cel™ Series Eyepieces

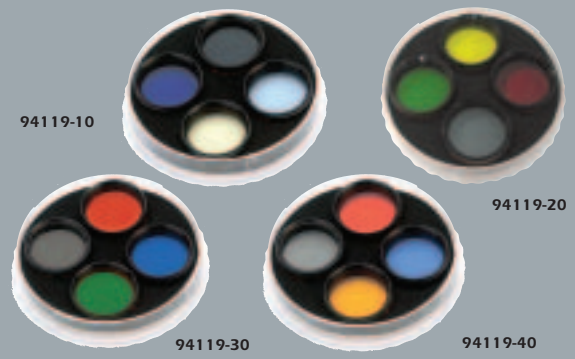
- Great for planetary viewing
- 6-element fully multi-coated optical design with extra low dispersion (ED) glass on its most highly curved surfaces
- Wide 55° apparent field of view, and a large 25mm clear aperture
- Comes with soft rubber eyecups
- 20mm eye relief
- Threaded barrels accept 1¼" thread-in filters

Item #	Description
93386	1¼" – 2.3mm; angular FOV 55°
93387	1¼" – 5mm; angular FOV 55°
93388	1¼" – 8mm; angular FOV 55°
93389	1¼" – 10mm; angular FOV 55°
93390	1¼" – 12.5mm; angular FOV 55°
93391	1¼" – 18mm; angular FOV 55°
93392	1¼" – 21mm; angular FOV 55°
93393	1¼" – 25mm
93327	2x Barlow Lens

Ultima®-LX Series Eyepieces

- Extendable twist-up cups
- Every Ultima eyepiece is parfocal with each other, meaning little or no focusing is needed when changing from low to high power
- Threaded barrels accept 1-1/4" Celestron thread-in filters
- Shock resistant rubber covering
- No slip grip designed for secure handling even in moist conditions
- Ergonomic contours prevent eyepiece from rolling off flat surfaces

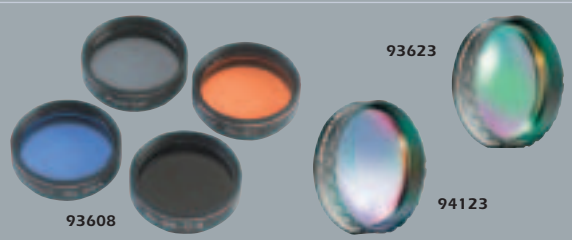
Item #	Description
93366	1¼"-2" – 5mm; angular FOV 70°
93367	1¼"-2" – 8mm; angular FOV 70°
93368	1¼"-2" – 13mm; angular FOV 70°
93369	1¼"-2" – 17mm; angular FOV 70°
93375	2" – 22mm; angular FOV 70°
93376	2" – 32mm; angular FOV 70°



1.25" Eyepiece Filter Sets

- Cells of each filter are double-threaded, so they can be stacked (piggybacked) in various combinations
- An invaluable aid in lunar and planetary observing
- Reduce glare and light scattering, increase contrast through selective filtration, increase definition and resolution, reduce irradiation and lessen eye fatigue
- Anti-reflection coating prevents glaring and ghosting
- Threaded to fit Celestron's, and most other manufacturer's, 1.25" eyepieces, and offer a full 26mm clear aperture

Item #	Description
94119-10	Kit includes: #21, #80A, #15 and polarizing filters
94119-20	Kit includes: #12, #25, #56, ND-25 filters
94119-30	Kit includes: #23A, #38A, #58, ND-50 filters
94119-40	Kit includes: #8, #47, #82A, ND-13 filters



Eyepiece Filters

- An invaluable aid in lunar, planetary and deep sky observing
- Reduce glare and light scattering, increase contrast through selective filtration, increase definition and resolution, reduce irradiation and lessen eye fatigue
- OIII narrowband filter (#93623) isolates just the two doubly-ionized oxygen lines emitted by planetary and emission nebulae, while blocking the rest of the overall spectrum of light
- Light Pollution Reduction (LPR) Filters (#94123) are designed to selectively reduce the transmission of certain wavelengths of light, specifically those produced by artificial light
- Filters are double-threaded, so they can be stacked

Item #	Description
93608	Polarizing Filter Set
93623	OIII Filter 1¼"
93624	OIII Filter 2"
94121	V Refractor Filter 1¼"
94123	UCH/LPR Filter 1¼"
94124	UCH/LPR Filter 2"
94125	UV/IR Cutoff Filter 1¼"
94119-A	Moon Filter 1¼"

2" Eyepiece and Filter Kit

- Three E-Lux 2" Eyepieces; 3-element fully multi-coated in 26, 32 and 40mm focal lengths
- 2" Barlow Lens – 2x; fully multi-coated.
- Five colored eyepiece (Lunar & Planetary) filters
- 2" mirror diagonal – fits Schmidt-Cassegrain telescopes and includes an adapter to use with refractor telescopes
- Aluminum carrying case – die-cut foam interior

Item # 94305

1.25" Eyepiece and Filter Kit

- Five Superior Grade Plössl Eyepieces – 4-element design in 4mm,6mm, 9mm, 15mm, and 32mm sizes.
- Barlow Lens - 2x; fully multi-coated
- Six Colored Eyepiece (Lunar & Planetary) Filters
- Moon Filter
- Aluminum Carrying Case with die-cut foam interior and has room for additional accessories.

Item # 94303

2" XLT Diagonal

- 2" Diagonal for Schmidt-Cassegrain or refractor telescopes
- Celestron's high performance XLT coating for maximum reflectivity >96%
- Interferometer tested 1/10th wave flat mirror
- All machined housings for accurate optical alignment
- Aluminum case for storage and protections

Item #	Description
93526	2" XLT diagonal for refractor
93527	2" XLT diagonal for Schmidt-Cassegrain

Stereo Binocular Viewer

- Allows you to adapt two eyepieces to your telescope and view with both eyes simultaneously
- Eliminates eye fatigue and provides a 3-D effect while viewing certain celestial objects
- Fully Multi-Coated BAK-4 prisms
- Foam lined aluminum storage case
- Eyepiece diopter scales for sharp focus

Item # 93691

The Mount and Tripod

To a large extent, a telescope is only as good as its tripod and mount. A telescope magnifies everything, including vibration. That's why many telescopes with good optics are rendered useless when supplied on an inexpensively made mount. Since you'll be using a mount's controls to track the slow and steady apparent movement of the stars, a suitable mount's adjustments should be smooth, yet precise.

Altazimuth vs. Equatorial

There are two basic types of mounts: Altazimuth (Alt-Azimuth) and Equatorial. Altazimuth mounts are the simplest type of mount with two motions: altitude (up and down/vertical) and azimuth (side-to-side/horizontal). Good Altazimuth mounts will have slow motion cable controls to make precise adjustments, which aid in keeping tracking motion smooth.

These type of mounts are good for terrestrial observing and for scanning the sky at lower power but are not advised for deep sky photography.

Both Altazimuth and Equatorial mounts can track the stars sufficiently for visual use, however, only equatorials can be used for long exposure astrophotography. Since Altazimuth mounts are not aligned with the Earth's axis, they must use both axes to track an object. With Altazimuth mounts you will be able to accurately track an object centered in the field of view, however over time all the other stars in the field will appear to rotate around the center of the field. This is hardly noticeable in an eyepiece, but is obvious on film.

