VESPERA PRO 2

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

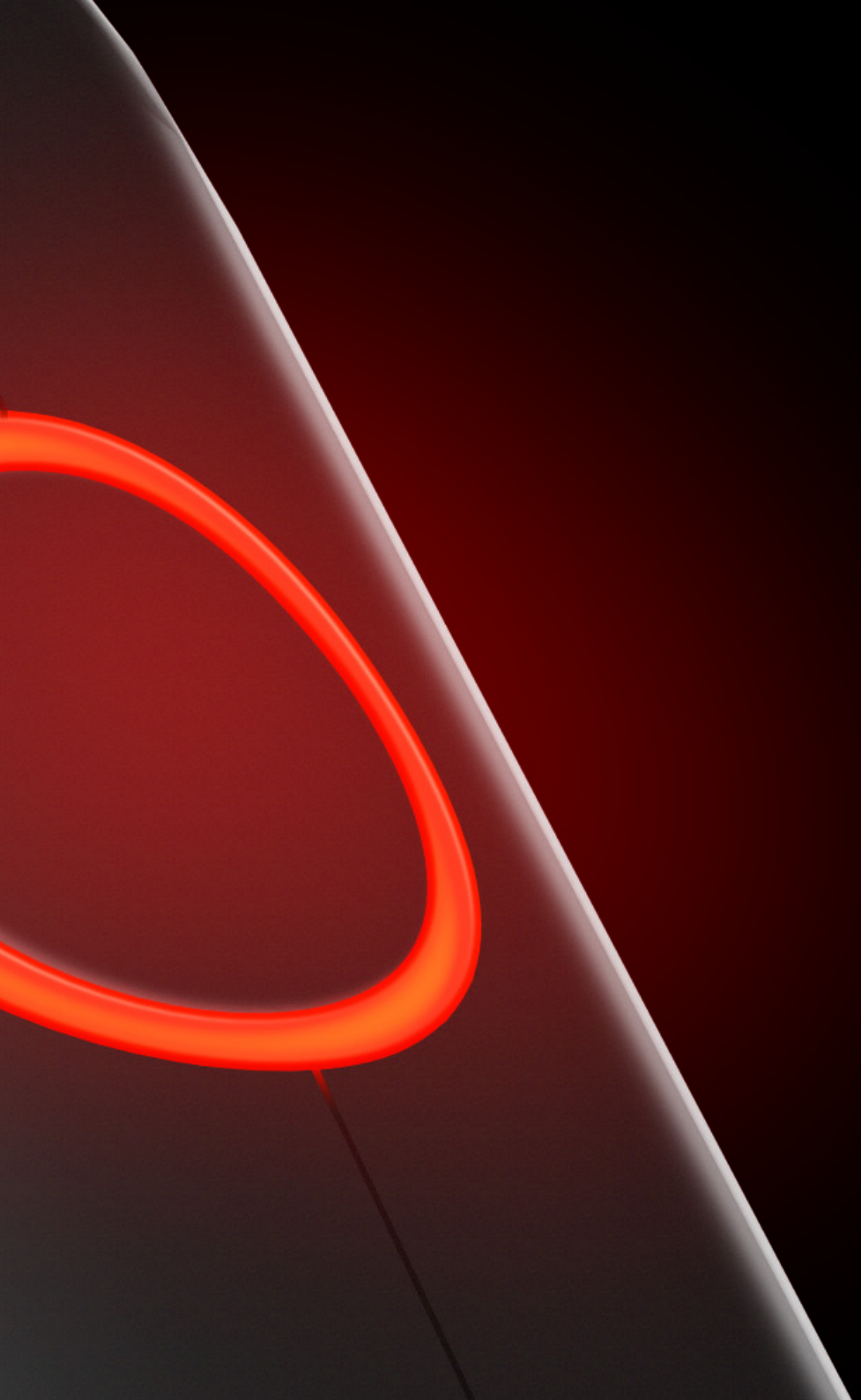
LAUNCH DATE

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)

