SVG5 Series AI Night Vision Monocular

- **50W black light black-white imaging Monocular(SVG5/5P)**

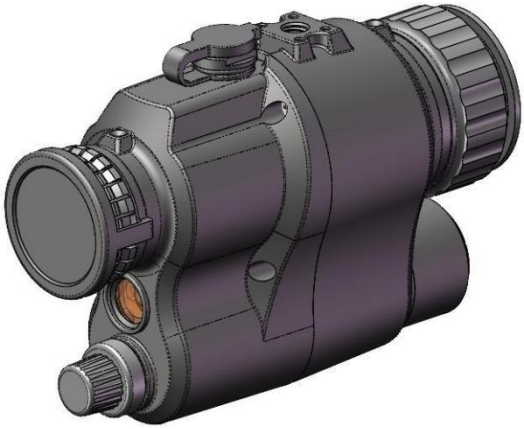
product overview

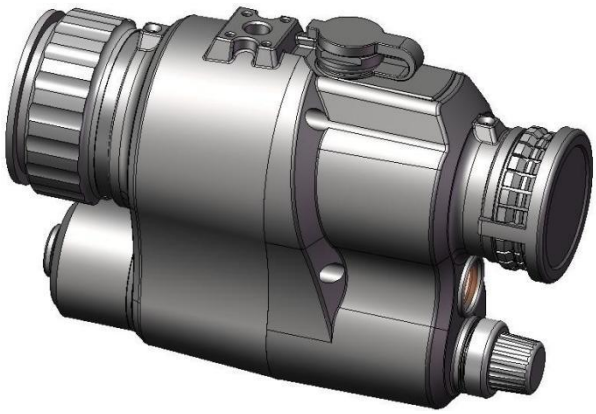
The SVG5 Series night vision monocular adopts a 1 inch large-target-surface super-sensitive CMOS sensor, processed by an AI ISP (Image Signal Processor) image engine. The AI algorithm enhances imaging performance in low-light to no-light environments; without supplementary lighting such as infrared or laser sources, it can achieve imaging under an illumination of 1×10^{-4} lux (even at night). Additionally, its imaging range is not limited by the distance of illuminators, giving it a unique advantage in large-scale night scenarios.

This monocular is powered by a lithium battery and can also be supplied with power via an auxiliary DC 5V battery pack or external power source. It features low power consumption and a compact structure. It can be used handheld, head-mounted, or mounted on other devices, and is suitable for professional scenarios.

product feature

- Can image clearly in 0.00005/0.0001Lux (no moon and no stars in the wild), see people, animals, objects, etc.
- Black and white imaging / color imaging two complete sets
- With 18650 battery, replaceable battery, or external battery pack
- Support little light night vision video, photo, for evidence collection, investigation, recording, etc;
- Equipped with AI ISP image engine architecture, it achieves no smear, low noise and clearer night vision effect.
- Night imaging does not need supplementary light, concealed operation, not easy to be anti-reconnaissance.
- Single button operation, support multiple settings brightness, contrast, frame rate, etc.





technical parameters

parameter	parameter items	parameter specification	
master chip	performance	Dual-core ARM Cortex A55 with built-in NPU processing engine	
	Model No.	SVG5	SVG5P
CIS sensor	Imaging	50W Black-White	
	Sensor Size	1 Inch Progressive Scan CMOS	
	Pixel Size	18 μm	
	Sensor Resolution	800 * 600	
	Spectral sensitivity	800nm ~1000nm	
	Frame Rate	50/100 HZ	
	Min Illumination(no extra light)	0.0001 Lux	0.00005 Lux
Display	Screen	Micro OLED	
	Size	0.5 Inch	
	Resolution	1600 * 1200	
	Screen brightness adjustment	1-8 level	
Optics	objective lens focal length	24.5mm	
	F/#	F1.15	
	Field of VIew(FOV)	43°	
	Exit pupil diameter	6mm	
	pupil distance	35mm	
	Visual magnification	1X	
	Minimum focusing distance	300mm	
	Eyepiece diopter	-6D ~ +4d	
image	Photo pixel	800*600 pixels	
	image stabilization	electronic image stabilization	
video	Video resolution	800*600@50~100fps	
business	key distribution	Key or rotary encoder: switch/infrared light control, menu/return/shooting mode, confirmation, screen brightness-, contrast	

	language	Simplified Chinese, English
storage	Memory card interface	Support built-in storage interface (up to 256G), support data line file transmission
general specifications	power supply	1 * 18650 lithium battery, aerial 5pin plug for external power
	charging protection	Support overshoot, reverse connection, and short circuit protection
	size	115mm*46mm *80mm
	weight	260g (NO Battery)
	power dissipation	MAX ≤2.5w
	Environmental adaptability	-25℃~60℃, humidity less than 95%(no condensation)
	Waterproof	IP 67, metal housing
optional functions	WiFi	Support optional WiFi video transmission
	Peripheral Interface	Support optional tipper bracket, custom bracket
	illuminator interface	Support optional infrared fill light function

product application

- **Head-mounted night vision goggles**: used for reconnaissance, combat, sentry, anti-terrorism, driving with lights off (military vehicles)

- **Sight (gun sight)**: used for training, aiming, outdoor hunting, shooting range actual combat, etc.

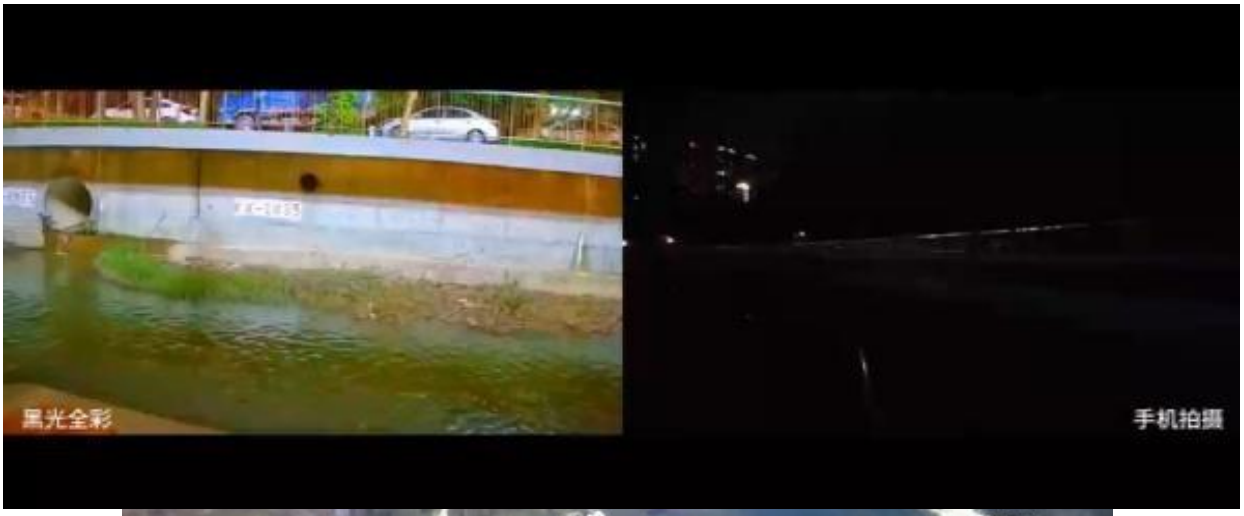
- **Handheld night vision device:**used for patrol, public security law evidence collection, equipment detection, outdoor search, etc.

effect display

A certain brand “S...” **SVG5 Series products**

0.0001Lux imaging effect comparison (no stars and moon environment)

SVG20F Apple iPhone 16



size data