

# ST-D180H25

## Long Endurance Unmanned Aircraft System



Operationally proven Group 2 or Group 3 (NATO: Class 1 - Small) UAS with unmatched endurance and Modular Open Systems Approach (MOSA) design in an extremely small package

### ST-D180H25 UAS MAIN FEATURES

- |   |   |   |   |
|---|---|---|---|
|  | Up to 25 hours flight endurance with payload      |  | Voice and data relay for Silvus tactical radio              |
|  | 180 km / 112 mi communication range               |  | Anti-jam interference avoidance                             |
|  | Crew of two                                       |  | Operational in GPS denied environment                       |
|  | Operational and maintenance training              |  | MISB compliant video stream                                 |
|  | Integrated software for artillery fire adjustment |  | Maritime operation solutions (SARSAT, AIS) - upgrade option |
|  | Remote video terminal with mesh                   |   |   |

## ST-D180H25 UAS SPECIFICATIONS

AIRCRAFT SPECIFICATIONS	
Wingspan	3.3 m / 10.8 ft
MTOW	Group 2: 25 kg / 55 lbs, Group 3: 28 kg / 62 lbs
Endurance	Group 2: 25.5 hours with <b>T140L</b> and 19 hours estimated with <b>T180</b>  Group 3: 25.5 hours with <b>T140L</b> and 19 hours estimated with <b>T180</b>
Range	180 km / 112 mi
Cruise speed	47-49 knots
Max level speed	62.2 knots
Ceiling	4000 m / 13000 ft AMSL
Max takeoff altitude	2000 m / 6500 ft AMSL
Operational temperature	-30 °C to +50 °C / -22 °F to +122 °F
Navigation	GPS and magnetometer (for GPS-denied environments)
Anti-icing measures	Heated pitot tube
Weather limitations	Rain <5 mm/hour / 0.2 inches/hour, 40 knot sustained winds
Detectability	Inaudible at 1km / 0.62 mi
Transponder	Mode 5 Mark XIIIB or ADS-B

PROPULSION SYSTEM	
Engine type	28cc EFI module; proprietary low noise muffler
Engine power	1.5 kw
Temperature control	Automatically controlled via mechanical flap
Fuel type	Unleaded gasoline or C10
Generator system	150W onboard generator system

DATA LINK SPECIFICATIONS	
Datalink manufacturer	Silvus MIMO with mesh
Frequency	UHF, L, C, or S band, customizable
Link Rate	Up to 20 mbps
Output power	Up to 10 W
Encryption	AES 256

PAYLOAD CAMERA COMPARISON				
	T95	T140L	T140Z	T180M
EO HD sensor with 30x optical zoom ratio + 4x digital zoom	×	✓	×	×
EO Full HD sensor with 30x optical zoom ratio + 4x digital zoom	×	×	✓	×
EO Full HD sensor with 20x optical zoom ratio + 4x digital zoom	✓	×	×	×
4K EO sensor with 20x optical zoom ratio + 4x digital zoom	×	×	×	✓
MWIR sensor with 15x optical zoom ratio + 4x digital zoom	×	×	×	✓
LWIR sensor with 5x optical zoom + 4x zoom	×	×	✓	×
LWIR sensor with 4x optical zoom	✓	✓	×	×
Up to 15 km / 9.32 mi Laser Range Finder	×	×	×	✓
Weight	570 g (1.25 lbs)	1.27 kg (2.80 lbs)	1.40 kg (3.09 lbs)	3.25 kg (lbs)

SYSTEM SPECIFICATIONS	
Autopilot	Piccolo, Cloud Cap Technology
Ground Control Station	Portable in rugged case with laptop and additional display
Tracking antenna	Tracking high gain directional and omnidirectional antennas
Takeoff	Fully autonomus pneumatic catapult with 11kJ or 16kJ launch energy
Landing	Computer assisted parachute recovery; airbag
Crew size	2
Mobility	System fits in 7 or fewer cases, Weight < 450 kg / 1,000 lbs
Preparation time	Less than 1 hour from pallet to launch ready

## COMPATIBLE WITH PAYLOAD CAMERA SYSTEMS OF CHOICE



T95 T140L T140Z T180M

PAYLOAD CAMERA OPTIONS	
HD, full HD or 4k resolution for EO	
MWIR or LWIR 640x512p for IR	
Onboard processing and recording	
Moving map software	
Automatic target tracking	
Moving target indicator	
High precision geolocation	
Onboard H.265 and H.264 encoder	
electronic stabilization	
Laser range finder: <1.5 m / 5 ft accuracy	
Laser pointer: 830 nm class IIIB, 50 mW	

## SYSTEM FOOTPRINT

3 aircraft, 1 launcher, 1 tracking antenna, 1 GCS