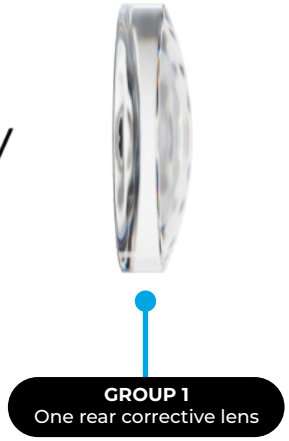
BATTERY LIFE
11 HOURS

INTERNAL STORAGE
225 GO

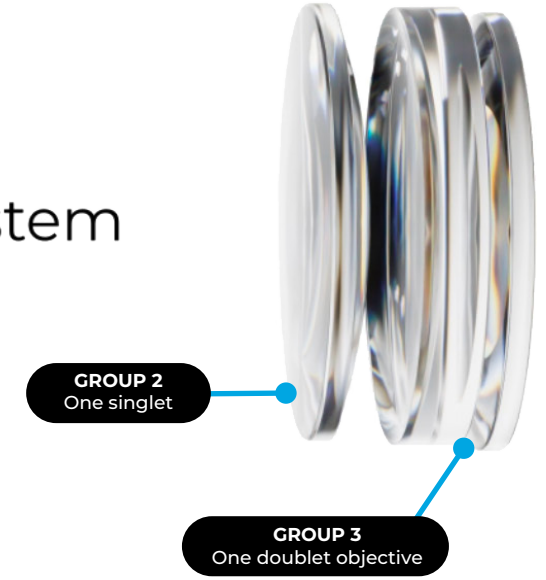
* with CovalENS (Mosaic Mode)

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

A completely



reimagined optical system



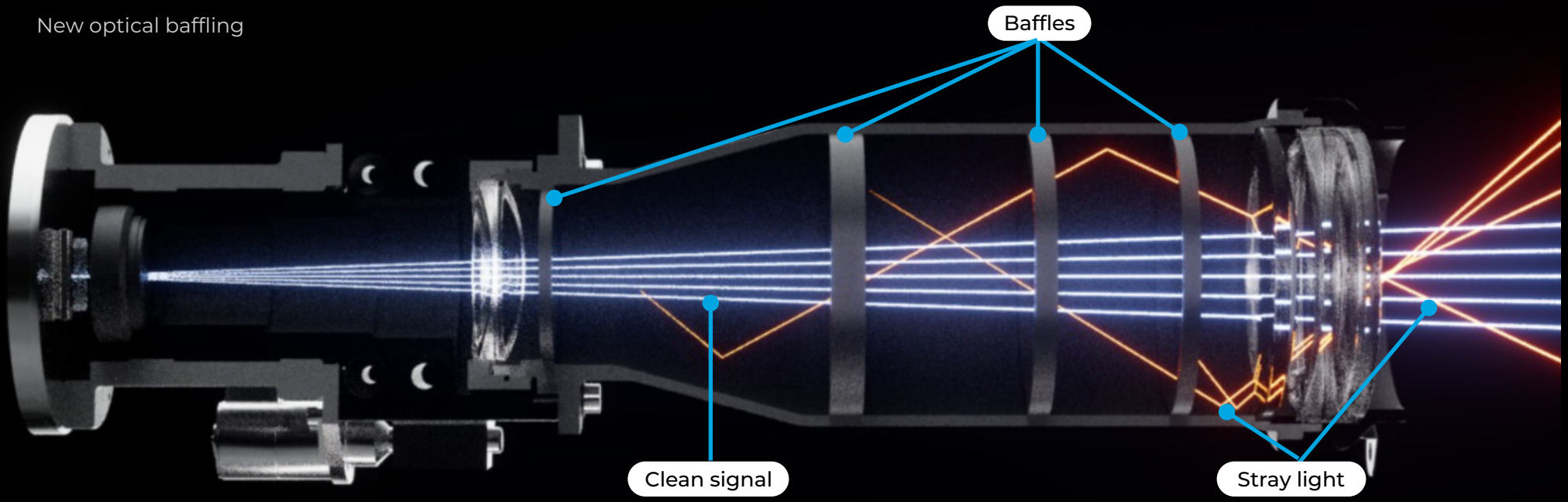
Vespera Pro 2 features a **flat-field apochromatic quadruplet** with a new lens configuration designed to **optimize the optical path** and **enhance image quality**.

