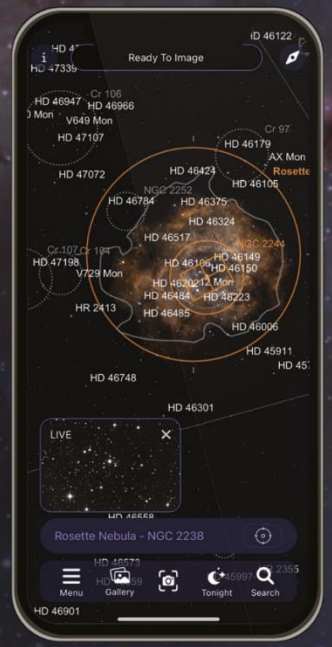
CELESTRON

origin

INTELLIGENT HOME OBSERVATORY

OVER 60 YEARS
OF INNOVATIVE TECHNOLOGY

A LEGACY OF INNOVATION,
A NEW ERA OF DISCOVERY



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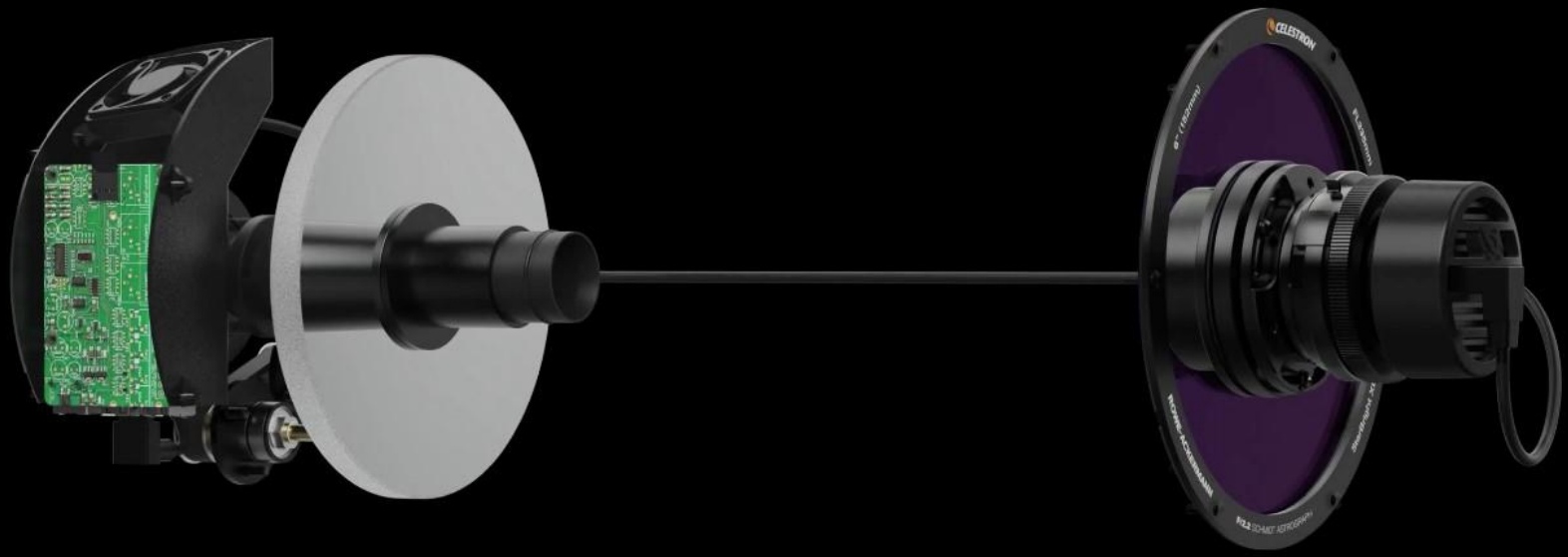

CELESTRON

FEATURES

- **Sony CMOS Colorsensor**
- 1¼”/2” Filter Drawer
- Patented StarSense plate solving technology