Altazimuth Advantages

- Easy to set-up and use
- Least expensive type of mount
- Ideal for terrestrial observing

Altazimuth Disadvantages

- Cannot be used for long exposure photography
- Non-computerized models cannot track stars and planets

On an Equatorial mounting, the two axes are perpendicular to each other as they are on an Altazimuth mount. But on an Equatorial mounting, the left-to-right axis has been tilted so that it is parallel to the Earth's axis instead of at the horizon. On an Equatorial mount, only the axis that is parallel to the Earth's axis, needs to be rotated. On an Altazimuth mount, BOTH axes must be moved.

If you would like to do long exposure photography, the telescope must be mounted on an equatorial mount. Some Celestron telescopes that are on Altazimuth mountings can be tilted up (with the use of an equatorial wedge) to orient the azimuth axis parallel to the Earth's axis.

Equatorial Advantages

- Best for long exposure photography
- Easy to use visually because only one axis movement compensates for Earth's rotation
- Setting circles on non-computerized models help locate astronomical objects

Equatorial Disadvantages

- Set-up is more extensive because of polar alignment requirements
- Not suitable for terrestrial use

Do you want a GoTo computerized telescope?

Many of Celestron's telescopes are computerized "GoTo" telescopes. GoTo capability is very useful for the novice who needs assistance in finding objects in the night sky. Since there is a large database of celestial objects, it is unnecessary to refer to star charts to identify objects. Once the telescope is properly aligned and an object is selected, the telescope will automatically "go to" the object. GoTo equipped Celestron telescopes include both altazimuth and equatorial models. Even without GoTo, many Celestron equatorial scopes have manual setting circles that allow you to find objects in the sky with the help of a good star map.

There are a number of factors to consider when selecting a particular telescope. These factors will usually depend on your individual requirements including cost, portability, versatility, usability and appearance. You should also consider how you plan to use the instrument both now and in the future. Most important, consider your budget and portability requirements, and select a telescope with the largest aperture possible.

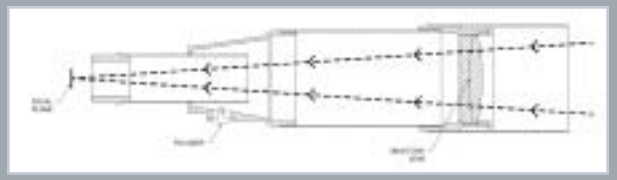
Types of Telescopes

REFRACTOR TELESCOPE

A refractor telescope uses a lens as the primary. The lens at the front of the telescope bends the light passing through it until it comes to a single point called the "focal plane".

The long, thin tubes of refractor telescopes look much the same as those Galileo used centuries ago. High quality optical glass and multi-coatings provide today's sky watchers views Galileo never dreamed of. The refractor type of telescope is very popular with individuals who want mechanical simplicity, rugged reliability and ease of use. Because the focal length is limited by the length of the tube, refractor telescopes become quite bulky and expensive beyond a four inch aperture. This limits the light gathering properties of refractor telescopes, but it is an excellent choice for beginners and those who prefer simple operation and versatility. Refractor telescopes are also a popular choice because of their unobstructed view, high contrast and good definition.

Refractor Advantages



- Easy to set-up and use
- Simple and reliable design
- Little or no maintenance
- Excellent for lunar, planetary and binary star observing especially in larger apertures
- Good for terrestrial viewing
- High contrast images with no secondary mirror or diagonal obstruction
- Color correction is good in achromatic designs and excellent in apochromatic and fluorite designs
- Sealed optical tube reduces image-degrading air currents and protects optics
- Objective lens is permanently mounted and aligned

Refractor Disadvantages

- More expensive per inch of aperture than Newtonians or Catadioptrics
- Heavier, longer and bulkier than equivalent aperture Newtonians and Catadioptrics
- The cost and size factors limit the practical maximum size primary to smaller apertures
- Some color aberration in achromatic designs (doublet)

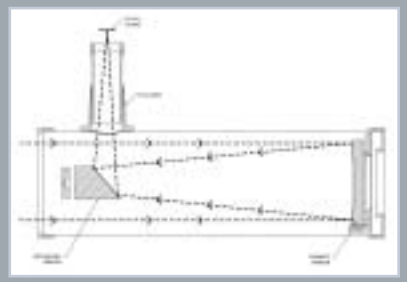
NEWTONIAN REFLECTOR TELESCOPE

A Newtonian reflector uses a single concave mirror as its primary. Light enters the tube traveling to the mirror at the back end. Light is then "bent" forward in the tube to a single point, its focal plane. A flat mirror called a "diagonal" intercepts the light and points it out the side of the tube at right angles to the tube through the eyepiece. The eyepiece is placed there for easy viewing.

Newtonian Reflector telescopes replace heavy lenses with mirrors to collect and focus the light, providing much more light gathering power for the money. You can have focal lengths up to 1000mm and still enjoy a telescope that is relatively compact and portable. Newtonian Reflector telescopes do require more care and maintenance because the primary mirror is exposed to air and dust. However, this small drawback does not hamper this type of telescope's popularity with those who want an economical telescope that can still resolve faint, distant objects.

Newtonian reflectors produce a "right-side-up image" but the image will appear rotated based on the location of the eyepiece holder in relation to the ground. Newtonian reflectors are best for astronomical use where right-side-up does not matter.

Newtonian Advantages



- Lowest cost per inch of aperture compared to Refractors and Catadioptrics since mirrors can be produced at less cost than lenses in medium to large apertures
- Reasonably compact and portable up to focal lengths of 1000mm
- Excellent for faint deep sky objects such as remote galaxies, nebulae and star clusters due to the generally fast focal ratios (f/4 to f/8)
- Adequate for lunar and planetary work
- Good for deep sky astrophotography (but not as convenient and more difficult to use than Catadioptrics)
- Free of color aberration due to the use of a primary mirror

Newtonian Disadvantages

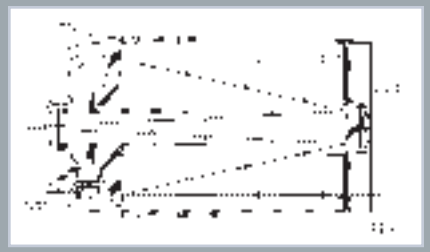
- Generally not suited for terrestrial applications
- Slight light loss due to secondary (diagonal) obstruction when compared with Refractors

CATADIOPTRIC TELESCOPE

Catadioptrics use a combination of mirrors and lenses to "fold" (reflect) the light path and form an image. There are two popular designs: the Schmidt-Cassegrain and the Maksutov-Cassegrain. In a Schmidt-Cassegrain, the light enters through a thin aspheric Schmidt correcting lens. It then strikes the spherical primary mirror. It is reflected back up the tube and intercepted by a small secondary mirror which reflects the light out an opening in the rear of the instrument where the image is formed at the eyepiece. Catadioptrics are the most popular and most modern type of telescope optical design and are marketed throughout the world in 3.5" and larger apertures.

Catadioptric telescopes combine the practical advantages of lenses and mirrors while eliminating their disadvantages. They offer the clarity and contrast of refractors with the low aberration of reflectors. Catadioptrics have an average focal ratio of f/10 which is wide enough for all types of photography. They are also easier to maintain because all optical elements are solidly mounted and rigidly collimated. Catadioptric telescopes provide the best possible combination of light gathering power, long focal length, portability and affordability.

