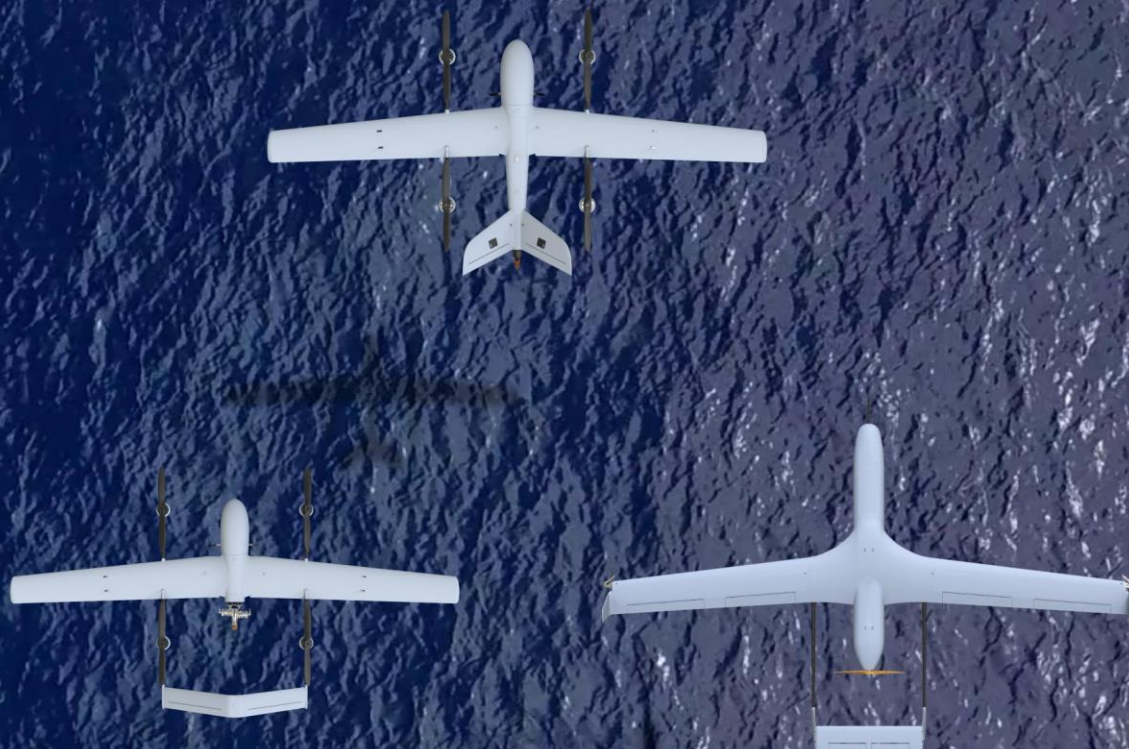




UAV PRODUCT BROCHURE



TECHSTAR SATCOM



About TECHSTAR SATCOM UAV

Techstar Satcom has been deeply engaged in the UAV industry for many years, and owns core products with independent intellectual property rights, such as Eagle eyes series portable vertical take-off and landing UAV, ArcSky series Skyhook recovery fixed wing UAV, pneumatic ejection device, vehicle-mounted and shipborne rope interception recovery system, etc.

