# Electric / Hybrid S.01 VTOL Fixed-Wing Special Mission VTOL UAV 1823mm Wingspan 5.5kg Payload 2032m Ceiling

Our Product Introduction

## Basic Information

- Place of Origin: China
- Brand Name: GS
- Certification: CE, RoHS, ISO
- Model Number: S.01
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: Military-standard transport case with pressure equalization valve
- Delivery Time: 34 working days
- Payment Terms: L/C
- Supply Ability: 100


## Product Specification

- Model: S.01
- Wingspan: 1823 Mm
- Length: 1767 Mm
- Airframe Material: Aviation Carbon Fiber Composite
- Engine: Electric / Hybrid
- Payload: 5.5 Kg
- Take-off Mass: 42.7 Kg
- Cruise Speed: 32 M/s
- Endurance: 197 Min
- Max Range: 311 Km
- Altitude: 2032 M
- Protection Degree: IP65
- Temperature: -20°C ~ 50°C
- Wind Resistance: Take-off Level 4 / Cruising Level 6
- Launch Method: Runway Take-off

*Product Description*

## S.01 Special Mission VTOL UAV

The **S.01** is a high-performance electric / hybrid-powered VTOL fixed-wing unmanned aerial vehicle, engineered for **Emergency Communication**. Featuring a 1823mm wingspan and 5.5kg payload capacity, this UAV delivers exceptional 197-minute endurance and 311km operational range. The entire airframe is constructed from **aviation-grade carbon fiber composite**, ensuring an optimal balance of structural strength and lightweight portability.

Equipped with an advanced flight control system and modular payload architecture, the S.01 supports rapid mission reconfiguration. Its VTOL capability eliminates the need for runways, enabling deployment from confined spaces. The IP65 protection rating ensures reliable operation in challenging environmental conditions.

## Key Features

**Advanced VTOL Capability** – Vertical takeoff and landing without runway infrastructure, deployable from ships, rooftops, or compact terrain

**Full Carbon Fiber Airframe** – Aerospace-grade composite construction for 29.9kg lightweight design with industry-leading strength-to-weight ratio

**Electric / Hybrid Power System** – Optimized for 197min continuous flight with efficient fuel/energy management and redundant safety protocols

**5.5kg Payload Capacity** – Modular bay accommodates EO/IR cameras, LiDAR, SAR radar, communication relays, and custom mission equipment

**311km Operational Range** – Beyond-line-of-sight capability with secure datalink and autonomous return-to-home fail-safe

**IP65 Environmental Protection** – Reliable operation in rain, dust, and extreme temperatures from -20°C to 50°C

## Specifications

| | |
|---|---|
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| **Airframe Material** | Aviation Carbon Fiber Composite |
| **Engine** | Electric / Hybrid |
| **Payload** | 5.5 kg |
| **Maximum Takeoff Weight** | 42.7 kg |
| **Cruise Speed** | 32 m/s |
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| **Max Range** | 311 km |
| **Service Ceiling** | 2032 m |
| **Protection Degree** | IP65 |
| **Launch Method** | Runway Take-off |

## FAQ

▼ **What missions is the S.01 best suited for?**

The S.01 is optimized for **Emergency Communication** operations, with its 5.5kg payload and 311km range making it ideal for extended-duration missions requiring reliable beyond-line-of-sight communication.

▼ **Can the payload configuration be customized?**

Yes, the modular payload bay supports rapid swapping between EO/IR gimbals, LiDAR scanners, multispectral cameras, SAR systems, and communication relay equipment based on mission requirements.

▼ **How does the VTOL transition work?**

The S.01 uses a seamless transition flight controller that automatically manages the conversion from vertical hover to fixed-wing cruise flight, requiring no manual pilot intervention during transition.

▼ **What training is required to operate this UAV?**

Basic operator training typically takes 3-5 days, covering mission planning, pre-flight checks, emergency procedures, and data post-processing. Advanced payload operation training is available separately.

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