Schmidt-Cassegrain Advantages

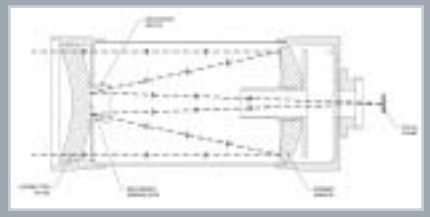


- Best all-purpose telescope design
- Combines the optical advantages of both lenses and mirrors while eliminating their disadvantages
- Excellent optics and razor sharp images over a wide field
- Excellent for deep sky observing and astrophotography
- Very good for lunar, planetary and binary star observing
- Excellent for terrestrial viewing and photography
- Focal ratio generally around f/10
- Closed tube design reduces image-degrading air currents
- Extremely compact and portable
- Easy to use
- Durable and virtually maintenance free
- Large apertures at reasonable cost and less expensive than equivalent aperture refractors
- Most versatile type of telescope
- More accessories available than with other types of telescopes
- Best near focus capability of any type of telescope

Schmidt-Cassegrain Disadvantages

- More expensive than Newtonians of equal aperture
- Slight light loss due to secondary mirror obstruction compared to refractors

MAKSUTOV–CASSEGRAIN TELESCOPE



The Maksutov-Cassegrain is similar to the Schmidt-Cassegrain with essentially the same advantages and disadvantages. It uses a thick meniscus correcting lens with a strong curvature and a secondary mirror that is usually an aluminized spot on the corrector. The Maksutov secondary mirror is typically smaller than the Schmidt's which gives it slightly better resolution for planetary observing.

Advantages of Maksutov-Cassegrain Compared to Schmidt-Cassegrain

- Smaller secondary obstruction results in a slight increase in planetary detail and contrast
- Less expensive to manufacture
- Longer focal lengths resulting in higher magnifications for planetary viewing

Disadvantages of Maksutov-Cassegrain Compared to Schmidt-Cassegrain

- Slightly heavier because of the thick meniscus correcting lens
- Increased time to reach thermal stability in larger apertures over 90mm
- Longer focal lengths resulting in smaller field of views

AstroMaster Item #	21061	21062	31035	21063	21064	31042	31043	31045
Model Name	AstroMaster 70AZ	AstroMaster 70EQ	AstroMaster 76EQ	AstroMaster 90AZ	AstroMaster 90EQ	AstroMaster 114EQ	AstroMaster 114AZ	AstroMaster 130EQ
Optical Design	70mm (2.8") refractor	70mm (2.8") refractor	76mm (3") reflector	90mm (3.5") refractor	90mm (3.5") refractor	114mm (4.5") reflector	114mm (4.5") reflector	130mm (5") reflector
Focal Length / Ratio	900mm / f/13	900mm / f/13	700mm / f/9	1000mm / f/11	1000mm / f/11	1000mm / f/9	1000mm / f/9	650mm / f/5
Finderscope	Built-on StarPointer	Built-on StarPointer	Built-on StarPointer	Built-on StarPointer	Built-on StarPointer	Built-on StarPointer	Built-on StarPointer	Built-on StarPointer
Tube Attachment	Dovetail Bar	Dovetail Bar	Dovetail Bar	Dovetail Bar	Dovetail Bar	Tube Rings w/dovetail	Dovetail Bar	Tube Rings w/dovetail
Mount	Altazimuth	CG-2 Equatorial	CG-2 Equatorial	Altazimuth	CG-3 Equatorial	CG-2 Equatorial	Altazimuth	CG-3 Equatorial
Eyepiece	20mm (45x)	20mm (45x)	20mm - Erect Image	20mm (50x)	20mm (50x)	20mm - Erect Image	20mm - Erect Image	20mm - Erect Image
Eyepiece	10mm (90x)	10mm (90x)	10mm (70x)	10mm (100x)	10mm (100x)	10mm (100x)	10mm (100x)	10mm (65x)
Star Diagonal Erect Image Eyepiece	1.25" diagonal	1.25" diagonal	n/a	1.25" diagonal	1.25" diagonal	n/a	n/a	n/a
Tripod	1.25" steel tube legs	1.25" steel tube legs	1.25" steel tube legs	1.25" steel tube legs	1.25" steel tube legs	1.25" steel tube legs	1.25" steel tube legs	1.25" steel tube legs
CD ROM	The Sky L1	The Sky L1	The Sky L1	The Sky L1	The Sky L1	The Sky L1	The Sky L1	The Sky L1
Highest Useful Magnification	165x	165x	180x	213x	213x	269x	269x	306x
Limiting Stellar Magnitude	11.7	11.7	11.9	12.3	12.3	12.8	12.8	13.1
Resolution: Rayleigh	1.98 arc seconds	1.98 arc seconds	1.82 arc seconds	1.54 arc seconds	1.54 arc seconds	1.21 arc seconds	1.21 arc seconds	1.06 arc seconds
Dawes Limit	1.66 arc seconds	1.66 arc seconds	1.53 arc seconds	1.29 arc seconds	1.29 arc seconds	1.02 arc seconds	1.02 arc seconds	.89 arc seconds
Light Gathering Power	100x unaided eye	100x unaided eye	118x unaided eye	165x unaided eye	165x unaided eye	265x unaided eye	265x unaided eye	345x unaided eye
Field of View: standard eyepiece	1.1º	1.1º	1.4º	1º	1º	1º	1º	1.5º
Linear FOV (@1000 yds)	58 ft	59 ft	75 ft.	53 ft.	53 ft.	53 ft.	53 ft.	79 ft.
Secondary Mirror Obstruction Dia, Area	n/a	n/a	25%, 6%	n/a	n/a	31%, 10%	31%, 10%	31%, 10%
Optical Coatings	Fully-Coated	Fully-Coated	Aluminum	Multi-Coated	Multi-Coated	Aluminum	Aluminum	Aluminum
Optical Tube Length	36 Inches	36 Inches	26 Inches	36 Inches	36 Inches	20 Inches	20 Inches	24 Inches
Telescope Weight	18 lbs	18 lbs	16 lbs	20 lbs	23 lbs	17 lbs	17 lbs	24 lbs

Specifications are subject to change without notice or obligation.

Omni XLT Item #	21088	21090	31057	11084
Model Name	Omni XLT 102	Omni XLT 120	Omni XLT 150	Omni XLT 127
Optical Design	Refractor	Refractor	Newtonian Reflector	Schmidt-Cassegrain
Optical Features	Non-Spherical Aberration	Non-Spherical Aberration	Non-Spherical Aberration	Non-Spherical Aberration
Aperture	102mm (4")	120mm (4.7")	150mm (6")	127mm (5")
Focal Length	1000mm	1000mm	750mm	1250mm
Focal Ratio	f/10	f/8.3	f/5	f/10
Optical Coatings	StarBright XLT	StarBright XLT	StarBright XLT	StarBright XLT
Optical Tube Color	Dark Blue Metallic	Dark Blue Metallic	Dark Blue Metallic	Dark Blue Metallic
Focuser	2" w/ 1-1/4" Adapter	2" w/ 1-1/4" Adapter	1-1/4"	Standard SCT
Finderscope	6x30	6x30	6x30	6x30
Star Diagonal - 1-1/4"	yes	yes	n/a	yes
Eyepiece	25mm LET w/multi-coating	25mm LET w/multi-coating	25mm LET w/multi-coating	25mm LET w/multi-coating
CD-ROM	The Sky L1	The Sky L1	The Sky L1	The Sky L1
Mount Type	CG-4 German Equatorial	CG-4 German Equatorial	CG-4 German Equatorial	CG-4 German Equatorial
Tripod w/bubble level	1.75" Stainless Steel Legs	1.75" Stainless Steel Legs	1.75" Stainless Steel Legs	1.75" Stainless Steel Legs
Counterweights	3.2kg & 1.8kg	3.2kg & 1.8kg	3.2kg & 1.8kg	3.2kg & 1.8kg
Highest Useful Magnification	241x	284x	300x	354x
Lowest Useful Magnification	15x	17x	18x	21x
Limiting Stellar Magnitude	12.5	12.9	13	13.4
Resolution: Rayleigh	1.36 arc seconds	1.15 arc seconds	1.09 arc seconds	.92 arc seconds
Dawes Limit	1.14 arc seconds	.97 arc seconds	.91 arc seconds	.77 arc seconds
Light Gathering Power	212x unaided eye	294x unaided eye	329x unaided eye	459x unaided eye
Field of View: standard eyepiece	1º	1.25º	1.0º	1.7º
Linear FOV (@1000 yds)	52.5 ft	66 ft	53 ft.	88 ft.
Secondary Mirror Obstruction	n/a	n/a	1.75"	1.75"
by Area	n/a	n/a	12%	8.5%
by Diameter	n/a	n/a	35%	29%
Optical tube length	40 inches	n/a	21 inches	27 inches
Telescope Weight	36 lbs	n/a	18 lbs	35 lbs

