Sirius Optics
Unit 1
26 Darnick Street
Underwood, Qld 4119

Opening Hours

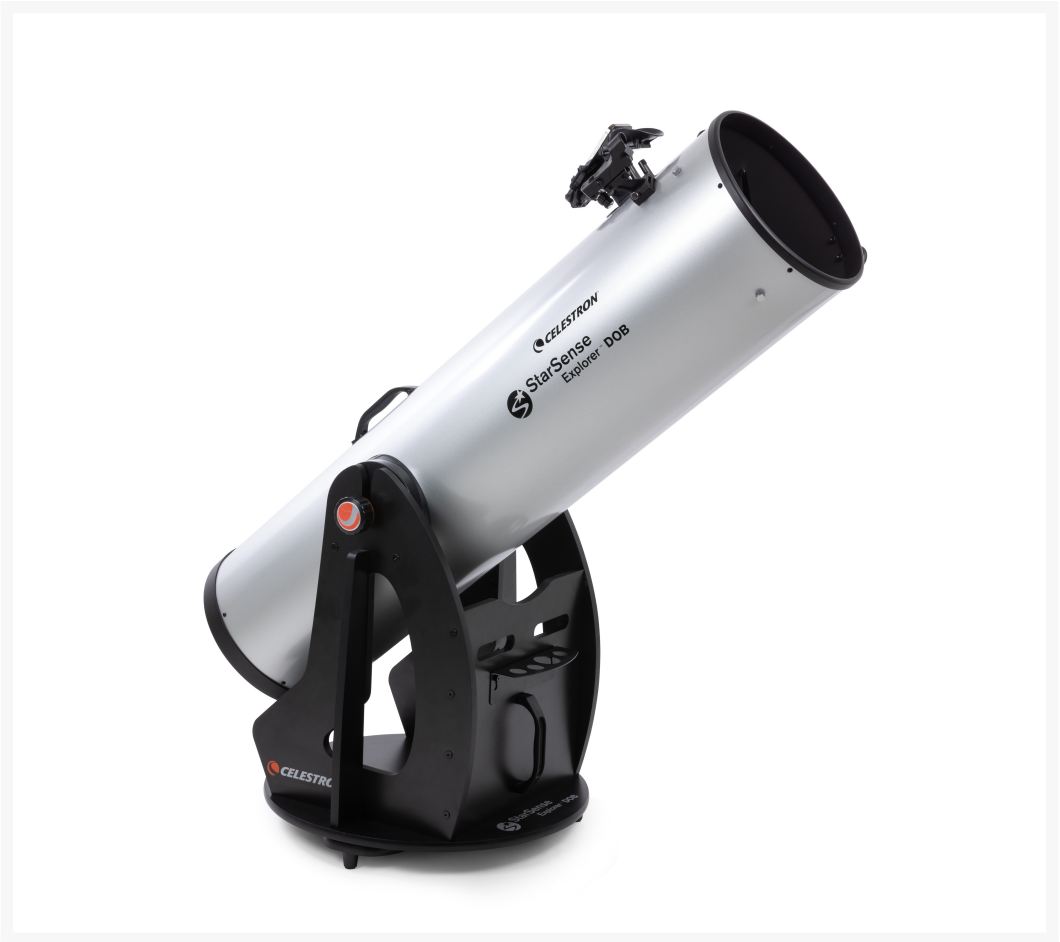
10am-5:30pm Mon-Fri
9am-2pm Sat

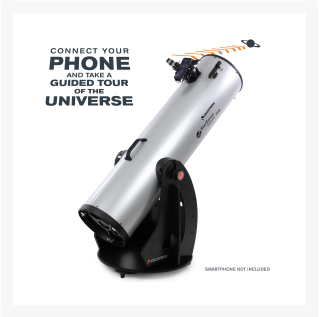
Phone: 07 3423 2355
www.sirius-optics.com.au

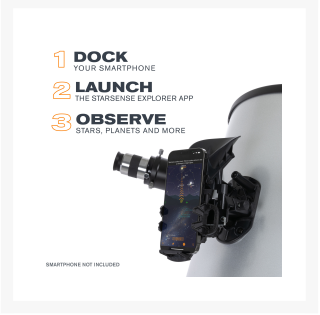
Celestron Starsense Explorer 12 inch Dobsonian

AUD $2,799.00

Product Images







Short Description

Unleash the power of your smartphone to take you on a guided tour of the night sky—no telescope experience required. Patented, award-winning StarSense sky recognition technology uses your smartphone to analyze star patterns overhead and calculate the

telescope’s position in real-time.