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.

Previous optical assembly (Vespera 1, Vespera 2, Vespera Pro)

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



Stray-light shield for urban environments

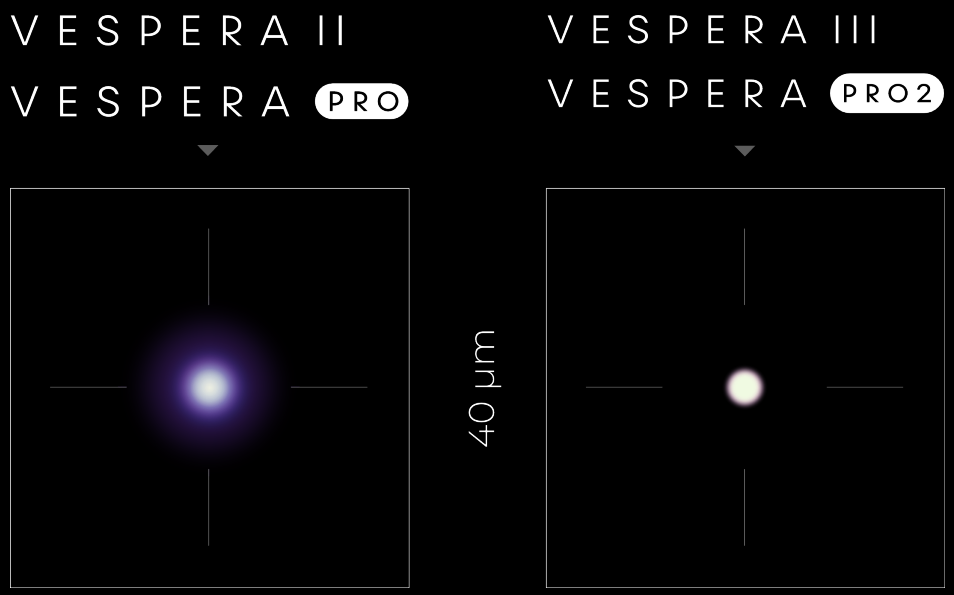
Vespera 3 and Vespera Pro 2 are the only smart telescopes on the market to feature built-in optical baffling. These integrated baffles block stray light before it reaches the sensor, ensuring a cleaner optical path.

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



Spot diagram (center of the field of view)

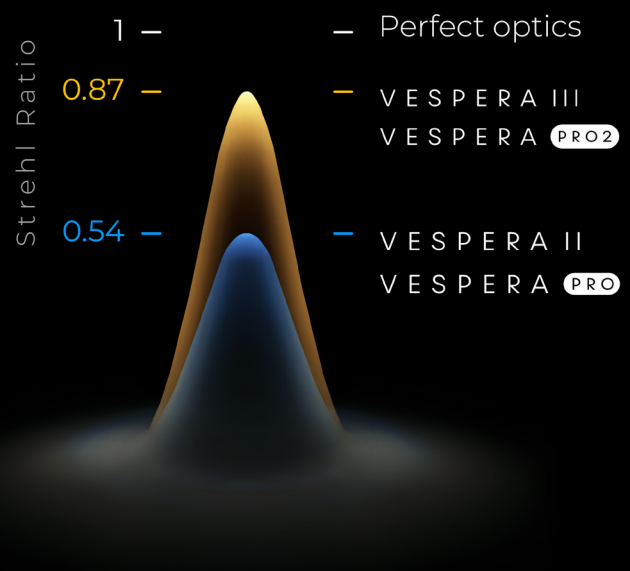
More signal, faster acquisition

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.