Specifications are subject to change without notice or obligation.

NexStar SLT Item #	22076	22086	22096	31143	31145
Model Name	NexStar 60 SLT	NexStar 80 SLT	NexStar 102 SLT	NexStar 114 SLT	NexStar 130 SLT
Optical Design	Refractor	Refractor	Refractor	Reflector	Reflector
Aperture (mm)	60mm (2.4')	80mm (3.1")	102mm (4")	114mm (4.5")	130mm (5")
Focal Length / Focal Ratio	700mm / f/12	900mm / f/11	660mm / f/6.5	1000mm / f/9	650mm / f/5
Finderscope	StarPointer	StarPointer	StarPointer	StarPointer	StarPointer
Mount	Motorized Altazimuth	Motorized Altazimuth	Motorized Altazimuth	Motorized Altazimuth	Motorized Altazimuth
Eyepieces	25mm (28x), 9mm (78x)	25mm (36x), 9mm (100x)	25mm (26x), 9mm (73x)	25mm (40x), 9mm (111x)	25mm (26x), 9mm (72x)
Star Diagonal	1.25"	1.25"	1.25"	n/a	n/a
Accessory Tray	No Tool, Quick release	No Tool, Quick release	No Tool, Quick release	No Tool, Quick release	No Tool, Quick release
Tripod	Pre-assembled Steel	Pre-assembled Steel	Pre-assembled Steel	Pre-assembled Steel	Pre-assembled Steel
CD ROM	The Sky L1 & NSOL	The Sky L1 & NSOL	The Sky L1 & NSOL	The Sky L1 & NSOL	The Sky L1 & NSOL
Telescope Control System	NexStar Computer Control System	NexStar Computer Control System	NexStar Computer Control System	NexStar Computer Control System	NexStar Computer Control System
Database	4,000 Object Database	4,000 Object Database	4,000 Object Database	4,000 Object Database	4,000 Object Database
Slew Speeds	Nine slew speeds	Nine slew speeds	Nine slew speeds	Nine slew speeds	Nine slew speeds
Tracking Rates	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar
Tracking Modes	Alt-Az, EQ North & EQ South	Alt-Az, EQ North & EQ South	Alt-Az, EQ North & EQ South	Alt-Az, EQ North & EQ South	Alt-Az, EQ North & EQ South
GPS Compatible	CN-16 GPS Accessory	CN-16 GPS Accessory	CN-16 GPS Accessory	CN-16 GPS Accessory	CN-16 GPS Accessory
Alignment Procedures	SkyAlign, Auto 2-Star Align,1-Star Align, 2-Star Align, Solar System Align	SkyAlign, Auto 2-Star Align,1-Star Align, 2-Star Align, Solar System Align	SkyAlign, Auto 2-Star Align,1-Star Align, 2-Star Align, Solar System Align	SkyAlign, Auto 2-Star Align,1-Star Align, 2-Star Align, Solar System Align	SkyAlign, Auto 2-Star Align,1-Star Align, 2-Star Align, Solar System Align
Highest Useful Magnification	142x	189x	240x	269x	306x
Limiting Stellar Magnitude	11.4	12	12.5	12.8	13.1
Resolution: Rayleigh / Dawes Limit	2.31 arc seconds / 1.93 arc seconds	1.73 arc seconds / 1.45 arc seconds	1.36 arc seconds / 1.14 arc seconds	1.21 arc seconds / 1.02 arc seconds	1.06 arc seconds / .89 arc seconds
Photographic Resolution	171 lines/mm	182 lines/mm	308 lines/mm	228 line/mm	400 line/mm
Light Gathering Power	73x unaided eye	131x unaided eye	212x unaided eye	265x unaided eye	345x unaided eye
Field of View (degrees) w/ low power eyepiece	1.6º	1.3º	1.7º	1.1º	1.7º
Linear FOV (ft@1000 yds)	84 ft.	66 ft.	91 ft.	59 ft	91 ft.
Optical Coatings	Fully Coated	Fully Coated	Multi-Coated	Aluminum	Aluminum
Secondary Mirror Obstruction/Dia./Area	n/a	n/a	n/a	1.6"/36%/13%	1.7"/34%/12%
Optical Tube Length	28 inches	34 inches	23 inches	19 inches	21 inches
Telescope Weight	10 lbs	14 lbs	14 lbs	15 lbs	18 lbs

