

VESPERA PRO2

WHAT'S NEW

- New optical assembly design
- Optical baffling
- Enhanced image quality and performance
- USB-C data transfer
- Upgraded to a premium tall carbon-fiber tripod
- 5-year warranty

LAUNCH DATE

April 11, 2026

Confidential



Pleiades

SHOT ON VESPERA PRO 2



VESPERA **PRO 2**

The highest definition sensor on any smart telescope, combined with a fully redesigned optical assembly.

With smaller pixels Vespera Pro 2 reach the finest details, while still offering a wide field of view.

APERTURE

50 MM

FOCAL LENGTH

245 MM

SENSOR

IMX676 Starvis 2

RESOLUTION

12.5 MP (3536 x 3536 PX)

RESOLUTION MAX*

50 MP

OPTICAL DESIGN

**Apochromatic Quadruplet
(new assembly)**

WEIGHT

5 KG (11 LBS)

SIZE

**48 x 20 x 9 cm
(15.7 x 7.9 x 3.5 in)**

BATTERY LIFE

11 HOURS

INTERNAL STORAGE

225 GO

* with CovalENS (Mosaic Mode)

New optical assembly (1/2) : Signal, details, contrast, colors: Boosted

A completely



GROUP 1
One rear corrective lens

reimagined optical system



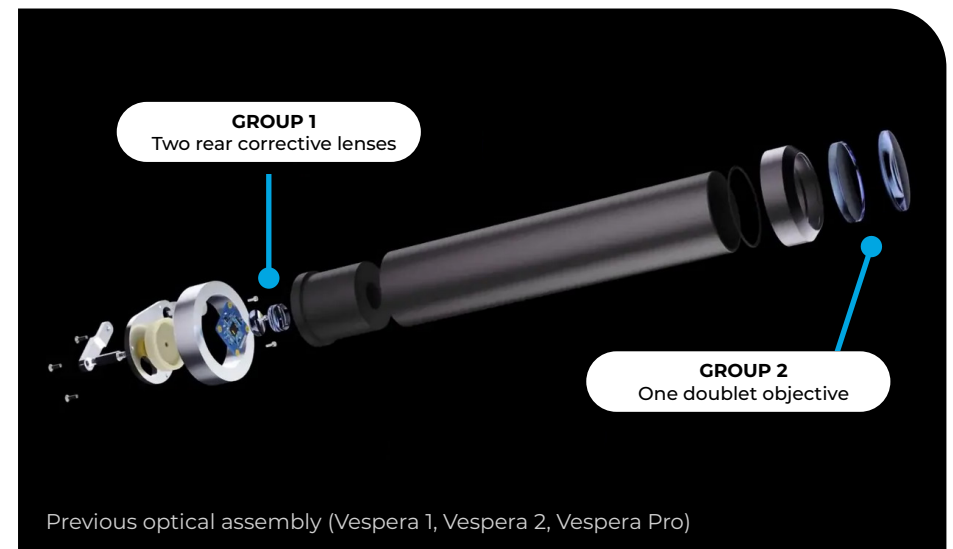
GROUP 2
One singlet

GROUP 3
One doublet objective

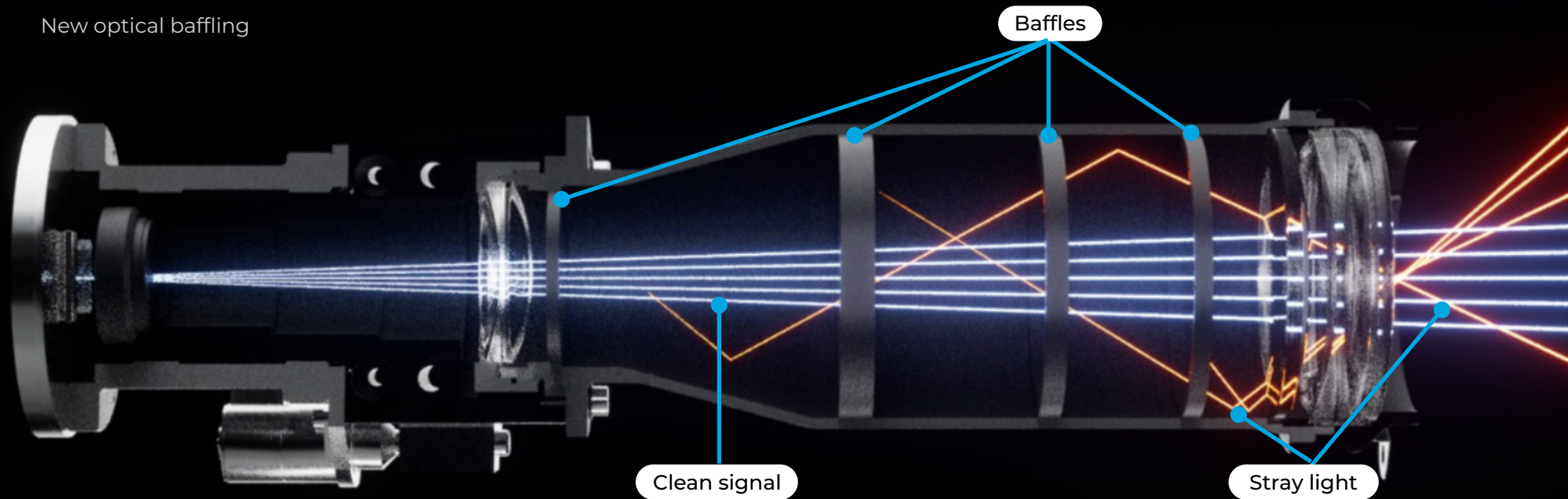
Vespera Pro 2 features a **flat-field apochromatic quadruplet** with a new lens configuration designed to **optimize the optical path** and **enhance image quality**.

