



PRECISION PAYLOAD DELIVERY SYSTEM - HEAVY LIFT (PPDS-HL)

The Corvo Precision Payload Delivery System - Heavy Lift (PPDS-HL) is a low-cost disposable SUAS that is optimised for use in a wide variety of roles in the modern battlespace. The flexible nature of the PPDS-HL platform enables the end user to innovate in the battlespace and to rapidly re-purpose the system to meet new and emerging operational requirements.



APPLICATIONS

LOGISTICS

The PPDS-HL is ideally suited to use in a logistics role. The system is capable of delivering supplies quickly and accurately over long range. The PPDS-HL is available with two different payload carrying options. The primary configuration is designed to carry payloads inside the fuselage with the payload delivery achieved through landing the air vehicle and physically removing the payload from the fuselage. The second payload carrying option utilises hardpoints on the wing, enabling external payloads to be carried and dropped from the air vehicle in flight. This design feature ensures that the system is flexible and responsive to a wide range of operational scenarios.

COMMS RELAY

PPDS-HL can increase the operational range of other UAS as well as provide support to Uncrewed Surface Vessels (USV) and Uncrewed Ground Vehicles (UGV) that require range extension. The comms relay capability also supports the extension and resilience of broader battlefield communication networks.

INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE (ISR)

PPDS-HL is capable of carrying lightweight ISR payloads. SYPAQ has developed an ISR module suitable for these types of operations. The PPDS-HL has sufficient payload capacity to carry the ISR payload and lightweight external stores simultaneously, enabling a true multirole UAS capability.

MAPPING

Achieved via fitment of the Corvo high-resolution photo mapping module.

SWARM

PPDS-HL air vehicles can be simultaneously deployed in large numbers, forming a swarm to generate combat mass and confuse and distract the enemy.

DECOY

PPDS-HL can be used to carry a wide range of EW payloads in a decoy role.

TARGET

PPDS-HL is the ideal target platform for testing of counter UAS technologies.

SPECIFICATIONS

RANGE & ENDURANCE

- 80km with 6kg of payload
- Endurance can be extended by reducing payload mass and by trading payload for additional flight batteries
- With 3kg of payload, range can be extended to 200km

CRUISE SPEED

- 60km/hr for optimum cruise, able to dash at up to 100km

LAUNCH

- Hand launch
- Bungee launch

RECOVERY

- Belly landing
- Deck landing (on large vessels)
- Landing into water (system is buoyant and avionics module is waterproof)

AIRFRAME

- Flying Wing Configuration
- Plastic, wood and foam construction
- Low cost and disposable

GROUND CONTROL STATION

Tablet device (Android or Windows OS)

DATALINK

3 options:

- No datalink
- Encrypted telemetry radio (low data rate)
- Encrypted IP mesh radio (high data rate)

PAYLOAD CAPACITY 6kg

SPAN 2.8m

MTOW 13kg