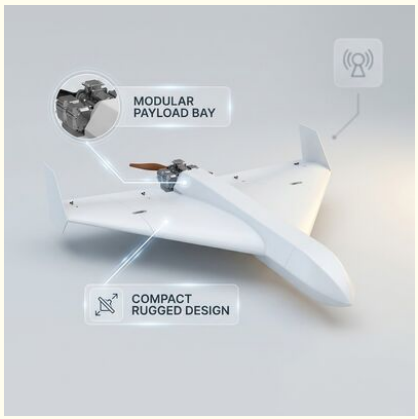
Electric / Hybrid S.02 VTOL Fixed-Wing Special Mission VTOL UAV 3402mm Wingspan 19.6kg Payload 2780m Ceiling

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: GS
- Certification: CE, RoHS, ISO
- Model Number: S.02
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: Aviation-grade protective foam case with reinforced aluminum outer shell
- Delivery Time: 18 working days
- Payment Terms: T/T, Western Union
- Supply Ability: 100



Product Specification

- Model: S.02
- Wingspan: 3402 Mm
- Length: 1712 Mm
- Airframe Material: Aviation Carbon Fiber Composite
- Engine: Electric / Hybrid
- Payload: 19.6 Kg
- Take-off Mass: 31.3 Kg
- Cruise Speed: 25 M/s
- Endurance: 93 Min
- Max Range: 331 Km
- Altitude: 2780 M
- Protection Degree: IP65
- Temperature: -20°C ~ 50°C
- Wind Resistance: Take-off Level 5 / Cruising Level 5
- Launch Method: Rocket-Assisted Launch

S.02 Special Mission VTOL UAV

The **S.02** is a high-performance electric / hybrid-powered VTOL fixed-wing unmanned aerial vehicle, engineered for **Environmental Monitoring**. Featuring a 3402mm wingspan and 19.6kg payload capacity, this UAV delivers exceptional 93-minute endurance and 331km 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.02 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 21.9kg lightweight design with industry-leading strength-to-weight ratio

Electric / Hybrid Power System – Optimized for 93min continuous flight with efficient fuel/energy management and redundant safety protocols

19.6kg Payload Capacity – Modular bay accommodates EO/IR cameras, LiDAR, SAR radar, communication relays, and custom mission equipment

331km 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

Model	S.02
Wingspan	3402 mm
Length	1712 mm
Airframe Material	Aviation Carbon Fiber Composite
Engine	Electric / Hybrid
Payload	19.6 kg
Maximum Takeoff Weight	31.3 kg
Cruise Speed	25 m/s
Endurance	93 min

Max Range	331 km
Service Ceiling	2780 m
Protection Degree	IP65
Launch Method	Rocket-Assisted Launch

FAQ

▼ **What missions is the S.02 best suited for?**

The S.02 is optimized for **Environmental Monitoring** operations, with its 19.6kg payload and 331km 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.02 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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