Born for the night

Adapts to DJI M300 & M350 RTK

S2 Pro

AI Night Vision
Drone Camera

DEEPTHINK

S2 Pro

AI Night Vision Drone Camera

S2 Pro was released by Deepthink in 2023. Compatible for DJI M300&M350 RTK, S2 Pro features for strong low-light performance with full-color in nearly total darkness. It's also a hybrid payload night vision camera paired with laserrange finder and zoom. With 30x optical Zoom, 160x max zoom, S2 Pro offers high quality imagery even with long distance.

The laser rangefinder obtains accurate coordinates of a location or object with detection range of 5m-1500m. S2 Pro has been in a wide range of unmanned applications including law enforcement, search and rescue, fire fighting, oil and gas survey in the night.

AI-powered ISP algorithm, full-color HD imaging in low light down to 0.0001 lux

4MP pixel zoom camera, with 160X integrated zoom

Laser rangefinder, accurate range measurement in 5-1500m

Intelligent HDR/3A, high imaging quality, and 2K resolution HD picture

Refuse trailing, effectively reduce the night moving objects 90% trailing

Real-time image transmission, real-time view of the scene screen, abnormalities at a glance

IP55, fearless of rain and snow

Operating range -25°C to 60°C(-13°F~140°F), no worries in extreme scenarios

Low wind resistance design

high-density aluminum alloy shell heat dissipation.Overcome the extreme operating environment of the drone

Night vision zoom camera

30X optical zoom,
160X integrated zoom,
4MP

1/1.8" Super Starlight CMOS,
0.0001 Lux Full Color HD Imaging

Laser rangefinder

measurement range: 5-1500 meters

Wavelength 905nm
accuracy in ±1m
real-time display of positioning altitude

Richly-defined color above 0.0001 lux

Generating images based on AI-powered ISP algorithm, this new technology enables users to see crisp, true-color images and take photos/videos in nearly complete darkness(0.0001 lux). Meanwhile, S2 Pro has excellent field of view and ultra-long night visibility distance.
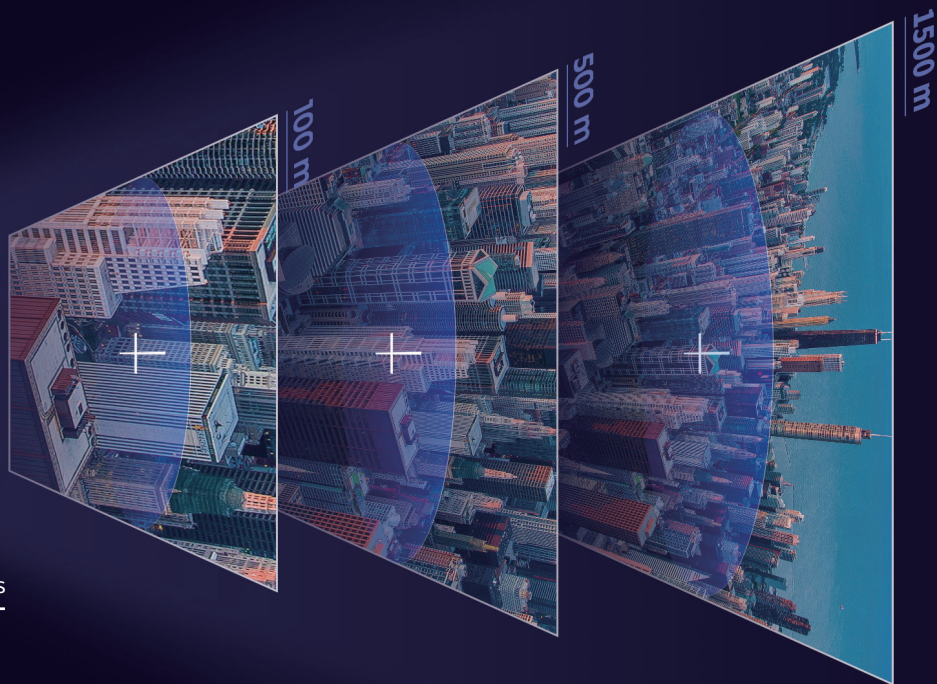
0.0001 Lux

1/1.8" Super Starlight CMOS

Accurate Distance Measuring

Equipped with a high-precision laser rangefinder, the detection distance is up to 1500 meters, real-time positioning and learn the position information of 5-1500m target.

100 m

500 m

1500 m

the detection distance is up to 1500 meters

Before

After

HDR Imaging in all conditions

In complex lighting scenes such as nighttime and city traffic, imaging is easily affected by light intensity, resulting in the loss of imaging details. The full-color zoom night vision camera has a built-in HDR function that boosts the high dynamic range to 120dB, restores true colors, and ensures that image details are not lost.

Before

Lift one's head above the fog

In rain, fog, snow, and other environments, light is affected by the occurrence of different degrees of attenuation, which in turn leads to blurred imaging. De-fog kinetic energy automatically analyzes each pixel in the picture, calculates the degree of attenuation of light through the obstacles, through the algorithm to compensate for the imaging, and ultimately realizes the de-fogging, presenting high-definition imaging.

After

Before

After

IR-Cut founction

Due to the influence of different wavelengths of light, the final image of the color is prone to deviation from the color seen by the naked eye, especially in the night environment. The light is extremely weak and difficult to image, and color deviation is more serious. Turning on the IR-CUT function can capture invisible light sources, thus ensuring that the target is prioritized in extremely dark scenes.

S2 Pro Night Vision

0.3 Lux   0.03 Lux   0.01 Lux   0.003 Lux

Competitor

0.3 Lux   0.03 Lux   0.01 Lux   0.003 Lux

AI Night Vision Drone Camera S2 Pro

Spec

Sensor	1/1.8" Starlight CMOS
Minimum Illumination	Full color：0.0001 Lux
Image Resolution	4MP，Full color 2688*1520P
Video Frame	5fps ~ 30fps
Digital Noise	Support
AI HDR	Support
Exposure Mode	Auto

Zoom

Focal	f=7.1~171mm， 30X optical zoom、160X max zoom Equivalent 34.8-820.8mm
Aperture	F 1.6 - F 5.1
Field of View	D:59.2° WIDE; 2.5° TELE H:34.6° WIDE; 1.4° TELE V:66.7° WIDE; 2.9° TELE
Day-night Mode	Electric IR-CUT

AI Night Vision Drone Camera S2 Pro

Laser Ranging

	Effective Distance	5 - 1500 m
	Wavelength	905 nm
	Measurement Accuracy	± 1 m

PTZ

	Angular Jitter	± 0.008°
	Control Rotation Range	P:-120°～＋30°, Y:±320°
	Interface	DGC 2.0
	Power	13.6 V / 2 A

Interface

General Spec

	SD card	Micro SD（Max 128G)
	Circuit Power	7 W
	Protection Level	IP 55
	Working Humidity	-25℃~60℃(-13°F~140°F), Humidity<95% (Condensation-free)
	Size	L 179mm * W 126.5mm* H 158mm
	Weight	About 885g ± 5

LET' S LIGHT UP
THE WORLD

The world's most advanced AI-ISP night vision hub.

Founded in 2017, Deepthink is the world's first start-up that uses AI ISP to deliver true-color night vision hardware. Product lines consist of AI night vision cameras, uav cameras and monoculars. Global markets include the US, Australia, Japan, Korea, as well as China.

As the world's leading night vision hub, Deepthink is the only company with the ability to achieve richly-defined color even in the darkest moment, which is around 0.0001lux. It's committed to unlock night adventure to users all over the world.

DEEPTHINK   DEEPTHINK   www.deepthink.ai