NexStar SE Item #	11049	11036	11068	11069
Model Name	NexStar 4 SE	NexStar 5 SE	NexStar 6 SE	NexStar 8 SE
Optical Design	4" (102mm) Maksutov	5" (125mm) Schmidt-Cassegrain	6" (150mm) Schmidt-Cassegrain	8" (203mm) Schmidt-Cassegrain
Focal Length / Focal Ratio	1325mm / F/13	1250mm / f/10	1500mm / f/10	2032mm / f/10
Optical Coatings	StarBright® XLT	StarBright® XLT	StarBright® XLT	StarBright® XLT
Optical Tube	Aluminum, metallic orange	Aluminum, metallic orange	Aluminum, metallic orange	Aluminum, metallic orange
Mount	Single fork arm, altazimuth	Single fork arm, altazimuth	Single fork arm, altazimuth	Single fork arm, altazimuth
Dovetail	Quick release tube clamp	Quick release tube clamp	Quick release tube clamp	Quick release tube clamp
Hand Control	Computerized	Computerized	Computerized	Computerized
Eyepiece (mm)	25mm E-Lux (53x)	25mm E-Lux (50x)	25mm E-Lux (60x)	25mm E-Lux (81x)
Finderscope	StarPointer	StarPointer	StarPointer	StarPointer
Diagonal	Internal flip mirror for straight or 90º viewing angle	Star diagonal, 1.25"	Star diagonal, 1.25"	Star diagonal, 1.25"
Tripod	Pre-assembled steel with built-in wedge	Pre-assembled steel with built-in wedge	Pre-assembled steel	Pre-assembled steel
Included Software	NexRemote™ & The Sky L1	NexRemote™ & The Sky L1	NexRemote™ & The Sky L1	NexRemote™ & The Sky L1
Software Features	Camera control	Camera control	N/A	N/A
Camera Shutter Cable	Yes	Yes	No	No
Power Supply	8-AA batteries (user supplied)	8-AA batteries (user supplied)	8-AA batteries (user supplied)	8-AA batteries (user supplied)
Highest Useful Magnification	240x	300x	354x	480x
Limiting Stellar Magnitude	12.5	13	13.4	14
Resolution: Rayleigh / Dawes Limit	1.36 arc seconds / 1.14 arc seconds	1.1 arc seconds / .91 arc seconds	.92 arc seconds / .77 arc seconds	.68 arc seconds / .57 arc seconds
Light Gathering Power	212x unaided eye	329x unaided eye	459x unaided eye	843x unaided eye
Field of View (degrees)	1º	1º	.83º	.63º
Linear FOV (ft@1000 yds)	52.5 ft.	52.5 ft.	43.8 ft.	33 ft.
Optical Tube Length	13.5 inches	11 inches	16 inches	17 inches
Telescope Weight / Tripod Weight	11 lbs / 10 lbs	17.6 lbs / 10 lbs	21 lbs / 9 lbs	24 lbs / 9 lbs
Database	40,000 Objects	40,000 Objects	40,000+ Objects	40,000+ Objects
Slew Speeds	Variable rate, nine speeds	Variable rate, nine speeds	Variable rate, nine speeds	Variable rate, nine speeds
Ports	RS-232, Aux, Camera Control	RS-232, Aux, Camera Control	RS-232, Aux	RS-232, Aux
Tracking Rates	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar
Tracking Modes	Alt-Az, EQ North & EQ South	Alt-Az, EQ North & EQ South	Alt-Az, EQ North & EQ South	Alt-Az, EQ North & EQ South
GPS Compatible	CN-16 GPS accessory	CN-16 GPS accessory	CN-16 GPS accessory	CN-16 GPS accessory
Alignment Procedures	SkyAlign, Auto 2-Star Align, 1-Star Align, 2-Star Align, Solar System Align	SkyAlign, Auto 2-Star Align, 1-Star Align, 2-Star Align, Solar System Align	SkyAlign, Auto 2-Star Align, 1-Star Align, 2-Star Align, Solar System Align	SkyAlign, Auto 2-Star Align, 1-Star Align, 2-Star Align, Solar System Align

Specifications are subject to change without notice or obligation.

Advanced Item #	21022	21027	31064	31054	21020
Model Name	C80ED-RGT	C100ED-RGT	C130-MGT	C6-NGT	C6-R GT
Optical Design	Refractor	Refractor	Maksutov-Cassegrain	Reflector	Refractor
Aperture	80mm (3.2")	100mm (4")	130mm(5")	150mm (6")	150mm (6")
Focal Length / Focal Ratio	600mm / f/7.5	900mm / f/9	2000mm / f/15.3	750mm / f/5	1200mm / f/8
Eyepiece	20mm (30x)	20mm (45x)	32mm (63x)	20mm (38x)	20mm (60x)
Finderscope	6x30	9x50	10x50	6x30	9x50
Mount	CG-5 Equatorial	CG-5 Equatorial	CG-5 Equatorial	CG-5 Equatorial	CG-5 Equatorial
Star Diagonal	1.25"	1.25"	1.25"	n/a	1.25"
Accessory Tray	yes	yes	yes	yes	yes
Tripod	2" Stainless Steel	2" Stainless Steel	2" Stainless Steel	2" Stainless Steel	2" Stainless Steel
CD ROM	The Sky L1	The Sky L1	The Sky L1	The Sky L1	The Sky L1
Counterweights	1-7 lbs	1-11 lbs	1-11 lbs	1-7 lbs, 1-4 lbs	2-11 lbs
Power (GT versions only)	Car Battery Adapter	Car Battery Adapter	Car Battery Adapter	Car Battery Adapter	Car Battery Adapter
Fastar Compatible	n/a	n/a	n/a	n/a	n/a
Highest Useful Magnification	189x	236x	300x	354x	354x
Lowest Useful Magnification	11x	14x	18x	21x	21x
Limiting Stellar Magnitude	12	12.5	13.1	13.4	13.4
Resolution: Rayleigh	1.73 arc seconds	1.38 arc seconds	.92 arc seconds	.92 arc seconds	.92 arc seconds
Dawes Limit	1.45 arc seconds	1.16 arc seconds	.91 arc seconds	.77 arc seconds	.77 arc seconds
Light Gathering Power	131x unaided eye	204x unaided eye	329x unaided eye	459x unaided eye	459x unaided eye
Field of View: standard eyepiece	1.67º	1.1º	.83º	1.3º	.83º
Linear FOV (@1000 yds)	87.5 ft	70 ft	68 ft.	68 ft	43.8 ft
Optical Coatings	Fully Multi-Coated	Fully Multi-Coated	Multi-Coated	Aluminum	Multi-Coated
Secondary Mirror Obstruction	n/a	n/a	1.5"	1.75"	n/a
by Area	n/a	n/a	9%	8.5%	n/a
by Diameter	n/a	n/a	29%	29%	n/a
Optical Tube Length	23 inches	34 inches	18 inches	27 inches	50.5 inches
Telescope Weight	42 lbs	50 lbs	51 lbs	54 lbs	68 lbs
Computerized Hand Control	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons
Max Slew Speed	3º/second	3º/second	3º/second	3º/second	3º/second
Software Precision	24bit, 0.08 arcsec calculation	24bit, 0.08 arcsec calculation	24bit, 0.08 arcsec calculation	24bit, 0.08 arcsec calculation	24bit, 0.08 arcsec calculation
Hand Control Ports	RS-232 communication port on hand control	RS-232 communication port on hand control	RS-232 communication port on hand control	RS-232 communication port on hand control	RS-232 communication port on hand control
Motor Ports	Aux Port, Autoguide Ports	Aux Port, Autoguide Ports	Aux Port, Autoguide Ports	Aux Port, Autoguide Ports	Aux Port, Autoguide Ports
Tracking Rates	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar
Tracking Modes	EQ North & EQ South	EQ North & EQ South	EQ North & EQ South	EQ North & EQ South	EQ North & EQ South
Alignment Procedures	AutoAlign, 2-Star Alignment, Quick Align	AutoAlign, 2-Star Alignment, Quick Align	AutoAlign, 2-Star Alignment, Quick Align	AutoAlign, 2-Star Alignment, Quick Align	AutoAlign, 2-Star Alignment, Quick Align
Database	40,000+ objects, 400 user defined programmable objects Enhanced information on over 200 objects	40,000+ objects, 400 user defined programmable objects Enhanced information on over 200 objects	40,000+ objects, 400 user defined programmable objects Enhanced information on over 200 objects	40,000+ objects, 400 user defined programmable objects Enhanced information on over 200 objects	40,000+ objects, 400 user defined programmable objects Enhanced information on over 200 objects
Complete Revised NGC Catalog	7,840	7,840	7,840	7,840	7,840
Complete Messier Catalog	110	110	110	110	110
Complete IC Catalog	5,386	5,386	5,386	5,386	5,386
Complete Caldwell	109	109	109	109	109
Abell Galaxies	2,712	2,712	2,712	2,712	2,712
Solar System objects	9	9	9	9	9
Famous Asterisms	20	20	20	20	20
Selected CCD Imaging Objects	25	25	25	25	25
Selected SAO Stars	29,500	29,500	29,500	29,500	29,500
Total Object Database	45,492	45,492	45,492	45,492	45,492

Specifications are subject to change without notice or obligation.