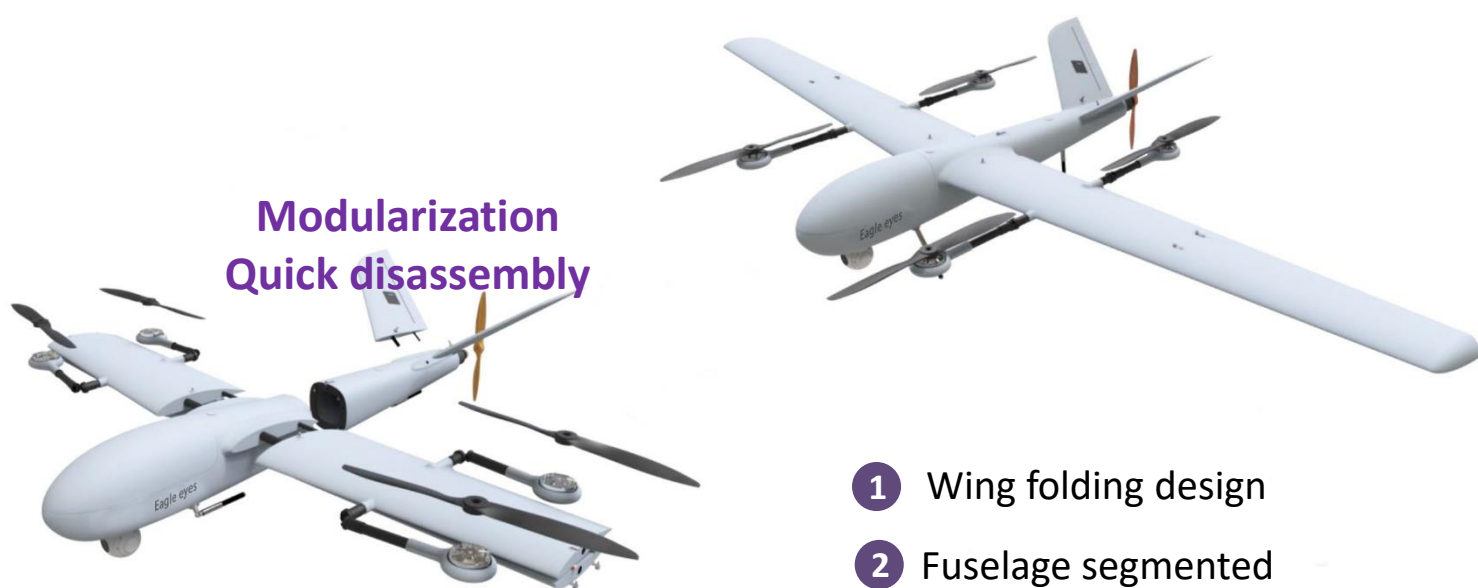
Eagle eyes Series Portable VTOL UAV—TXS25

Portable:

Extremely small packing size, can be transported by compact car.

Easy to use:

The whole machine is disassembled and assembled by hand to improve the operation efficiency.



- 1 Wing folding design
- 2 Fuselage segmented quick disassembly design
- 3 Support folding design
- 4 Arm folding design
- 5 Full drone quick disassembly design

Wingspan	3.6m	Fuselage Length	1.64m
Takeoff Weight	25kg	Mission Load	1~3kg
Cruise Speed	24~25m/s	Dynamic Form	Electric
Endurance	180~200min@ no load 140~160min@3kg load		
Take-off and landing mode	VTOL	Wind Resistance	Level 6
Packing size	Wing box : 92cm×28cm×62cm, Fuselage box : 92cm×35cm×49cm		

Eagle eyes Series Portable VTOL UAV—TXS30

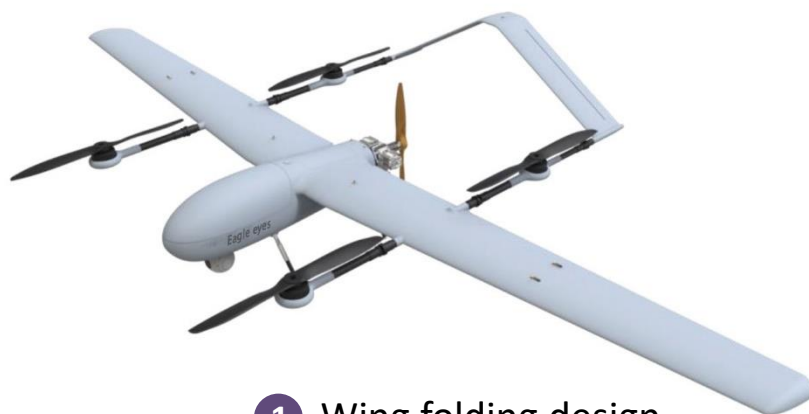
Portable:

Extremely small packing size, can be transported by compact car.

Easy to use:

The whole machine is disassembled and assembled by hand to improve the operation efficiency.

