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NexStar Evolution Telescopes

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NexStar Evolution Telescopes

- ***The most advanced SCT system ever offered, WiFi-ready, internal rechargeable batteries, newly designed mount.***

- **Control the telescope with your smart device! Built-in WiFi operates telescope with Celestron's new app, rich with multimedia, including a real-time synchronized display of the sky.**

- **Newly designed fork mount with handles, several new features including charge port and adjustable accessory tray light.**

CELESTRON NEXSTAR EVOLUTION

- **Long-life internal rechargeable lithium-ion battery eliminates the need for external power, will run an entire night of observing – up to 10 hours of usage.**

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NexStar Evolution Telescopes

The “Jack of All Trays”!

- 3 x 1.25” Eyepieces
- 1 x 2” Eyepiece
- Misc. Accessory Holder
- Stylish
- *Stays assembled when tripod is folded!*

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NexStar Evolution Features 1

Features	Benefits
Built-in WiFi	No Hand controller required! Just use your smartphone or tablet which connects to the telescope via WiFi.
Free Celestron Navigator App	Access the sky and control your telescope from an interactive planetarium on your smart device – the app provides the best star gazing experience for you and your friends and family – know when Jupiter's Great Red Spot will be visible, including shadow transits, planetary occultations, conjunctions, or pick the best deep sky objects to view. Objects contain informative backstories and beautiful image galleries, then see them for yourself through the telescope!
Long-Life Internal Rechargeable Lithium-Ion Battery	Built to carry you through a solid night of observing (at least 10 hours of continuous usage under most circumstances), and built to last.
Precision Machined Worm Gears and Improved Motors	Provides better pointing and tracking accuracy. Worm gears are used for both the altitude and azimuth axes which provide minimal backlash. A solid step up from the SE series.
SkyAlign	Simply align on any three bright stars in the sky.
NexStar+ Hand Control Included	Although the telescope can run with the free app, the NexStar+ Hand Control is included.

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NexStar Evolution Features 2

Features	Benefits
Beefier Fork Arm with Built-In Carry Handles	New wider fork arm and improved mechanical design provides a more stable platform than previous single-fork arm designs. The optical tube is removable with a quick release dovetail with ergonomic clamping knob.
USB Direct Charge Port	Charge your smart device or accessory with the USB Direct Charge Port.
Manual Clutches for ALT and AZ	Allows the telescope to be moved manually when needed, also very useful for storage.
Upper Accessory Tray	Built into the fork arm with rubber lining for 1.25” eyepieces and miscellaneous accessories.
Tripod Accessory Tray “Jack of All Trays”	Holds three 1.25” eyepieces, one 2” eyepiece, miscellaneous accessories, and best of all, you can fold the tripod with the tray installed
Upper Accessory Tray Illuminator	Red L.E.D. accessory tray illuminator with fully adjustable brightness. Illuminates the accessory tray on the fork arm to see your equipment in the dark without disturbing your night vision or those around you. Fully adjustable and can be switched off through the included hand control or app.
NexStar+ Hand Control Included	Although the telescope can run with the free app, the NexStar+ Hand Control is included.

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NexStar Evolution Features 3

Features	Benefits
Tripod Enhancements	All-metal design including stainless steel legs for added durability and stability. Height index marks on tripod legs provide easy and level height adjustment.
Quick Set Up and Take Down	Quick release knobs attach fork arm to tripod and snap into place for perfect alignment. Quick release knob for optical tube dovetail.
4 Auxiliary Ports	Accessorize your NexStar Evolution mount with StarSense or other accessories. StarSense ready!
Included AC Adapter	For US, UK, EU and AU. 2.1amp power supply.
Tripod Accessory Tray “Jack of All Trays”	Holds three 1.25” eyepieces, one 2” eyepiece, miscellaneous accessories, and best of all, you can fold the tripod with the tray installed
Astro-Imaging	All new drive system makes astro-imaging with NexStar Evo a reality! For long exposures, add the optional Pro HD Wedge.
6”, 8” and 9.25” models	Ranged to fit anyone’s price and portability needs.

“The best telescope is the one you use most often!”