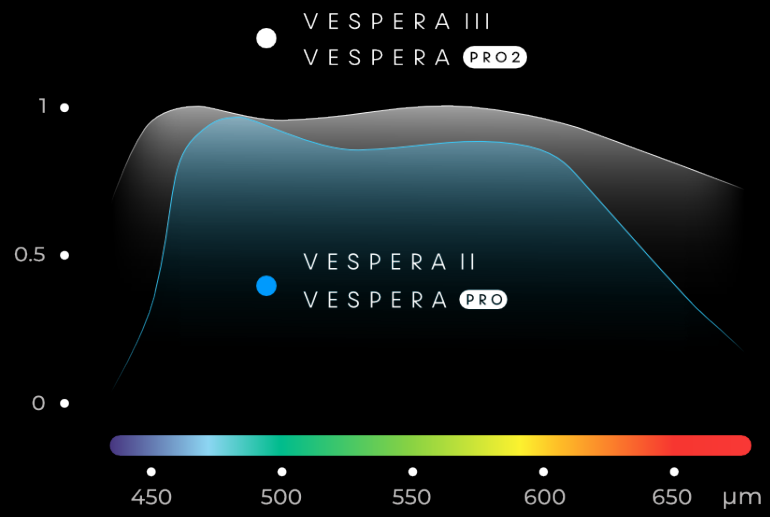
Sharper stars and details

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

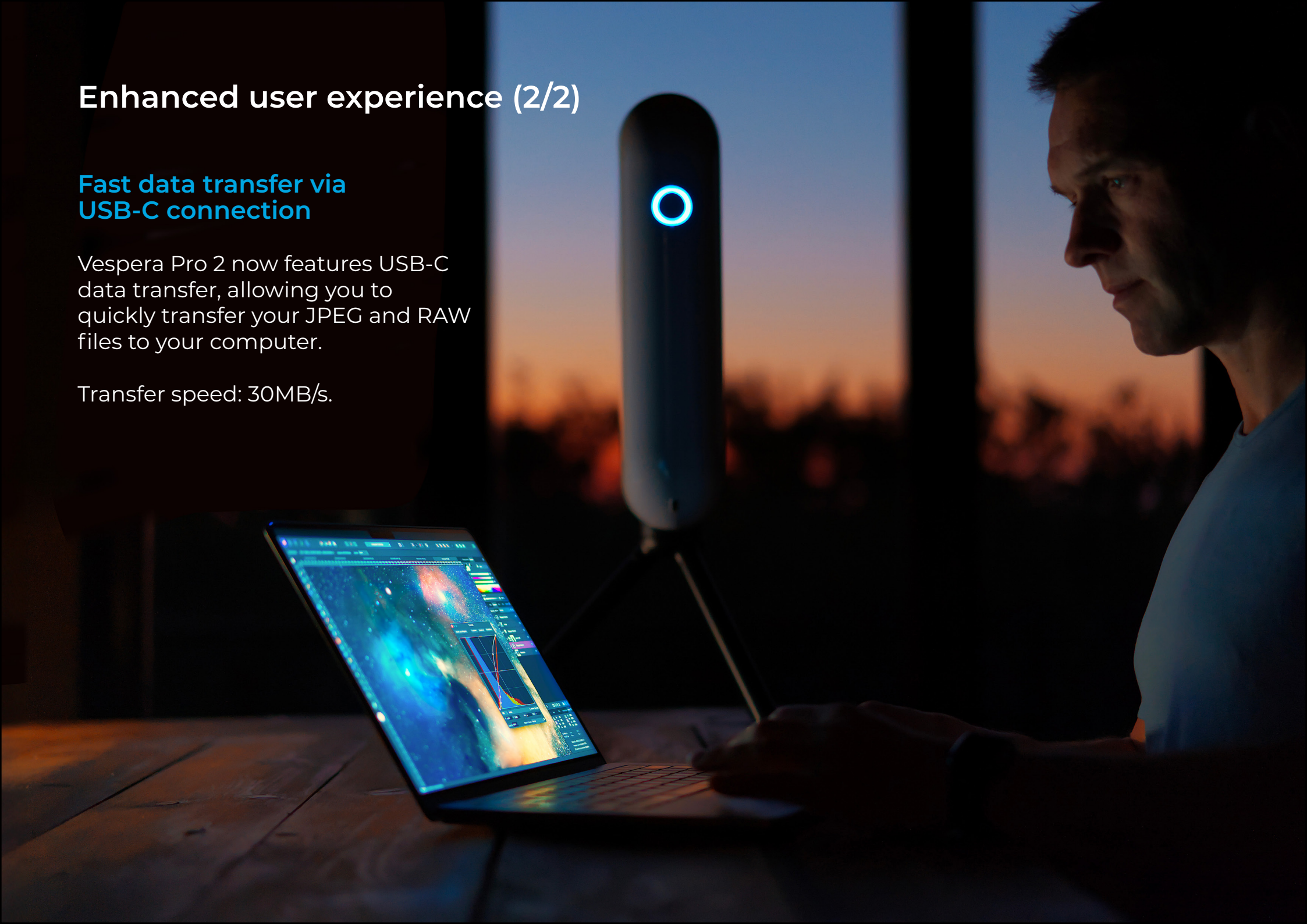
Because of the nature of light, optical performance varies with wavelength. The new Vespera range offers more consistent image quality across the spectrum, with improved performance in the blue and red.