The optical system comprises **4 lenses in 3 groups**: 2 front elements, followed by a third lens, and a rear corrective lens—**assembled with high precision** to deliver exceptional performance and consistency.

Among the four lenses, two are **ED (extra-low dispersion) elements**, minimizing chromatic aberration (color fringing), resulting in improved sharpness and more accurate color reproduction.



New optical assembly (2/2) : Signal, details, contrast, colors: Boosted



Stray-light shield for urban environments

Vespera 3 and Vespera Pro 2 are the only smart telescopes on the market to feature built-in optical baffling. These integrated baffles block stray light before it reaches the sensor, ensuring a cleaner optical path.

Better contrast. Faster stacking.

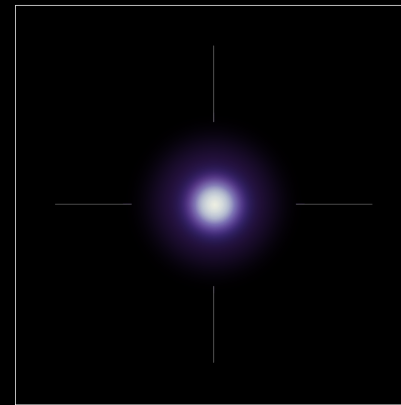
By reducing unwanted light, the system delivers higher contrast and reveals deeper details, even under heavily light-polluted skies. It also reduces the number of rejected frames, enabling faster and more efficient image stacking.

Enhanced image quality and performance (1/2)

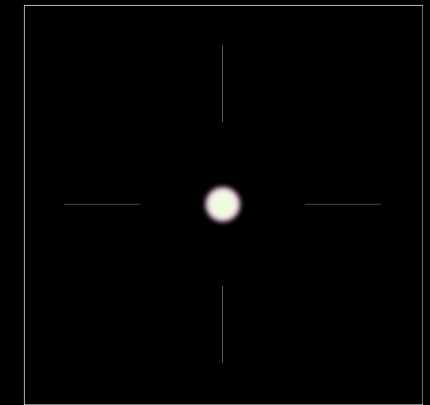


Signal gain for each color channel

VESPERA II
VESPERA PRO



VESPERA III
VESPERA PRO2



40 μ m

Spot diagram (center of the field of view)