Advanced Item #	11026-XLT	31062	11046-XLT	11048	11067-XLT
Model Name	C8-SGT	C8-NGT	C9.25-SGT	C10-NGT	C11-SGT
Optical Design	Schmidt-Cassegrain	Reflector	Schmidt-Cassegrain	Reflector	Schmidt-Cassegrain
Aperture	203mm (8")	200mm (8")	235mm (9.25")	254mm (10")	279mm (11")
Focal Length / Focal Ratio	2032mm / f/10	1000mm / f/5	2350mm / f/10	1200mm / f/4.7	2800mm / f/10
Eyepiece	25mm (81x)	20mm (50x)	25mm (94x)	20mm (60x)	40mm (70x)
Finderscope	6x30	9x50	6x30	9x50	9x50
Mount	CG-5 Equatorial	CG-5 Equatorial	CG-5 Equatorial	CG-5 Equatorial	CG-5 Equatorial
Star Diagonal	1.25"	n/a	1.25"	n/a	1.25"
Accessory Tray	yes	yes	yes	yes	yes
Tripod	2" Stainless Steel	2" Stainless Steel	2" Stainless Steel	2" Stainless Steel	2" Stainless Steel
CD ROM	The Sky L1	The Sky L1	The Sky L1	The Sky L1	The Sky L1
Counterweights	1-11 lbs	2-11 lbs	2-11 lbs	3-11 lbs	3-11 lbs
Power (GT versions only)	Car Battery Adapter	Car Battery Adapter	Car Battery Adapter	Car Battery Adapter	Car Battery Adapter
Fastar Compatible	yes	n/a	n/a	n/a	n/a
Highest Useful Magnification	480x	480x	555x	600x	660x
Lowest Useful Magnification	29x	29x	34x	36x	40x
Limiting Stellar Magnitude	14	14	14.4	14.5	14.7
Resolution: Rayleigh	.68 arc seconds	.69 arc seconds	.59 arc seconds	.54 arc seconds	.50 arc seconds
Dawes Limit	.57 arc seconds	.58 arc seconds	.49 arc seconds	.46 arc seconds	.42 arc seconds
Light Gathering Power	843x unaided eye	843 unaided eye	1127x unaided eye	1316 unaided eye	1593x unaided eye
Field of View: standard eyepiece	.64º	1º	.55º	.83º	.71º
Linear FOV (@1000 yds)	33.6 ft.	52.5 ft.	29 ft.	43.8 ft.	38 ft.
Optical Coatings	StarBright® XLT	Aluminum	StarBright® XLT	Aluminum	StarBright® XLT
Secondary Mirror Obstruction	2.7"	2.2"	3.35"	2.3"	3.75"
by Area	11%	8%	13%	5%	12%
by Diameter	34%	28%	36%	23%	34%
Optical Tube Length	17 inches	37 inches	22 inches	45 inches	24 inches
Telescope Weight	54.5 lbs	67 lbs	73 lbs	93 lbs	91 lbs
Computerized Hand Control	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons
Max Slew Speed	3º/second	3º/second	3º/second	3º/second	3º/second
Software Precision	24bit, 0.08 arcsec calculation	24bit, 0.08 arcsec calculation	24bit, 0.08 arcsec calculation	24bit, 0.08 arcsec calculation	24bit, 0.08 arcsec calculation
Hand Control Ports	RS-232 communication port on hand control	RS-232 communication port on hand control	RS-232 communication port on hand control	RS-232 communication port on hand control	RS-232 communication port on hand control
Motor Ports	Aux Port, Autoguide Ports	Aux Port, Autoguide Ports	Aux Port, Autoguide Ports	Aux Port, Autoguide Ports	Aux Port, Autoguide Ports
Tracking Rates	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar
Tracking Modes	EQ North & EQ South	EQ North & EQ South	EQ North & EQ South	EQ North & EQ South	EQ North & EQ South
Alignment Procedures	AutoAlign, 2-Star Alignment, Quick Align	AutoAlign, 2-Star Alignment, Quick Align	AutoAlign, 2-Star Alignment, Quick Align	AutoAlign, 2-Star Alignment, Quick Align	AutoAlign, 2-Star Alignment, Quick Align
Database	40,000+ objects, 400 user defined programmable objects Enhanced information on over 200 objects	40,000+ objects, 400 user defined programmable objects Enhanced information on over 200 objects	40,000+ objects, 400 user defined programmable objects Enhanced information on over 200 objects	40,000+ objects, 400 user defined programmable objects Enhanced information on over 200 objects	40,000+ objects, 400 user defined programmable objects Enhanced information on over 200 objects
Complete Revised NGC Catalog	7,840	7,840	7,840	7,840	7,840
Complete Messier Catalog	110	110	110	110	110
Complete IC Catalog	5,386	5,386	5,386	5,386	5,386
Complete Caldwell	109	109	109	109	109
Abell Galaxies	2,712	2,712	2,712	2,712	2,712
Solar System objects	9	9	9	9	9
Famous Asterisms	20	20	20	20	20
Selected CCD Imaging Objects	25	25	25	25	25
Selected SAO Stars	29,500	29,500	29,500	29,500	29,500
Total Object Database	45,492	45,492	45,492	45,492	45,492

Specifications are subject to change without notice or obligation.