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Preliminary Pricing

12090: NexStar Evo 6	$TBA
12091: NexStar Evo 8	$TBA
12092: NexStar Evo 9.25	$TBA

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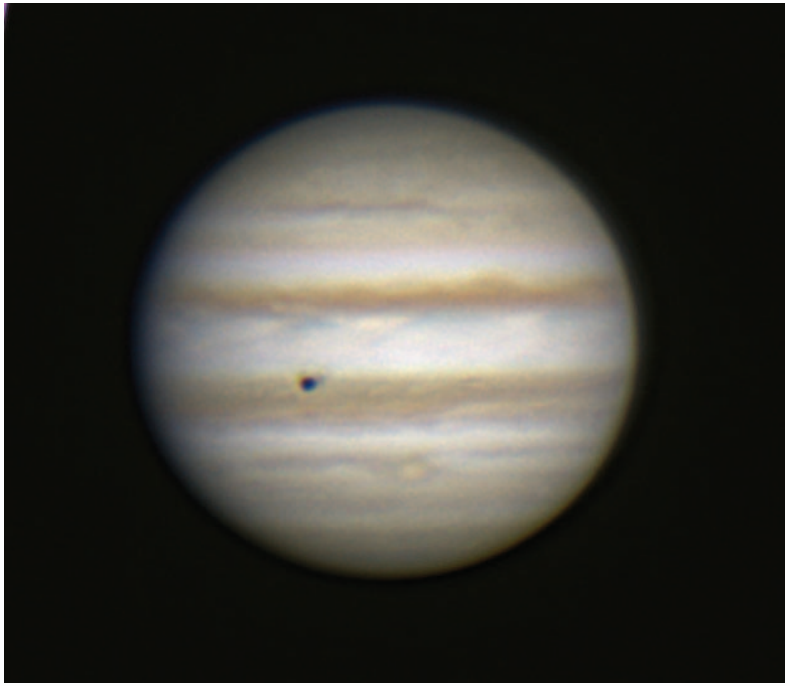
Skyris M034 CMOS

- State-of-the-art CMOS technology from Aptina, the MT9M034 is used by imaging companies world-wide (including Celestron StarSense!)
- *FAST, SENSITIVE, AFFORDABLE*
- Takes full advantage of USB 3.0 SuperSpeed. Image at more than *200 frames per second* when subframed on the planets.
- *Image the full 1.2 megapixel 1/3" sensor at 60 frames per second!! Solar and Lunar imagers will love this.*



- The only camera that uses SuperSpeed USB 3.0 with the Aptina MT9M034!

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Skyris M034 CMOS

Features	Benefits
Aptina MT9M034	Revolutionary CMOS technology. This 1.2MP (1280 x 960) sensor has outstanding sensitivity and high-speed capability.
1/3” Format Sensor	Ample field of view for solar and lunar imaging.
High-Value	Aggressive pricing will make this the fastest and most affordable imager in its class
10’ USB 3.0 Cable	High-quality cable included with screw fasteners.
Updated iCap Capture Software	Now supports 12-bit capture and automatic framerate adjustment with exposure.
RegiStax	Powerful stacking software which easily allows the user to stack and sharpen their planetary images.
FireCapture Compatible	Works with the popular third party software, FireCapture, which supports ASCOM filter wheels, autoguiding, and more.

Color and Monochrome models available

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NexImage Burst

- **Lowest priced Aptina MT9M034 camera available anywhere.**
- **1.2MP 1/3” format sensor, great for all kinds of Solar System imaging.**
- **CMOS can be subframed to increase speed when imaging the planets. Image at more than 120 frames per second when subframed on the planets.**
- **Software included iCap and RegiStax easily captures and processes images.**

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NexImage Burst

Features	Benefits
Aptina MT9M034	Revolutionary CMOS technology. This 1.2MP (1280 x 960) sensor has outstanding sensitivity and high-speed capability.
1/3” Format Sensor	Great for all types of Solar System imaging. Ample field of view for solar and lunar imaging.
Best Performance Per Dollar	Low Pricing aims at making the NexImage Burst an irresistible value
Updated iCap Capture Software	Now supports 12-bit capture and automatic framerate adjustment with exposure.
RegiStax	Powerful stacking software which easily allows the user to stack and sharpen their planetary images.
FireCapture Compatible	Works with the popular third party software, FireCapture, which supports ASCOM filter wheels, autoguiding, and more.

Color and Monochrome models available

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Rowe-Ackermann F/2.2 Schmidt Astrograph

- All-new dedicated astro-imaging optical system designed by world class optical engineers David Rowe and Mark Ackermann.
- Super-fast f/2.2 optics optimized for sensor sizes large as 70mm! That means a full frame camera is well within the capability of this astrograph.
- Record images over 20 times faster than at f/10! 30 second images at f/2.2 capture equivalent detail to a 10 minute image at f/10.
- Wide field 620mm focal length combined with large image circle makes this astrograph ideal for wide angle imaging, surveying, even comet hunting!

- Improved focusing mechanics using a machined brass bearing, provides less image shift, and we include a 10:1 FeatherTouch Micro focuser for precision focusing.