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

	VESPERA II	VESPERA III	VESPERA PRO2
Launch date	January 2024	April 2026	April 2026
Application	Deep sky, moon, sun	Deep sky, moon, sun	Deep sky, moon, sun
Weight - Vespera only	5 kg (11 lb)	5 kg (11 lb)	5 kg (11 lb)
Total weight	N/A (no tripod included)	6 kg (13.2 lb) with tripod	9 kg (19.8 lb) w/ case & tripod
Size (closed)	40x20x9 cm | 15.7x7.9x3.5 in	40x20x9 cm | 15.7x7.9x3.5 in	40x20x9 cm | 15.7x7.9x3.5 in
Sensor	Sony IMX585	Sony IMX585	Sony IMX676 Starvis 2
Native resolution	8.3 MP (3840 x 2160 px)	8.3 MP (3840 x 2160 px)	12.5 MP (3536 x 3536 px)
Max resolution (CovalENS)	24 MP	24 MP	50 MP
Pixel size	2,9 µm	2,9 µm	2,0 µm
Optical design	Apochromatic quadruplet (2 groups of 2 lenses)	Apochromatic quadruplet (4 lens in 3 groups) NEW	Apochromatic quadruplet (4 lens in 3 groups) NEW
Aperture	50 mm	50 mm	50 mm
Focal lenght	250 mm	245 mm NEW	245 mm NEW
Focal ratio	F/5	F/4.9	F/4.9
Field of view	2.5° x 1.4°	2.5° x 1.4°	1.6° x 1.6° (square format)
Max FOV (CovalENS)	4.3° x 2.4°	4.3° x 2.4°	3.2° x 3.2° (square format)
Storage	25 GB	115 GB NEW	225 GB
Battery life	4 hours	11 hours NEW	11 hours
Temperature range	0–40 °C ≈ 32–104 °F	0–40 °C ≈ 32–104 °F	0–40 °C ≈ 32–104 °F
Hygrometer	Optional	Built-in NEW	Built-in
Mount	Motorised altaz Go-To	Motorised altaz Go-To	Motorised altaz Go-To
Connectivity	Wi-Fi	Wi-Fi	Wi-Fi
Connector type	USB-C	USB-C w/ Data transfer NEW	USB-C w/ Data transfer NEW
Warranty	3 years	5 years NEW	5 years NEW
Included in the starter pack	Bubble level	Tall aluminium tripod NEW	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

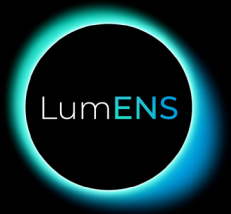
Schedule your observations in advanced and collect hours of observation in the morning.

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

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