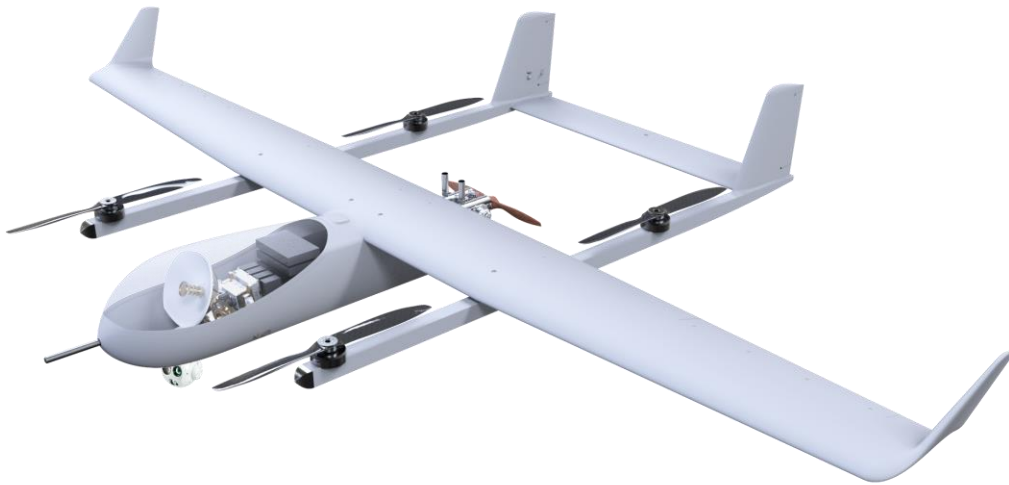
Modularization Quick disassembly



- 1 Wing folding design
- 2 Support folding design
- 3 Arm folding design
- 4 Full drone quick disassembly design

Wingspan	3.8m	Fuselage Length	1.8m
Takeoff Weight	35kg	Mission Load	≤6kg
Cruise Speed	28m/s	Dynamic Form	Hydraulic (carburetor / EFI optional)
Endurance	6~8h	Startup Mode	Manual / electric start optional
Take-off and landing mode	VTOL	Wind Resistance	Level 6
Packing size	Wing box : 92cm×28cm×62cm, Fuselage box : 92cm×35cm×49cm		

Fixed-Wing Hybrid VTOL UAV—TXS100



Eagle eyes TXS100 is a Fixed-Wing Hybrid VTOL UAV. The rotor part is powered by an efficient brushless motor and lithium polymer battery, and the fixed wing part is powered by a two-stroke gasoline engine. The whole machine adopts double vertical tail pneumatic layout which the engine is rear set, the whole machine's pneumatic is stable and reliable.

Wingspan	6m
Length	3.57m(Head airspeed tube excluded)
Maximum take-off weight	115kg
Power	Two stroke electric starting EFI piston engine
Max load capacity	38kg(fuel + mission load)
Communication distance	Beyond visual range communication within satellite coverage
Position Accuracy	RTK centimeter level positioning
Wind Resistance	Takeoff and landing: level 5, cruise: level 6
Service ceiling	4000m
Endurance	>8h@16kg mission payload
Voyage	>700km@16kg mission payload
Take-off and landing mode	VTOL
Control method	Remote control; center control

ArcSky series skyhook recovery maritime UAV——AS30



Wingspan	3.6m	Fuselage length	1.64m
Takeoff weight	32kg	Mission load	5~6kg
Cruise speed	28m/s	Dynamic form	Oil power (gasoline / aviation kerosene)
Endurance	8~10hours@full load	Takeoff mode	Ejection
Landing mode	Skyhook recycling	Wind Resistance	Level 7
Packing size	1690mm×950mm×470mm		

ArcSky series skyhook recovery maritime UAV——AS20



Wingspan	3.3m	Fuselage length	1.64m
Max takeoff weight	20kg	Mission load	2.5kg
Cruise speed	23m/s	Dynamic form	Electric
Endurance	>3hours@full load	Takeoff mode	Ejection
Landing mode	Skyhook recycling	Wind Resistance	Level 6

PCTM Series Pneumatic Ejection Device

PCTM60 pneumatic catapult :

By using the expansion of high pressure gas to do work, the UAV can get a certain off-orbit velocity. Compared with the elastic dynamic catapult, it has the characteristics of higher ejection stability, better ejection parameterization control, higher ejection velocity, stronger ejection ability, less ejection overload and less influence by ambient temperature.

PCTM60 has intelligent "foolproof" control terminal, which can automatically set the ejection pressure according to the ejection weight and deorbit speed, with high intelligence, simple and safe operation.



Expansion length	6.5m
Storage length	4m
Ejection angle	5~15 ° adjustable
Ejection aircraft weight	≤50kg
Derailment speed	22~27m/s adjustable
Total system weight	<1T (Including air compressor and generator)
Mode of transport	Trailer type/truck type optional