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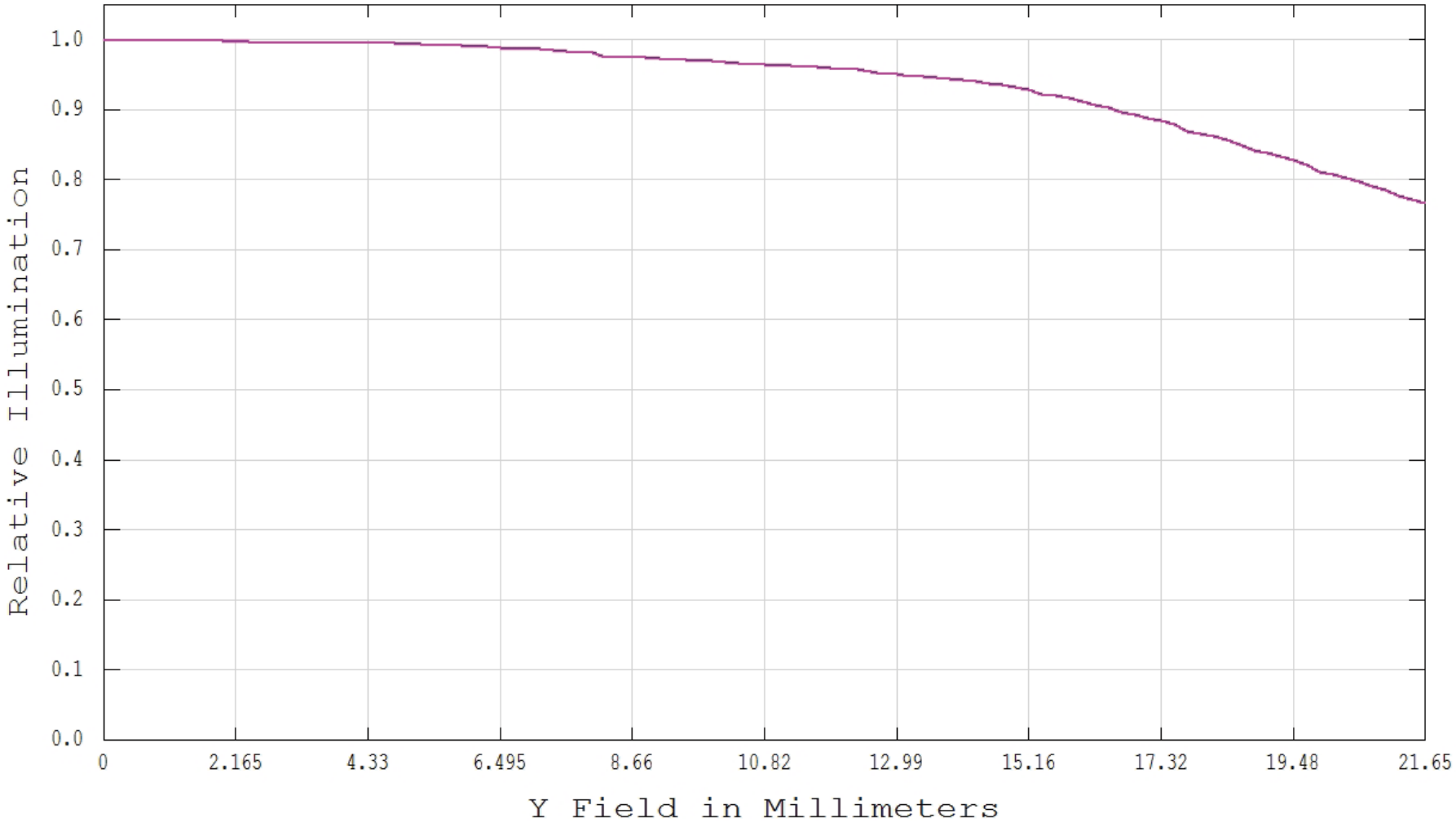
Rowe-Ackermann F/2.2 Schmidt Astrograph

Features	Benefits
11” (280mm) F/2.2 Optics	Provides a super-fast, high-resolution imaging system across a large sensor area.
4-element group containing Rare-Earth Glass	Minimizes false color and off-axis distortions including coma and field curvature.
Fully Multi-coated Removable Optical Window	Optical system was designed for the glass thickness of this optical window – can be replaced with special filters, light pollution and narrowband. Filters are in development for this telescope.
70mm Optimized Image Circle	Covers a massive sensor area. Maintains diffraction limited pinpoint stars to far corners of your imaging sensor. Unprecedented optical performance!
Brass Bearing Focusing System	Significantly decreases image shift.
Dual-speed 10:1 Reduction FeatherTouch Micro Focus Knob (RoboFocus compatible)	The standard for high-end focusers, provides the most precise focusing.
Air Cooling System	Quiet, high-output 12V MagLev fan channels air around the primary mirror to reduce cool down time. Air intake vents block dust while allowing air flow.
Included Camera Adapters	M42 T-thread and M48 wide, 55mm backfocus.
Nightscape and DSLR Ready	Cameras that fit within the 114mm obstruction are an ideal match for scope. DSLRs also work very well.

