

# **C4i** *communication*

EXPERIENCE THE DIFFERENCE  
YOUR SECURITY & SAFETY PRODUCTS

## **LONG-RANGE TACTICAL VTOL UAS SOLUTION** **Eagle C4I VTOL MIL UAS**



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<http://c4communication.com>



LONG-ENDURANCE VERTICAL TAKEOFF & LANDING UNMANNED AIRCRAFT SYSTEM

**The group 2/3 VTOL UAS is unmatched in endurance, reliability, modularity and operating parameters with minimal logistic and manpower requirements.**



## **Key Features**

- ▶ **14+ hours flight endurance**
- ▶ **180 km range**
- ▶ **Fully automated and precise vertical takeoff and landing**
- ▶ **4.5 kg / 9.9 lb of payload capacity**
- ▶ **Takeoff and landing in 30 knot winds**
- ▶ **Quick and simple deployment**
- ▶ **Secondary payload bay for custom payloads**
- ▶ **Parachute system for emergency landing**
- ▶ **Remote video terminal with mesh**
- ▶ **Voice and data relay for Silvus Tactical Radios**
- ▶ **Anti-Jam interference avoidance**
- ▶ **Operational in GPS denied environment**
- ▶ **MISB compliant video stream**



# Technical specification

## AIRCRAFT SPECIFICATIONS

Wingspan	3.9 m / 12.8 ft
MTOW	32 kg / 70.55 lb
Endurance	14+ hours
Range	180 km / 110 mi
Max payload	4.5 kg / 9.2 lb
Cruise speed	46 knots
Max level speed	68 knots
Ceiling	4000 m / 13000 ft AMSL
Max takeoff altitude	2000 m / 6500 ft AMSL
Operational temperature	-40 °C to +50 °C / -40 °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; 30 knot takeoff wind speed
Detectability	Not detectable at 1 km / 0.62 mi
Transponder	Mode 5 Mark XII B or ADS-B

## PROPULSION SYSTEM

Engine type	28cc EFI module; proprietary low noise muffler
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 20 W
Encryption	AES 256

## GIMBAL COMPARISON

	E140LC	E140Z G2	E175	E180
EO HD sensor with 45x optical zoom ratio, 4x digital zoom	✓		✓	
EO Full HD sensor with 67x optical zoom ratio, in addition 4x digital zoom				✓
EO Full HD sensor with 67x optical zoom ratio, in addition 4x digital zoom		✓		
LWIR sensor with fixed FOV	✓			
LWIR sensor with 5x optical zoom ratio		✓		
MWIR sensor with 15x optical zoom ratio			✓	✓
> 10 km / 6.2 mi Laser Range Finder			✓	✓
Gimbal weight	1.3 kg / 2.9 lb	1.4 kg / 3.1 lb	2.6 kg / 5.7 lb	3.75 kg / 8.2 lb

## SYSTEM SPECIFICATIONS

Ground Control Station	Portable, dual touchscreen displays
Tracking antenna	Tracking high gain directional and omnidirectional antennas
Takeoff and landing	Vertical, fully automated, with parachute for emergency landing
Crew size	2
Mobility	3 aircraft system fits in 5 or fewer cases

*"The movement tracking ability of the Eagle C4I far surpasses the current payload abilities of the Shadow. The picture quality is clear and the stability option is very helpful in keeping a steady picture. It's very easy to identify individuals and equipment using the eagle C4I payload."*

AEWE 2019 Evaluator (Shadow Operator)

*"Persistent Brigade quality ISR feeds at the Battalion and Company level enables integrated reconnaissance and security increasing the units ability to shape the AO using precision fires and maneuver to positions of advantage"*

Army Expeditionary Warrior Experiment 2020  
Insights Day briefing by Maneuver Battle Lab



**OCTOPUS**  
ISR SYSTEMS

## EPSILON Series Sensors



E140LC

E140Z G2

E175

E180

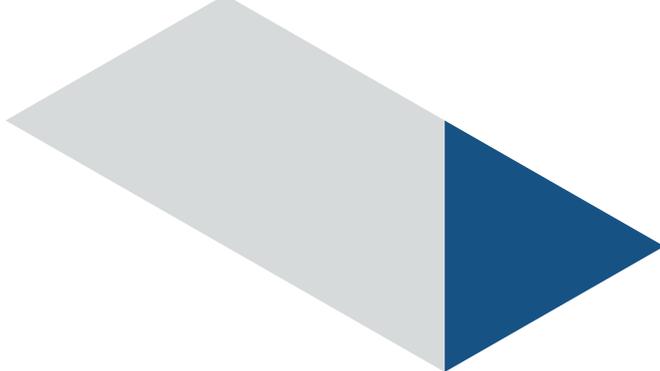
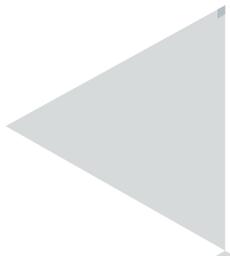
## GIMBAL OPTIONS

- Onboard Processing and Recording
- Onboard Deep Learning AI Classifier
- Moving Map Software
- Automatic Target Tracking
- Moving Target Indicator (up to 100 targets)
- High Precision Geo-Location
- MV Out; Onboard H.265 and H.264 Encoder
- Electronic Stabilization
- Laser Range Finder: <1.5 m / 5 ft accuracy
- Laser Illuminator: 830 nm class IIIB, 50 mW

## System Footprint

- 3 Aircraft
- 1 Tracking Antenna
- 1 GCS





LEARN MORE: [c4icommunication.com](http://c4icommunication.com)

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