



## Silent Falcon Unmanned Aircraft System

The patent-pending Silent Falcon is a solar electric, carbon fiber, modular, small Unmanned Aircraft System (sUAS) with a highly-sophisticated communication system and open interface/open architecture payload bay designed for meeting numerous application requirements with long range, long endurance mission profiles. All while supplying superb, encrypted and secure data to anyone, anywhere around the world. The entire system fits in the back of a pickup truck and can be set up in 30 minutes. After launch, it's virtually silent at 100 meters. Tailor made payload and communication system solutions are available to satisfy most any mission purpose.

### **SPECIFICATIONS:**

#### **PAYLOADS**

Open interface/open architecture payload bay accommodates off-the-shelf sensors and payloads as well as tailor-made payload solutions.

#### **PERFORMANCE SPECIFICATIONS**

Range: Depending on terrain up to 15 kilometers or up to 100 kilometers with mesh network, wave relay communication system with tracking antenna  
Endurance: Depending on flight conditions, up to 5-hours in optimal conditions  
Speed: 45-90 kmh (25 – 48 knots); mission loiter speed 50 kmh (27 knots)  
Operating Altitude: 75 meters (250 feet) AGL to 6,000 meters (20,000 feet) MSL

#### **PHYSICAL SPECIFICATIONS**

Wingspan: 4.4 meters (14.4 feet)  
Length: 1.9 meters (6.2 feet) including propeller and spinner  
Weight: 14.5 kg (32 pounds) payload dependent

#### **COMMUNICATION SPECIFICATIONS**

AutoPilot: MicroPilot MP 2128 g2  
Comms: SF Wave Relay MANET; multiple frequencies; other communication systems available  
Antenna: Dual 3 dBi Blade 2.4 GHz on aircraft; other frequencies available  
Launch & Recovery: Catapult launch, parachute recovery  
Fuel Source: Electric (Li-Po Battery) / Solar (Integrated Thin Film Photovoltaic)

#### **GROUND CONTROL STATION**

GCS: SF Flight Planning and Control Unified Ground Control Station on rugged laptop computer; payload control on second laptop; large monitor and all communication and power cabling on standalone GCS integrated into a single Pelican case.