- Dew shield and **integrated intelligent dew heater**

- **Patented 6” f/2.2 RASA optics**

- Onboard computer
- Automatic, AI-supported real-time image processing **– based on the EAA principle**
- Motorized autofocus
- Double cooling fans
- Download of RAW files

- Built-in 97.9 Wh **LiFePO4 battery**
- WiFi

- New NexStar Evolution-like mount and fully-fledged tripod

CELESTRON origin

APP CONTROL

- Objects are targeted using plate solving technology and centered in the camera sensor

- New Celestron Origin app, based on SkySafari™

- Automatic selection of the best objects in the current night sky

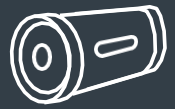
- Automatic, AI-controlled image processing - **based on the EAA principle**

- Audio descriptions and additional information on current objects (in English only)

SPECIFICATIONS

CELESTRON origin

OPTICS



OPTICAL DESIGN	**Rowe-Ackermann Schmidt Astrograph (RASA)**
APERTURE	152mm
FOCAL LENGTH	335mm
EFFECTIVE FOCAL RATIO	f/2.2
OPTICAL COATINGS	StarBright XLT coatings throughout
FILTER DRAWER	Integrated, accepts 1.25" or 2" astroimaging filters

IMAGING SENSOR

CMOS IMAGE SENSOR	**Sony IMX178LQJ, color, back-illuminated**
SENSOR SIZE	8.92mm diagonal
PIXEL SIZE	2.4µm x 2.4µm
NUMBER OF EFFECTIVE PIXELS	6.44M (3096 x 2080)
FIELD OF VIEW	1.27° x 0.85°

INTEGRATED ELECTRONICS

ONBOARD COMPUTER	**Raspberry Pi 4 Model B**
MOUNT	Computerized GoTo altazimuth mount
DEW PREVENTION	Fully automated heating element integrated into front lens, removable dew shield/lens shade
FOCUS MOTOR	Autofocus or manual control
COOLING FANS	One fan for optics, one fan for electronics, both pull air though vents with wire mesh
LED STATUS RING	Indicates status "at-a-glance"

SPECIFICATIONS

PORTS

USB-A	Two on optical tube for accessing raw image files for external processing, one on mount for mobile device charging only
ETHERNET	One on optical tube
AUXILIARY PORTS	Two on optical tube, four on mount

POWER

BATTERY	**Integrated LiFePO4, 97.9 Wh, capable of 6+ hours of use**
POWER INPUT	12V DC adapter for charging internal battery or running on external AC power

WEIGHT

OPTICAL TUBE	4.8 kg (10.6 lb)
MOUNT	7.7 kg (17.0 lb)
TRIPOD	6.4 kg (14.0 lb)
TOTAL SYSTEM	**18.9 kg (41.6 lb)**

CELESTRON ORIGIN PRODUCT IMAGES

ADDITIONAL ACCESSORIES: NEBULA FILTER

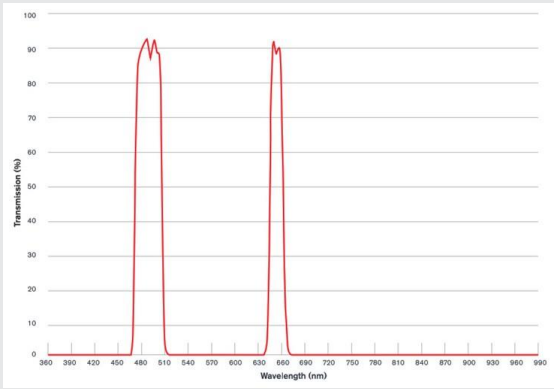
- transmits only the key Hα-Hβ-OIII wavelengths from emission nebulae

- blocks light pollution, boosts image contrast, and darkens the sky background

- **Transmission spectrum:** 85% or greater at key wavelengths (486nm, 496nm/501nm, 656nm) and less than 0.5% transmission elsewhere