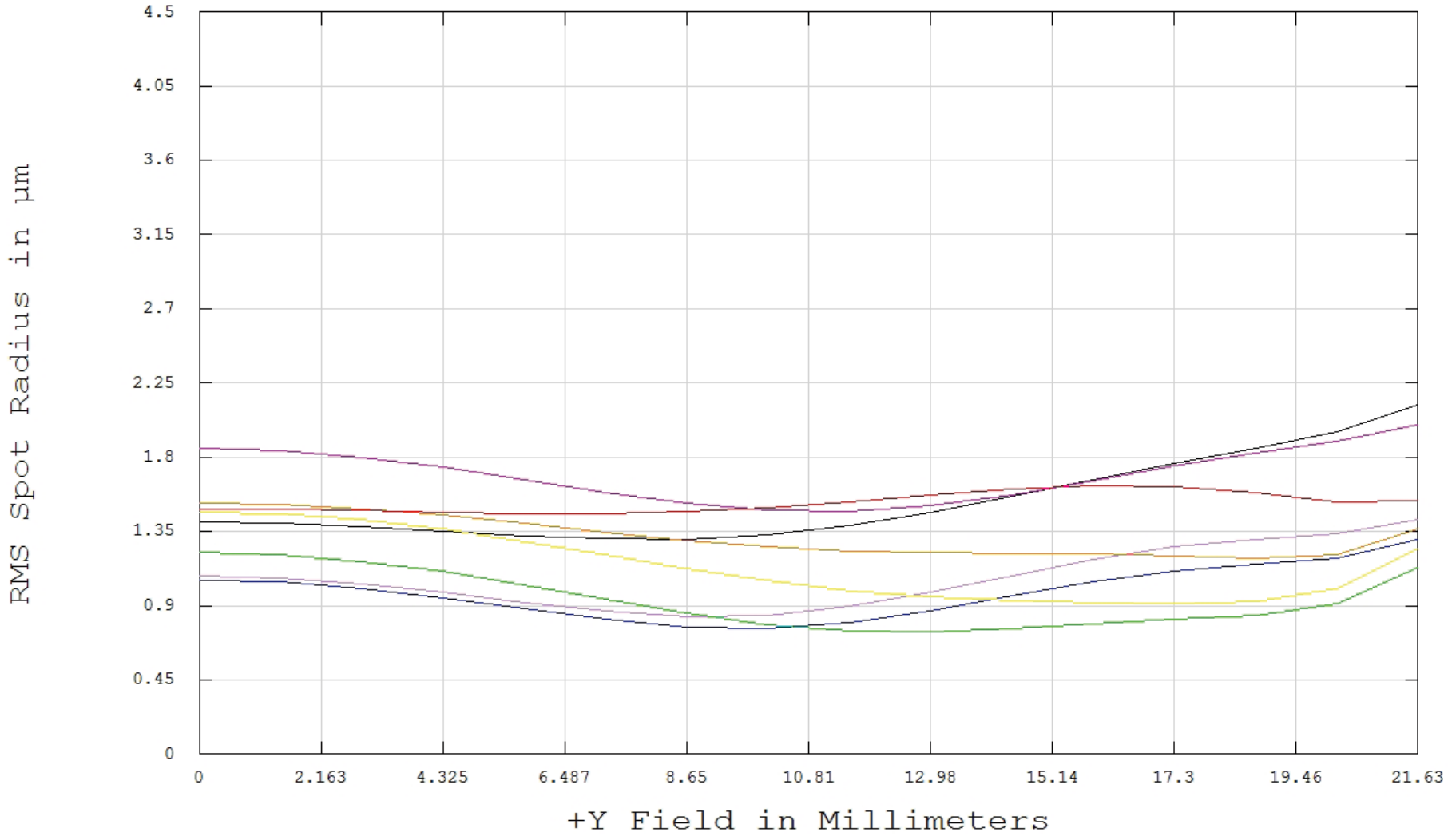


Relative Illumination

Celestron 11-inch - Rowe-Ackermann Schmidt Astrograph
3/10/2014
Wavelength: 0.546070 µm

Celestron
Rowe-Ackermann
Schmidt Astrograph

April 2014



RMS Spot Radius vs Field

Celestron 11-inch - Rowe-Ackermann Schmidt Astrograph
3/10/2014

Poly 0.436 0.486 0.5 0.546 0.6 0.656 0.707

Reference: Centroid

Celestron
Rowe-Ackermann
Schmidt Astrograph

April 2014