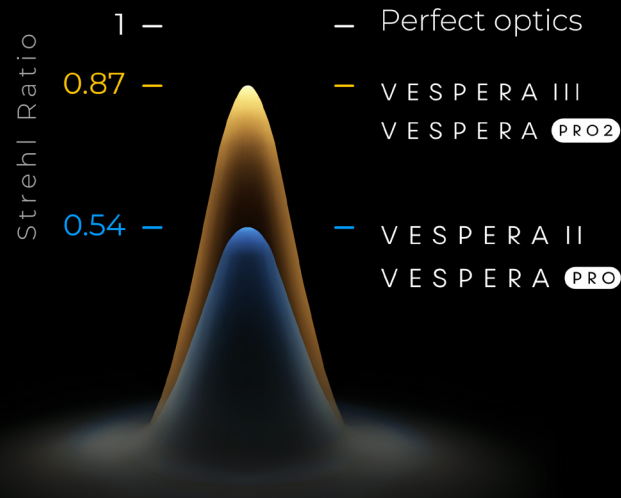
More signal, faster acquisition

Thanks to the new optical design, more of the signal reaches the sensor, meaning slightly faster acquisition and cleaner image data, especially in the blue channel.

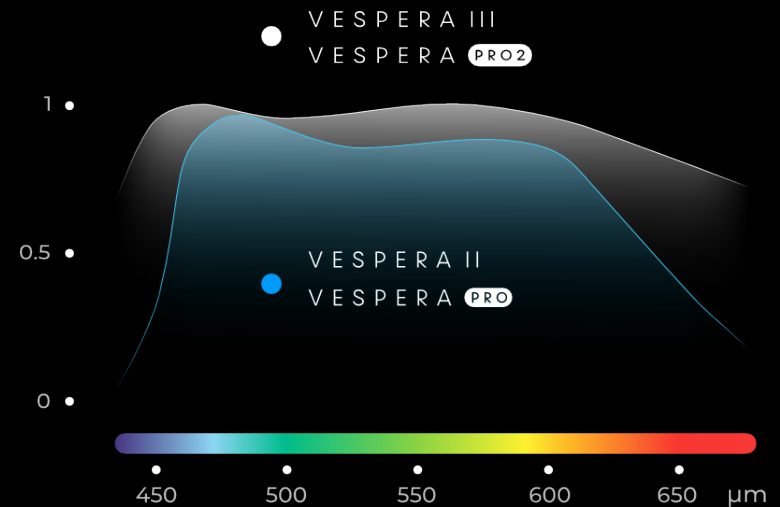
Sharper stars and details

The Spot Diagram is like an eye test for a telescope. It shows how a single point of light spreads out on your camera sensor after passing through the telescope. **The smaller and tighter the spot, the sharper the image.**

Enhanced image quality and performance (2/2)



Point Spread Function Diagram



Optical performance across the color spectrum

Less chromatic aberration

When light from a point source passes through a telescope, it spreads into a spot. The Point Spread Function represents how the light is distributed within it. A more concentrated spot and a higher peak intensity means better image quality with less chromatic aberration.