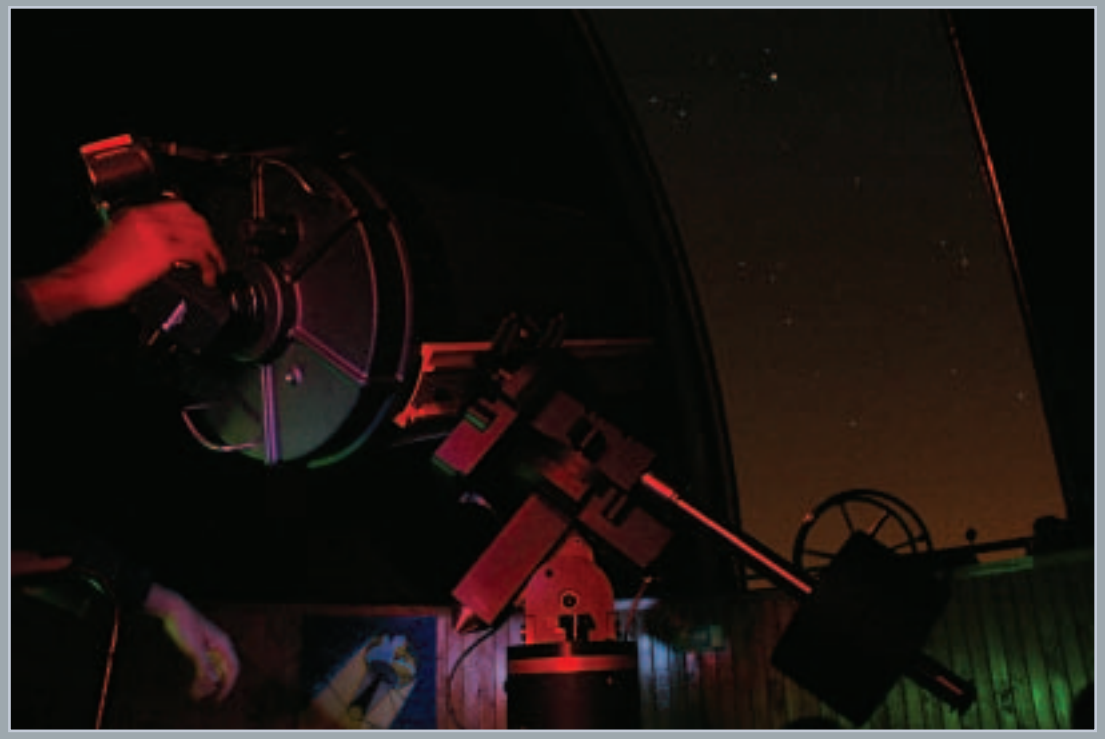
CPC Item #	11073-XLT	11074-XLT	11075-XLT
Model Name	CPC 800	CPC 925	CPC 1100
Optical Design	Schmidt-Cassegrain	Schmidt-Cassegrain	Schmidt-Cassegrain
Aperture	8" (203mm)	9.25" (235mm)	11" (279mm)
Focal Length / Focal Ratio	2032mm / f/10	2350mm / f/10	2800mm / f/10
Finderscope	8x50mm Finderscope w/ quick release bracket	8x50mm Finderscope w/ quick release bracket	8x50mm Finderscope w/ quick release bracket
Mount	Dual Fork Arm	Dual Fork Arm	Dual Fork Arm
Optical Tube	Aluminum	Aluminum	Aluminum
Eyepiece	40mm Plössl (51x)	40mm Plössl (59x)	40mm Plössl (70x)
Star Diagonal	1.25"	1.25"	1.25"
Tripod / Accessory Tray	Heavy Duty Steel Adjustable with Leg Brace & Eyepiece Holder	Heavy Duty Steel Adjustable with Leg Brace & Eyepiece Holder	Heavy Duty Steel Adjustable with Leg Brace & Eyepiece Holder
Power Supply	Car Battery Adapter	Car Battery Adapter	Car Battery Adapter
Telescope Control System	NexStar Computer Control System	NexStar Computer Control System	NexStar Computer Control System
Software	NexRemote control software w/RS232 cable	NexRemote control software w/RS232 cable	NexRemote control software w/RS232 cable
Computerized Hand Control	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons
Hand Control Ports	RS-232 communication port on hand control	RS-232 communication port on hand control	RS-232 communication port on hand control
Drive Base Ports	Aux Port, Autoguide Ports	Aux Port, Autoguide Ports	Aux Port, Autoguide Ports
Database	40,000 Object Database	40,000 Object Database	40,000 Object Database
GPS	Internal 16 channel	Internal 16 channel	Internal 16 channel
Motor Type	DC Servo motors with encoders, both axes	DC Servo motors with encoders, both axes	DC Servo motors with encoders, both axes
Resolution	.1406 arcsecond	.1406 arcsecond	.1406 arcsecond
Slew Speeds	Nine slew speeds: 3º /sec, 2º /sec, .5º/sec, 64x, 16x, 8x, 4x, 1x, .5x	Nine slew speeds: 3º /sec, 2º /sec, .5º/sec, 64x, 16x, 8x, 4x, 1x, .5x	Nine slew speeds: 3º /sec, 2º /sec, .5º/sec, 64x, 16x, 8x, 4x, 1x, .5x
Software Precision	24bit, 0.08 arcsec calculations	24bit, 0.08 arcsec calculations	24bit, 0.08 arcsec calculations
Tracking Rates	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar
Tracking Modes	Altazimuth, EQ North & EQ South	Altazimuth, EQ North & EQ South	Altazimuth, EQ North & EQ South
Alignment Procedures	SkyAlign, Auto Two Star Align, One-Star Align, EQ Align, Solar System Align	SkyAlign, Auto Two Star Align, One-Star Align, EQ Align, Solar System Align	SkyAlign, Auto Two Star Align, One-Star Align, EQ Align, Solar System Align
Fork Arm	Dual fork arm, cast aluminum w/ detachable HC cradle	Dual fork arm, cast aluminum w/ detachable HC cradle	Dual fork arm, cast aluminum w/ detachable HC cradle
Gear	5.625" 180 tooth hard anodized aluminum gear mated w/ brass worm	5.625" 180 tooth hard anodized aluminum gear mated w/ brass worm	5.625" 180 tooth hard anodized aluminum gear mated w/ brass worm
Bearings	9.8" azimuth bearing	9.8" azimuth bearing	9.8" azimuth bearing
Periodic Error Correction	Permanently Programmable	Permanently Programmable	Permanently Programmable
Useful Magnification Highest/Lowest	480x / 29x	555x / 34x	660x / 40x
Limiting Stellar Magnitude	14	14.4	14.7
Resolution: Rayleigh/Dawes Limit	.68 arc seconds / .57 arc seconds	.59 arc seconds / .49 arc seconds	.50 arc seconds / .42 arc seconds
Light Gathering Power	843x unaided eye	1127x unaided eye	1593x unaided eye
Field of View: standard eyepiece	.8º	.7º	.6º
Linear FOV (@1000 yds)	42 ft.	38 ft.	32 ft.
Optical Coatings	StarBright XLT Coatings	StarBright XLT Coatings	StarBright XLT Coatings
Secondary Mirror Obstruction	2.5"	3.35"	3.75"
by Area / by Diameter	10% / 31%	13% / 36%	12% / 34%
Optical Tube Length	17 inches	22 inches	23 inches
Telescope Weight	42 lbs	58 lbs	65 lbs

StarHopper	10600	10800	10110	10112
Models	StarHopper 6	StarHopper 8	StarHopper 10	StarHopper 12
Optical Design	Dobsonian Reflector	Dobsonian Reflector	Dobsonian Reflector	Dobsonian Reflector
Aperture	6” (152mm)	8” (203mm)	10” (254mm)	12” (305mm)
Focal Length / Focal Ratio	1219mm / f/8	1219mm / f/6	1270mm / f/5	1500mm / f/5
Eyepieces	25mm Plössl 1.25”	25mm Plössl 1.25”	32mm E-Lux 2"	32mm E-Lux 2"
Collimation Cap	Yes	Yes	Yes	Yes
Focuser	1.25"	2"	2"	2"
Finder	6x30	9x50	9x50	9x50
Primary	BK7	BK7	BK7	BK7
Cooling	N/A	N/A	Fan	Fan
Mirror Cell	3-point	3-point	3-point	9-point
Azimuth Bearing / Altitude Bearing	Roller track / Nylon Cylinder	Roller track / Nylon Cylinder	Roller track / Nylon Cylinder	Roller track / Nylon Cylinder
Tension System	Variable friction clutch	Variable friction clutch	Variable friction clutch	Variable friction clutch
Highest Useful Magnification	359x	480x	600x	721x
Limiting Stellar Magnitude	13.4	14	14.5	14.9
Resolution: Rayleigh / Dawes Limit	.91 arcsec / .76 arcsec	.68 arcsec / .57 arcsec	.54 arcsec / .46 arcsec	.45 arcsec / .38 arcsec
Light Gathering Power	472x	843x	1317x	1898x
Field of View: standard eyepiece (°)	1.03	1.03	1.0	0.83
Linear FOV (@1000 yds)	54.1	54.1	52.5	43.6
Secondary Mirror Obstruction / by Dia. / by Area	1.5” / 25% / 6.3%	1.95” / 24% / 5.9%	2.5” / 25% / 6.3%	2.75” / 23% / 5.3%
Optical Tube Length	45”	45”	48”	58”
Telescope Weight	46 lbs	54 lbs	65 lbs	80 lbs

Specifications are subject to change without notice or obligation.

