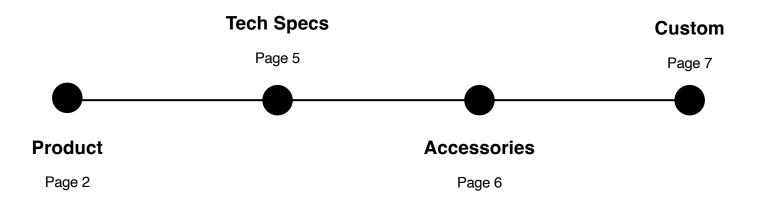






## CONTENTS



# **UAVISUS S1**

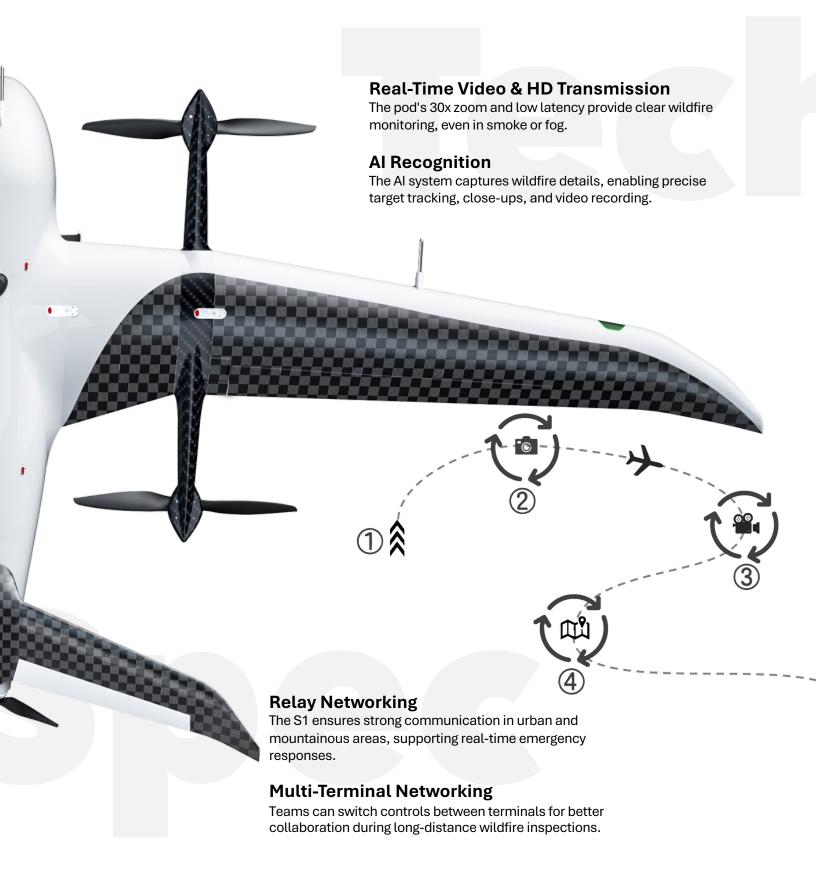
The S1 VTOL UAV is tailored for wildfire monitoring and disaster response, featuring a quick-release interface for rapid payload swaps like thermal cameras and optoelectronic pods. It ensures efficient situational awareness with multi-source data collection.

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.











### **Infrared Thermal Imaging**

**Visible Light Camera** 



Visible light camera of the electro-optical pod

Effective pixels

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 or	ad identification d	istanco tablo (@ Visibility > 25 km	& Atmospheric temperature = 25°C)

Detection and identification distance table (@ Visibility ≥ 25 km & Atmospheric temperature = 25°C)

### Thermal imaging camera of the electro-optical pod

Detector type	Vanadium oxide
Number of pixels	640 × 512
Focal Length	60 mm / 25 mm
FOV	7.3°(H) × 5.8°(H) / 17.4°(H) × 14°(H) (5%)
Electronic zoom FOV	3.6°(H) × 2.9°(H) / 1.8°(H) × 1.4°(H) (5%)
FOV switching time	≤1s
NETD	< 75 mK(0.075°C) @ 300 K(27°C)

1920 × 1080

Target	Size (m)	Detection distance (km)	Recognition distance (km)
People	0.5 × 1.8	1.87	0.72
Vehicle	3 × 6	5.3	2

Detection and identification distance table (@ Visibility ≥ 25 km & Atmospheric temperature = 25°C)

### Laser ranging unit of the electro-optical pod

Working wavelength	1.55 μm
Measuring range	Detection Range:  • Vehicle: ≤ 3 km  • Building: ≤ 5 km  Conditions:  • 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





D-LiDAR500



DV-LiDAR22



DV-LiDAR30