More color contrast

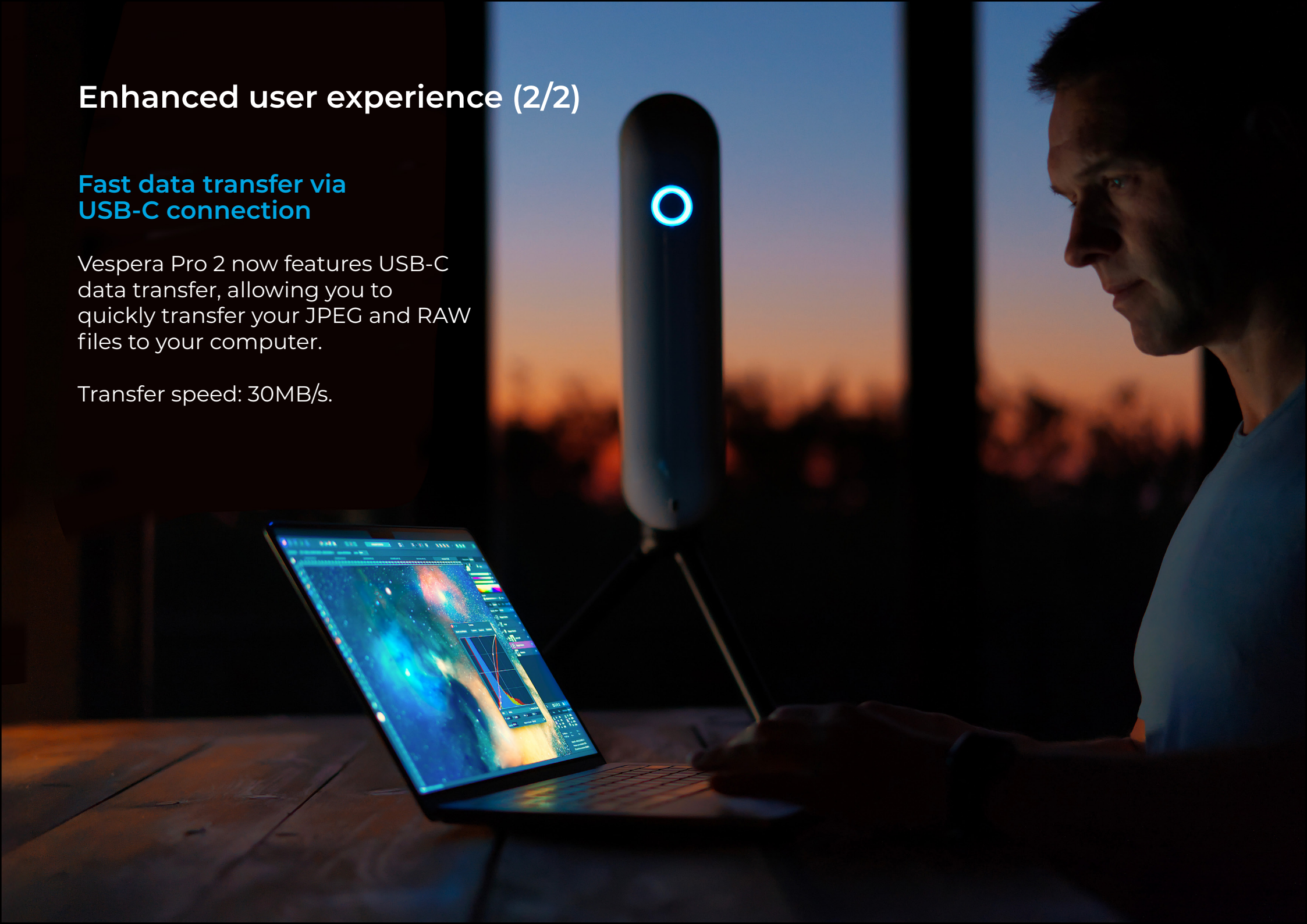
Because of the nature of light, optical performance varies with wavelength. The new Vespera range offers more consistent image quality across the spectrum, with improved performance in the blue and red.

Enhanced user experience (2/2)

Fast data transfer via USB-C connection

Vespera Pro 2 now features USB-C data transfer, allowing you to quickly transfer your JPEG and RAW files to your computer.

Transfer speed: 30MB/s.



Enhanced user experience (1/2)

Premium carbon-fiber tripod

- Built-in bubble level for precise alignment
- Carbon fiber construction for a lightweight and durable design
- Adjustable 3-section legs for flexible height positioning
- Weight: 0.9 kg (1.98 lb)
- Maximum height: 91 cm (35.8 in)
- Closed length: 43 cm (16.9 in)



Price & Availability

RETAIL PRICE

2 990 € TTC | USD 2,990

Vespera Pro 2
+ Hygrometer Sensor
+ Aluminium Carrying Case
+ Tall Carbon-Fiber Tripod

5-YEAR WARRANTY

With the introduction of Vespera Pro 2 and Vespera 3, Vaonis extends its product warranty from 3 to 5 years.

In case of a manufacturing defect, the product is covered by Vaonis for 5 years, excluding damage resulting from misuse or improper maintenance.

AVAILABILITY

Starting Saturday, April 11, 2026 Vespera Pro 2 will be available on vaonis.com and through authorized retailers.



Technical specifications

V E S P E R A II

Launch date	January 2024
Application	Deep sky, moon, sun
Weight - Vespera only	5 kg (11 lb)
Total weight	N/A (no tripod included)
Size (closed)	40x20x9 cm 15.7x7.9x3.5 in
Sensor	Sony IMX585
Native resolution	8.3 MP (3840 x 2160 px)
Max resolution (CovalENS)	24 MP
Pixel size	2,9 µm
Optical design	Apochromatic quadruplet (2 groups of 2 lenses)
Aperture	50 mm
Focal length	250 mm
Focal ratio	F/5
Field of view	2.5° x 1.4°
Max FOV (CovalENS)	4.3° x 2.4°
Storage	25 GB
Battery life	4 hours
Temperature range	0–40 °C ≈ 32–104 °F
Hygrometer	Optional
Mount	Motorised altaz Go-To
Connectivity	Wi-Fi
Connector type	USB-C
Warranty	3 years
Included in the starter pack	Bubble level