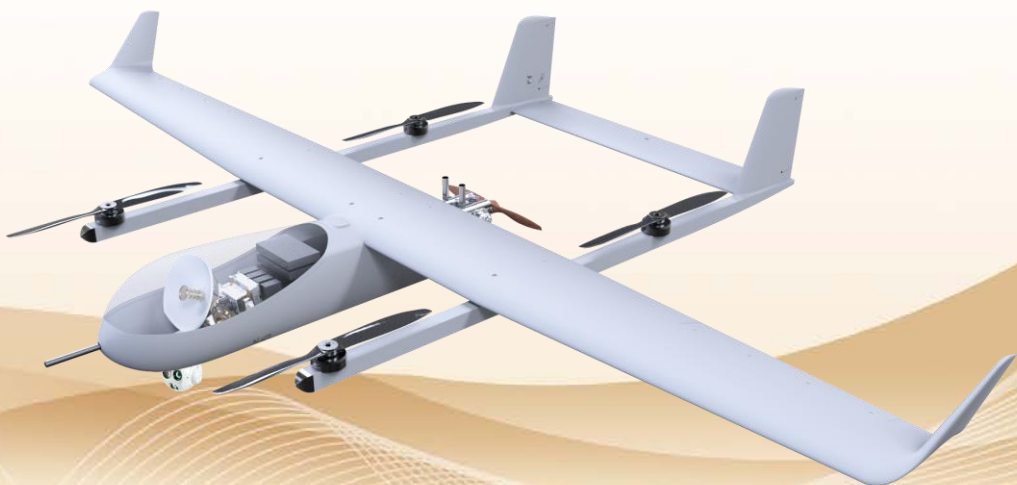
Integrated vehicle ejection recovery system



Integrated vehicle ejection recovery system:

The integrated vehicle ejection and recovery system aims at improving the operational mobility of fixed-wing UAV, and can achieve rapid response, rapid deployment, withdrawal and rapid transfer of maneuverable flight tasks in the application fields of border patrol, anti-terrorism and emergency and disaster relief. The system integrated: intelligent pneumatic ejection device, hydraulic rapid deployment recovery system, auxiliary crane, vehicle uninterrupted power supply system and night operation lighting system, with high integration, high mobility and other characteristics.

TXS100 Fixed-Wing Hybrid VTOL UAV





TXS100 Fixed-Wing Hybrid VTOL UAV

Flyshark series TXS100 is a Fixed-Wing Hybrid VTOL UAV. The rotor part is powered by an efficient brushless motor and lithium polymer battery, and the fixed wing part is powered by a two-stroke gasoline engine. The whole machine adopts double vertical tail pneumatic layout which the engine is rear set, the whole machine's pneumatic is stable and reliable.

TXS100 has a maximum takeoff weight of 115kg and the maximum payload capacity of 38kg (fuel load + mission load). Its oversized mission payload capacity and wide fuselage space make it easy to carry high-throughput broadband satellite communication equipment. It overcomes many pain points of traditional point-to-point radio communication, such as limited communication distance, blocked by earth curvature and mountain terrain, high flying altitude and so on. The UAV can transmit airborne data and video back to the remote command center in real time from anywhere in the satellite coverage area. TXS100 UAV is the UAV system with the smallest take-off weight and body size among the UAV integrated with satellite communication equipment in USA at present. Due to the innovation of communication technology, the application requirements of UAVs that cannot be solved by communication means in the past can be solved, such as:

1. In the field of forest fire prevention: It solves the pain point that the communication link of small UAV is blocked by the terrain of forest and mountainous area and can not realize real-time transmission of data and images.
2. Route patrol and border belt patrol areas: Small UAVs cover 50 to 100 kilometers in a single patrol, compared to current communications technology, and is greatly affected by the terrain environment, due to the guarantee of satellite communication link, the single patrol is close to 600-700km belt without the influence of terrain;
3. Maritime patrol area: it can take off and land along the coast or on the ship, carry out long-range and large-scale operations in the offshore waters or the 300km sea area around the ship, which can meet the application requirements of fishery resource protection, maritime rescue and search, military intelligence investigation, etc.
4. Emergency communication: after a major natural disaster, the rescue site generally needs to quickly establish ground communication, so that the rescue personnel can contact the outside of the rescue site. Through UAV + SATCOM + 4G/5G technology, 4G/5G base station is set up on UAV, combined with 4G/5G technology and satellite resources, local communication network can be quickly restored to provide communication guarantee for rescue mission.



TXS100 Fixed-Wing Hybrid VTOL UAV

Technical Parameter

Model	TXS100
Wingspan	6m
Length	3.57m(Head airspeed tube excluded)
Maximum take-off weight	115kg
Power	Two stroke electric starting EFI piston engine
Max load capacity	38kg(fuel + mission load)
Communicationdistance	Beyond visual range communication within satellite coverage
Position Accuracy	RTK centimeter level positioning
Wind Resistance	Takeoff and landing: level 5,cruise: level 6
Service ceiling	4000m
Endurance	>8h@16kg mission payload
Voyage	>700km@16kg mission payload
Take-off and landing method	Vertical take-off and landing
Control method	Remote control; center control



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