NOTE: *to protect your scope optics from dust in storage we recommend the Pegasus 6-8" Dust cover for the bottom of your scope. (Product Number 126685)*

Description

Celestron has reinvented the Dobsonian telescope with StarSense Explorer—the first Dobsonian that uses your smartphone to analyze the night sky and calculate its position in real-time. This large-aperture Celestron StarSense Explorer is ideal for serious beginners and advanced observers alike, thanks to the app's user-friendly interface and detailed tutorials. It's like having your own personal tour guide of the night sky. The large aperture will ensure that you won’t outgrow the telescope as you continue on in your astronomical adventures. Advanced observers will appreciate the ease of use and spectacular views the StarSense Explorer 12” Dobsonian provides.

Dock, Launch, Explore

Leave complicated star charts, imprecise planetarium apps, and computerized mounts behind. With StarSense Explorer, locating objects has never been easier, faster, or more accurate. Within minutes of setting up the telescope, you'll be navigating the sky with confidence. Simply place your phone in the unique StarSense dock and launch the StarSense Explorer app.

After aligning your phone to the telescope's optics (a quick and easy procedure), StarSense Explorer generates a list of celestial objects currently visible. Make your selection and arrows appear on-screen, guiding you as you move the telescope. When the object is ready to view in the eyepiece, the bullseye turns green. As you observe, listen to hundreds of audio descriptions and view detailed information about thousands of objects within the app’s robust database.

High-Quality Altazimuth Base

An ultra-stable Dobsonian base provides a sturdy foundation for StarSense Explorer. It features large diameter altitude bearings with variable tensioning, Teflon azimuth bearings, and braces on the side panels for extra stability (unlike many 12” Dobsonian bases). The altitude bearings provide a smooth up-and-down motion while the integrated altitude "brake" system allows you to adjust the tension along the altitude axis for smoothest motion even with slight imbalances. The panning knob on the telescope tube provides an ergonomic grip so you can precisely point the telescope without introducing heat from your hands into the optical system. As celestial objects appear to drift across the night sky, you'll be able to easily follow them with minor adjustments to the telescope’s position.

Dazzling Views with High-Quality Optics

With a large 12" Newtonian reflector optical tube, this telescope has enough light-gathering ability to bring out impressive detail in celestial objects. You can expect sharp, bright views of Jupiter's four Galilean moons, its cloud bands and Great Red Spot, the rings of Saturn, the gaseous glow of the Orion Nebula, dust lanes in the Lagoon Nebula, and our neighbor galaxy, Andromeda. Compared to the other StarSense Explorer Dobsonian telescopes, the 12” Dobsonian has 2.25 more light gathering ability than the 8” and 2.25x more light gathering ability than the 10”, providing better views of faint objects.

All mirror surfaces are coated with our XLT optical coatings to visibly increase contrast and light throughput for brighter views. With XLT, you'll be able to discern subtle details while viewing the Moon and planets, as well as faint galaxies and nebulae. The mirrors are made of low-expansion optical glass, which helps ensure the best images under changing environmental conditions.

This telescope also comes with a high-quality 2” Crayford focuser. The Crayford design provides precise and smooth movements without focus shifting. It also includes a 2” to 1.25” adapter and a 2” extension tube, so you can use virtually any 1.25” or 2” telescope eyepiece with your StarSense Explorer Dobsonian. The focuser also features a thumbscrew so you can lock in the sharpest focus.

Perfect for the City or Dark Sky Sites

Even if you live in a light-polluted city location, the Celestron StarSense Explorer 12” Dobsonian is advanced enough to easily pick out Jupiter, Saturn, open star clusters like the Pleiades, double stars like Alberio, the Orion Nebula, Andromeda Galaxy, and more of the best and brightest celestial objects.

But if you can take the telescope to an even slightly darker location, more objects will become visible. With this 12" Dobsonian and relatively dark skies, hundreds of fascinating objects are well within your reach.