CGE Item #	11058-XLT	11059-XLT	11061-XLT	11063-XLT	11064-XLT
Model Name	CGE 800	CGE 925	CGE 1100	CGE 1400	CGE 1400
Optical Design	Schmidt-Cassegrain	Schmidt-Cassegrain	Schmidt-Cassegrain	Schmidt-Cassegrain	Schmidt-Cassegrain
Aperture	8" (203mm)	9.25" (235mm)	11" (279mm)	14" (356mm)	14" (356mm)
Focal Length / Focal Ratio	2032mm / f/10	2350mm / f/10	2800mm / f/10	3910mm / f/11	3910mm / f/11
Finderscope	6x30	6x30	9x50	9x50	9x50
Mount	Computerized Equatorial Mount	Computerized Equatorial Mount	Computerized Equatorial Mount	Computerized Equatorial Mount	Computerized Equatorial Mount
Optical Tube	Carbon Fiber	Aluminum	Carbon Fiber	Aluminum	Aluminum
Fastar Compatible	Yes	No	No	No	Yes
Eyepiece	25mm Plössl - 1.25" (81x)	25mm Plössl - 1.25" (94x)	40mm Plössl - 1.25" (70x)	40mm Plössl - 2" (98x)	40mm Plössl - 2" (98x)
Star Diagonal	1.25"	1.25"	1.25"	2" with 1.25" adapter	2" with 1.25" adapter
Tripod	Adjustable, Carbon Steel	Adjustable, Carbon Steel	Adjustable, Carbon Steel	Adjustable, Carbon Steel	Adjustable, Carbon Steel
Software	NexRemote control software w/RS232 cable	NexRemote control software w/RS232 cable	NexRemote control software w/RS232 cable	NexRemote control software w/RS232 cable	NexRemote control software w/RS232 cable
Power Supply	Car Battery Adapter	Car Battery Adapter	Car Battery Adapter	Car Battery Adapter	Car Battery Adapter
Highest Useful Magnification	480x	555x	660x	840x	840x
Lowest Useful Magnification	29x	34x	40x	51x	51x
Limiting Stellar Magnitude	14	14.4	14.7	15.3	15.3
Resolution: Rayleigh	.68 arc seconds	.59 arc seconds	.50 arc seconds	.39 arc seconds	.39 arc seconds
Dawes Limit	.57 arc seconds	.49 arc seconds	.42 arc seconds	.33 arc seconds	.33 arc seconds
Light Gathering Power	843x unaided eye	1127x unaided eye	1593x unaided eye	2581x unaided eye	2581x unaided eye
Field of View :standard eyepiece	.62º	.53º	.71º	.51º	.51º
Linear FOV (@1000 yds)	32 ft.	28 ft.	38 ft.	27 ft.	27 ft.
Optical Coatings	StarBright XLT	StarBright XLT	StarBright XLT	StarBright XLT	StarBright XLT
Secondary Mirror Obstruction	2.7"	3.35"	3.75"	4.5"	4.5"
by Area	11%	13%	12%	10%	10%
by Diameter	34%	36%	34%	32%	32%
Optical Tube Length	17 inches	22 inches	24 inches	31 inches	31 inches
Optical Tube Weight	12.5 lbs	20 lbs	27.5 lbs	45 lbs	45 lbs
Tripod and Pier	41.5 lbs	41.5 lbs	41.5 lbs	41.5 lbs	41.5 lbs
EQ Mount Weight	42 lbs	42 lbs	42 lbs	42 lbs	42 lbs
Counterweight Bar	5 lbs	5 lbs	5 lbs	5 lbs	5 lbs
Counterweight	1 x 11 lbs	1 x 25 lbs	1 x 25 lbs	2 x 25 lbs	2 x 25 lbs
Motor Drive	DC Servo motors with encoders, both axes	DC Servo motors with encoders, both axes	DC Servo motors with encoders, both axes	DC Servo motors with encoders, both axes	DC Servo motors with encoders, both axes
Computerized Hand Control	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons	Double line 16 character, Liquid Crystal Display; 19 LED backlit buttons
Slew Speeds	Nine slew speeds: 4º /sec, 2º /sec, .5º/sec, 64x, 8x, 4x, 1x, .5x	Nine slew speeds: 4º /sec, 2º /sec, .5º/sec, 64x, 8x, 4x, 1x, .5x	Nine slew speeds: 4º /sec, 2º /sec, .5º/sec, 64x, 8x, 4x, 1x, .5x	Nine slew speeds: 4º /sec, 2º /sec, .5º/sec, 64x, 8x, 4x, 1x, .5x	Nine slew speeds: 4º /sec, 2º /sec, .5º/sec, 64x, 8x, 4x, 1x, .5x
Tracking Rates	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar	Sidereal, Solar and Lunar
Tracking Modes	EQ North & EQ South	EQ North & EQ South	EQ North & EQ South	EQ North & EQ South	EQ North & EQ South
Alignment Procedures	AutoAlign, 2-Star Align, Quick Align, 1-Star Align, Recall Last Alignment, 3-Star Align	AutoAlign, 2-Star Align, Quick Align, 1-Star Align, Recall Last Alignment, 3-Star Align	AutoAlign, 2-Star Align, Quick Align, 1-Star Align, Recall Last Alignment, 3-Star Align	AutoAlign, 2-Star Align, Quick Align, 1-Star Align, Recall Last Alignment, 3-Star Align	AutoAlign, 2-Star Align, Quick Align, 1-Star Align, Recall Last Alignment, 3-Star Align
Software Precision	24bit, 0.08 arcsec calculation	24bit, 0.08 arcsec calculation	24bit, 0.08 arcsec calculation	24bit, 0.08 arcsec calculation	24bit, 0.08 arcsec calculation
Database	40,000+ objects, 400 user defined programmable objects. Enhanced information on over 200 objects	40,000+ objects, 400 user defined programmable objects. Enhanced information on over 200 objects	40,000+ objects, 400 user defined programmable objects. Enhanced information on over 200 objects	40,000+ objects, 400 user defined programmable objects. Enhanced information on over 200 objects	40,000+ objects, 400 user defined programmable objects. Enhanced information on over 200 objects
Power Requirements	12 VDC 2.0A	12 VDC 2.0A	12 VDC 2.0A	12 VDC 2.0A	12 VDC 2.0A
Idle Current	215mA	215mA	215mA	215mA	215mA
Slew One Axis	600mA	600mA	600mA	600mA	600mA
Slew Both Axes	850mA (with 1A spikes)	850mA (with 1A spikes)	850mA (with 1A spikes)	850mA (with 1A spikes)	850mA (with 1A spikes)
Internal Clock	Yes	Yes	Yes	Yes	Yes
GPS Compatible	CN-16 GPS Accessory	CN-16 GPS Accessory	CN-16 GPS Accessory	CN-16 GPS Accessory	CN-16 GPS Accessory

Specifications are subject to change without notice or obligation.



ABOUT CELESTRON

For over four decades, Celestron has been recognized as one of the world's leading designers and manufacturers of high quality computerized and non-computerized telescopes, binoculars, spotting scopes, microscopes, and related accessories.

The foundation of Celestron's commitment to product design and engineering innovation is based upon its longstanding ability to manage and control all aspects of the design-to-market process. Celestron's staff of experienced engineers, industrial designers, and optical experts are consistently improving and refining our products as well as developing new products and technologies for our customers.

Celestron's passion for continuous product improvement, innovation, and design excellence ensures products that provide our customers with years of enjoyment, reliability, and, most important – VALUE.

For more information on all or our products or to find a dealer near you please visit us at: www.celestron.com

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