

### SWORD 30-30 to 60-60

Easily deployed and operated, Automated flights and deliveries / drops. Massive payload sensor / gimbal capability and rapid 'swap or drop' of load containers.

Twin Wing design removes the need for a tail, which traditionally pushes down to balance the forward Centre of Gravity (CoG).

This negative force can reduce lift by up to 20% and is a constant inefficiency, reducing payload capacity, increasing drag and fuel consumption and challenging stability.

Two wings relocate the CoG balance point between the front and rear wings. This more central balance point greatly improves stability. Control surfaces provide double corrective force and redundancy. Safety is thus greatly enhanced!

Twin wings are shorter, like for like, for safer manoeuvering and reduced wing stress. Shorter wings reduce the tipping moment of wind gusts providing improved stability and further reduction of stress to the airframe. Fatigue of the structure is reduced, improving safety and extending operational life.

### Features and Benefits

- Portable, easily handled equipment
- Transported and protected in convenient carrying cases
- Large capacity fuselage, ultra-long missions or large payloads as required
- Very low magnetic signature for magnetic surveys / mapping or stealthy surveillance
- Dual redundant control surfaces for extreme reliability
- Electric or EFI IC Petrol Twin cylinder pusher engines
- Efficient twin wing design promoting more lift as wing loading is halved giving long flight duration, halving the wingspan compared to a traditional monoplane
- The VTOL Co-Ax version Combined with a hybrid power system this versatile UAV becomes a 'Quad' drone platform at the flick of a switch. Launcher versions also available along with STOL and STOVL.
- Ultra-long flights > 24 hours, bringing large UAV performance to commercial users, BVLOS and Aircraft DAA capabilities

## **CANNONDYNAMICS.CO.UK**

# SWORD Twin wing, large capacity heavy lift fuselage

### Twin Wing 3 Meter Wingspan Range

**SWORD 30-30 E** 

Single electric pusher, 5-hour duration.

10kg max payload \*

SWORD 30-30 2E

Twin Coax Electric pusher. Get Home

resilience. \*\*

SWORD 30-30 ICE

70cc, 4 Stroke EFI engine, 10-hour duration \*\*

SWORD 30-30 VTOL

Fixed rotor Octoplane + Pusher hybrid. \*\*\*

#### Twin Wing 4 Meter Wingspan Range

**SWORD 40-40 E** 

Single electric pusher, up to 6-hour duration,

15 kg max load \*\*\*

SWORD 40-40 ICE

120cc, 4 Stroke EFI engine, 12-24 hour

duration \*\*\*

SWORD 40-40 VTOL

Fixed rotor pusher Octoplane hybrid\*\*\*







Model	SWORD 30-30	SWORD 60-60	
Frame Length			
Wingspan	3000mm twin	6000mm twin	
Frame Weight			
Take off Weight	35kg	35kg+	
Frame Material			
Flight Time	Up to 10 hours	Over 24 hours	
Payload	10kg	15kg+	