Transporting your StarSense Explorer Dobsonian is easy thanks to the ergonomic carry handles located at the balance point of the tube and base. Dust covers are also included for the front of the tube and the focuser.

Smartphone Compatibility

Celestron StarSense Explorer works with most modern smartphones, including iPhone 6 and up, and most devices running Android 7.1.2 or later manufactured since 2016. For a complete compatibility list, click here.

Patented StarSense Sky Recognition Technology

StarSense Explorer uses patented technology and your smartphone to determine exactly where the telescope is pointed in the night sky. A Lost in Space Algorithm (LISA), like the ones satellites use in orbit to correctly orient themselves, helps the app match star patterns it detects overhead to its internal database.

While other astronomy apps may claim that they can help you find objects, they rely exclusively on the phone's gyros and accelerometers, which aren't as accurate as LISA technology. No other app can accurately tell you when your target is visible in the eyepiece.

Enhance Your Setup

Keep your phone charged all night while exploring with your StarSense Explorer by adding the PowerTank Glow 5000 to your must-have accessories (sold separately). This 2-in-1 accessory was made with the StarSense Explorer Dobs in mind, it has a red flashlight PLUS a USB power bank for charging mobile devices in the field. Connect the PowerTank Glow 5000 to the two posts at the front of the StarSense Explorer dock with the included bands so it is held in a convenient location for charging your smartphone while in use.

To achieve the sharpest views faster, we recommend pairing the StarSense Explorer 12” Dobsonian with the USB Cooling Fan for Dobsonian Telescopes (sold separately). The fan cools the primary mirror to the ambient outdoor temperature faster, leaving you more time to observe. It mounts directly onto the rear cell of the Dobsonian and works with any USB power source.

Additional Information

Specifications

OPTICAL TUBE INFO:	
Optical Design:	Newtonian Reflector
Aperture:	305mm (12")
Focal Length:	1500mm (59")
Focal Ratio:	f/4.9
Focal Length of Eyepiece 1:	32mm (1.26")
Magnification of Eyepiece 1:	47x
Highest Useful Magnification:	720x
Lowest Useful Magnification:	43x
Limiting Stellar Magnitude:	14.9
Light Gathering Power:	1895x as compared to the human eye
Optical Coatings:	XLT reflective coatings with silicon dioxide and tantalum pentoxide protective overcoatings for primary and secondary mirrors
Mirror Material:	Pyrex equivalent for primary and secondary mirrors
Primary Mirror Thickness:	37mm (1.45") (approx. 1:8 thickness ratio)
Secondary Mirror Thickness:	11mm (0.43")
Minor Axis of Secondary Mirror:	70mm (2.75")
Tube Material:	Steel
Focuser:	2" Crayford focuser, includes 2" extension tube and 2"-to-1.25" adapter
Finderscope:	StarPointer™ red-dot finderscope
Resolution Rayleigh:	0.45 arcseconds
Resolution Dawes:	0.38 arcseconds
Optical Tube Dimensions:	1422.4mm (56") long x 355.6mm (14" diameter)
Optical Tube Weight:	49.8 lbs (22.58 kg)
MOUNT INFO:	
Mount Type:	Altazimuth Dobsonian base
Base Material:	Particle board with melamine surfaces and edge trim, CARB compliant
Base Dimensions:	635mm x 635mm x 736.6mm (25" x 25" x 29")
Base Weight:	33.8 lbs (15.33 kg)
Slew Speeds:	Manual
Software:	Celestron Starry Night Basic Edition Software and StarSense Explorer App
Total Telescope Kit Weight:	83.6 lbs (37.92 kg)
Included Items:	Optical tube Dobsonian Base 32mm eyepiece 2" Crayford focuser StarPointer™ red-dot finderscope StarSense Explorer dock StarSense Explorer unlock code Eyepiece rack Collimation cap Celestron Starry Night Basic Edition Software
Solar Warning	• Never look directly at the Sun with the naked eye or with an optic (unless you have the proper solar filter). Permanent and irreversible eye damage may result. • Never use your optic to project an image of the Sun onto any surface. Internal heat build-up can damage the optic and any accessories attached to it. • Never leave your optic unsupervised. Make sure an adult who is familiar with the correct operating procedures is with your optic at all times, especially when children are present.