

UAVISUS

S1



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UAVISUS S1

The S1 VTOL UAV is tailored for wildfire monitoring and disaster response, featuring a quick-release interface for rapid payload swaps like thermal cameras and optoelectronic pods. It ensures efficient situational awareness with multi-source data collection.

With air relay and ground station relay modes, the S1 overcomes signal blockages in tough terrains, enabling real-time data and seamless team coordination, critical for emergency response and disaster rescue.

4.15 m

24.8 kg

ADS-B

240 mins



Real-Time Video & HD Transmission

The pod's 30x zoom and low latency provide clear wildfire monitoring, even in smoke or fog.

AI Recognition

The AI system captures wildfire details, enabling precise target tracking, close-ups, and video recording.



Relay Networking

The S1 ensures strong communication in urban and mountainous areas, supporting real-time emergency responses.

Multi-Terminal Networking

Teams can switch controls between terminals for better collaboration during long-distance wildfire inspections.



Visible light camera of the electro-optical pod

Optical zoom	30X	Target	Size (m)	Detection distance (km)	Recognition distance (km)
Digital zoom	2X	People	0.5 × 1.8	4	2
Horizontal FOV	63.7° ~ 1.3°	Vehicle	3 × 6	9	5
Sensor	1/2.8" color CMOS	Detection and identification distance table (@ Visibility ≥ 25 km & Atmospheric temperature = 25°C)			
Effective pixels	1920 × 1080				

Thermal imaging camera of the electro-optical pod

Detector type	Vanadium oxide	Target	Size (m)	Detection distance (km)	Recognition distance (km)
Number of pixels	640 × 512	People	0.5 × 1.8	1.87	0.72
Focal Length	60 mm / 25 mm	Vehicle	3 × 6	5.3	2
FOV	7.3°(H) × 5.8°(H) / 17.4°(H) × 14°(H) (5%)	Detection and identification distance table (@ Visibility ≥ 25 km & Atmospheric temperature = 25°C)			
Electronic zoom FOV	3.6°(H) × 2.9°(H) / 1.8°(H) × 1.4°(H) (5%)				
FOV switching time	≤ 1 s				
NETD	< 75 mK(0.075°C) @ 300 K(27°C)				

Laser ranging unit of the electro-optical pod

Working wavelength	1.55 μm
Measuring range	Detection Range: <ul style="list-style-type: none"> Vehicle: ≤ 3 km Building: ≤ 5 km Conditions: <ul style="list-style-type: none"> Visibility ≥ 10 km Temperature = 25°C Reflectivity ≥ 0.3 Humidity ≤ 80%
Ranging accuracy	± 2 m



GCS 2000 Dual-Screen Ground Station

The GCS2000 features a 15.6-inch and 13.3-inch high-brightness dual-screen display, powered by an i5-1235U processor. It offers precise UAV control with dual joysticks, knobs, a touch-enabled surface, and customizable buttons. With an IP54 rating and 5G connectivity, it includes versatile interfaces like USB, HDMI, Ethernet, and audio ports for seamless integration with external devices.

Real-Time Video and Data Transmission

This ground station supports real-time video and data transmission from drones, UGVs, USVs, and other platforms. It enables live monitoring and data exchange, handling sensor data, navigation, and mission information with ease.



Flexible Payload Adaptation

A quick-release interface allows the S1 to switch payloads easily for various tasks.

Aerial photogrammetry module



V-CAM10

Oblique module



D-OP4000



D-OP5000

LiDAR module



D-LiDAR500



DV-LiDAR22



DV-LiDAR30