V E S P E R A III

Launch date	April 2026
Application	Deep sky, moon, sun
Weight - Vespera only	5 kg (11 lb)
Total weight	6 kg (13.2 lb) with tripod
Size (closed)	40x20x9 cm 15.7x7.9x3.5 in
Sensor	Sony IMX585
Native resolution	8.3 MP (3840 x 2160 px)
Max resolution (CovalENS)	24 MP
Pixel size	2,9 µm
Optical design	Apochromatic quadruplet (4 lens in 3 groups) NEW
Aperture	50 mm
Focal length	245 mm NEW
Focal ratio	F/4.9
Field of view	2.5° x 1.4°
Max FOV (CovalENS)	4.3° x 2.4°
Storage	115 GB NEW
Battery life	11 hours NEW
Temperature range	0–40 °C ≈ 32–104 °F
Hygrometer	Built-in NEW
Mount	Motorised altaz Go-To
Connectivity	Wi-Fi
Connector type	USB-C w/ Data transfer NEW
Warranty	5 years NEW
Included in the starter pack	Tall aluminium tripod NEW

V E S P E R A **PRO 2**

Launch date	April 2026
Application	Deep sky, moon, sun
Weight - Vespera only	5 kg (11 lb)
Total weight	9 kg (19.8 lb) w/ case & tripod
Size (closed)	40x20x9 cm 15.7x7.9x3.5 in
Sensor	Sony IMX676 Starvis 2
Native resolution	12.5 MP (3536 x 3536 px)
Max resolution (CovalENS)	50 MP
Pixel size	2,0 µm
Optical design	Apochromatic quadruplet (4 lens in 3 groups) NEW
Aperture	50 mm
Focal length	245 mm NEW
Focal ratio	F/4.9
Field of view	1.6° x 1.6° (square format)
Max FOV (CovalENS)	3.2° x 3.2° (square format)
Storage	225 GB
Battery life	11 hours
Temperature range	0–40 °C ≈ 32–104 °F
Hygrometer	Built-in
Mount	Motorised altaz Go-To
Connectivity	Wi-Fi
Connector type	USB-C w/ Data transfer NEW
Warranty	5 years NEW
Included in the starter pack	Tall carbon-fiber tripod NEW Aluminium carrying case

SMART FEATURES



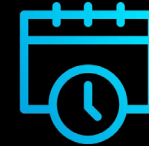
LIVE IMAGE STACKING

Watch your astrophotography images improve in real time as exposures are stacked live.



MOSAIC MODE

Capture ultra-wide cosmic panoramas by automatically stitching multiple fields of view together.



PLAN MY NIGHT

Schedule your observations in advanced and collect hours of observation in the morning.



MULTI NIGHT MODE

Collect data seamlessly over several nights to reveal stunning deep-sky details.



REAL-TIME FOCUS CORRECTION

Enjoy perfectly sharp stars thanks to continuous, on-the-fly focus adjustments.



AI VOICE ASSISTANT

An interactive companion that answers questions about the cosmos using a voice assistant.

OPTIONAL ACCESSORIES

All current Vaonis accessories, including the filters, remain fully compatible with Vespera Pro 2 and Vespera 3.



**LIGHT POLLUTION
FILTER**

Enhances contrast and reveal clearer, sharper deep-sky objects even under city skies.



SOLAR FILTER

Allows to observe our star—tracking sunspot activity or capture solar eclipses.



DUAL BAND FILTER

A narrowband filter designed to reveal the finest details of emission nebulae.



BACKPACK

Lightweight backpack to carry and protect your smart telescope anywhere.

About Vaonis

Founded in Montpellier in 2016, Vaonis is the creator of the world's first smart telescope Stellina, pioneering a new way of exploring the night sky and inspiring a new era of stargazing.

By combining technological innovation with ease of use, Vaonis makes astronomy accessible to everyone — from passionate stargazers to complete beginners.

With an international presence, the company distributes its products worldwide and has been honored with several prestigious awards, including CES Innovation Awards, for its groundbreaking approach to astronomy.

vaonis
SHARE YOUR UNIVERSE