- engineered specifically to work with Origin's fast f/2.2 optics

- **Quality Construction**: Constructed of Schott glass with anti-reflective coatings

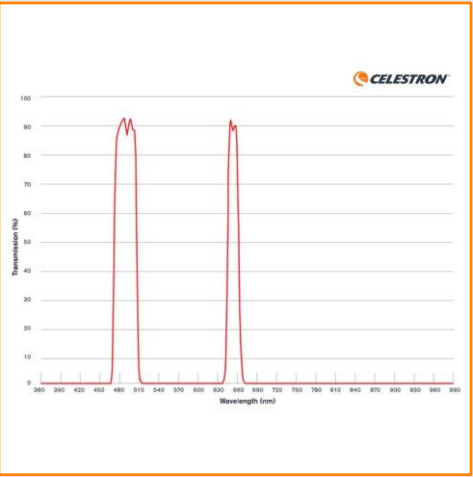


ADDITIONAL ACCESSORIES: PADDED BAG

- **Safeguard your Celestron Origin**: sleek, grab-and-go case for Origin's 6" RASA
- **Easy to load and unload**: Multiple zippers provide instant access to the tube

- Two carrying options
- **Durable triple-layer construction**: ultra-durable and water-resistant 900 denier outer shell, 1.5" thick EPE foam padding, and a super-soft inner lining.

CELESTRON ORIGIN ACCESSORIES



SMART-TELESCOPES IN COMPARISON

ZWO SEESTAR S50

50 mm Apochromatic Triplet
250 mm Focal length (f/5)
Sony IMX462 (2.9 µm)
integr. UV/IR / Dual Band / Dark Filter
Battery life of 6 hours
2.5 kg total weight

€ 799,-

UNISTELLAR ODYSSEY

85 mm Newton Telescope
320 mm Focal length (f/3.9)
3.4-mp sensor (Type still unknown)
Battery life of 5 hours
4 kg total weight

€ 2499,-

UNISTELLAR EQUINOX 2

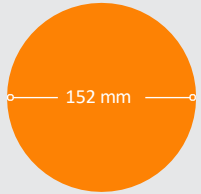
114 mm Newton Telescope
450 mm Focal length (f/4)
Sony IMX347 (1.45 µm)
Battery life of 11 hours
9 kg total weight

€ 2499,-

CELESTRON ORIGIN

152 mm RASA (6")
335 mm Focal length (f/2.2)
Sony Exmor Starvis IMX178 (2.4 µm)
opt. Light Pollution Filter (UHC-L)
Anti-Dew-Heater
18.9 kg total weight

€ 4990,-



SMART-TELESCOPES IN COMPARISON

VAONIS STELLINA

80 mm Apochromatic ED Duplet
400 mm Focal length (f/5)
Sony Exmor Starvis IMX178 (2.4 µm)
integr. Light Pollution Filter (CLS)
Anti-Dew-Heater
12 kg total weight

€ 3999,-

UNISTELLAR EVSCOPE 2

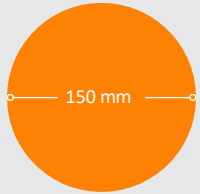
114 mm Newton Telescope
450 mm Focal length (f/4)
Sony IMX347 (1.45 µm)
Battery life of 9 hours
7 kg total weight

€ 4699,-

VAONIS HYPERIA

150 mm Apochromatic ED Triplet
1050 mm Focal length (f/7)
Sony IMX455 Mono (QHY600M Sensor)
7nm Narrowband Filter
75 kg total weight

€ 45000,-



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152 mm RASA (6")
335 mm Focal length (f/2.2)
Sony Exmor Starvis IMX178 (2.4 µm)
opt. Light Pollution Filter (UHC-L)
Anti-Dew-Heater
18.9 kg total weight

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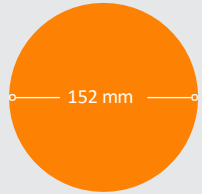

FIRST LIGHTS WITH THE ORIGIN

INTELLIGENT HOME OBSERVATORY