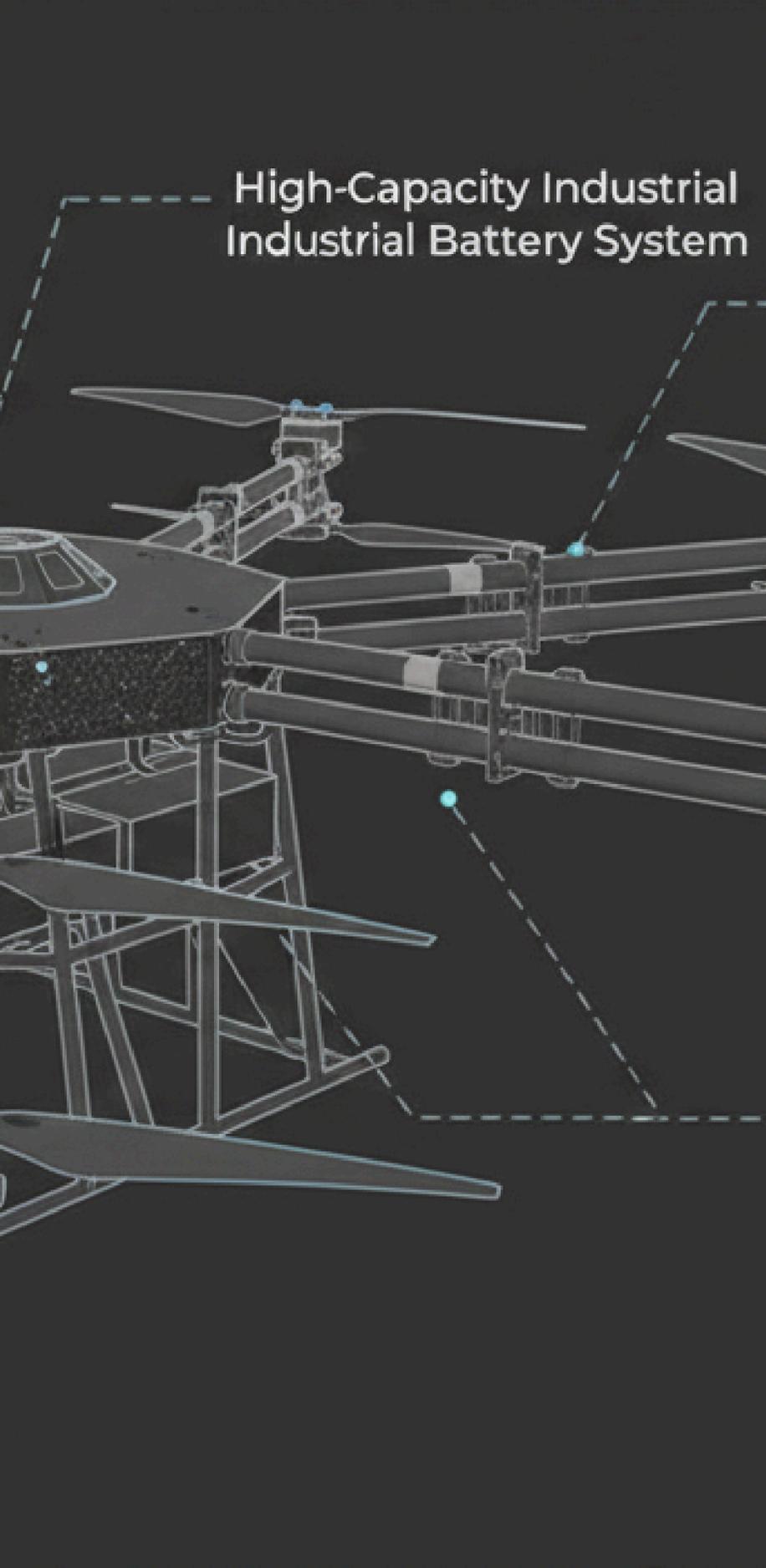


TITAN HEAVY-LIFT UAS PLATFORM

MODULAR CONFIGURATIONS FOR EMERGENCY AND CIVIL PROTECTION OPERATIONS





High-Capacity Industrial
Industrial Battery System

PROJECT OVERVIEW

PURPOSE OF THE PROJECT

This project explores the deployment of a heavy-lift unmanned aerial platform intended to enhance logistics and emergency operations in environments that are challenging or hazardous.

OPERATIONAL DESIGN

Designed to operate where conventional ground access is restricted, delayed, or unsafe, the platform enables the transport and lifting of heavy equipment without subjecting personnel to direct risk.

TARGET ENVIRONMENTS

Environments that are challenging or hazardous where logistics and emergency operations need enhancement.

SAFETY ADVANTAGES

The platform allows transport and lifting without subjecting personnel to direct risk.

APPLICATION SCENARIOS

Use is particularly relevant for scenarios requiring rapid response and the handling of substantial payloads in difficult-to-reach locations.

**THE PROJECT IS BASED ON THE TITAN HEAVY-LIFT UNMANNED AERIAL PLATFORM,
CURRENTLY DEPLOYED IN OPERATIONAL ENVIRONMENTS.**

OPERATIONAL CHALLENGES & USE CASES

CRITICAL CHALLENGES IN EMERGENCY OPERATIONS

Emergency and logistical operations frequently face critical challenges including restricted access to remote or disaster-stricken areas, significant safety risks for personnel, and the urgent need for transporting bulky or heavy equipment.

HEAVY EQUIPMENT DELIVERY TO ISOLATED AREAS

Delivery of heavy emergency equipment or vital supplies to isolated communities or sites inaccessible by ground vehicles.

SUPPORT IN FIREFIGHTING AND RESCUE MISSIONS

Providing logistical assistance during firefighting and rescue missions in rugged or mountainous terrains.

TRANSPORTATION OF RELIEF MATERIALS IN LIMITED ACCESS

Transporting relief materials in situations where both ground and conventional air access are limited or compromised by environmental conditions.



PLATFORM CAPABILITIES (TITAN MODULAR UAS)



PAYLOAD HANDLING

Handling substantial payloads across different TITAN configurations, supporting emergency logistics, equipment transport and access to hard-to-reach areas.

AUTONOMOUS FLIGHT & SAFETY

Autonomous flight capabilities prioritising operational safety, including waypoint navigation, obstacle avoidance and automatic return-to-home functionality in case of signal loss.

MODULAR CONFIGURATION

Modular platform architecture allowing mission-specific configuration, including different payload systems, sensors and operational setups based on task requirements.

OPERATIONAL DEPLOYMENT

Designed for deployment in challenging and hazardous environments where conventional ground access is limited, delayed or unsafe.

CONTROLLED LIFT OPERATION

PRECISION LIFT & PLACEMENT

Demonstration of controlled payload lift using a tethered delivery setup.

The platform supports stable hover and precise vertical positioning for safe handling in constrained environments.

This capability enables delivery and placement of equipment where ground access is restricted or unsafe, reducing the need for personnel to operate in high-risk zones.

Typical use cases include emergency logistics, equipment positioning and controlled supply delivery.



PILOT PROJECT PROPOSAL

OBJECTIVE OF THE PILOT PROJECT

The pilot will utilise a selected TITAN configuration, tailored to a specific operational scenario.

SCOPE OF THE TRIAL

This trial would consist of a controlled short-term demonstration designed to evaluate the platform's practicality, reliability, and suitability for real-world emergency and logistical applications.

PURPOSE AND NEXT STEPS

The intention is to facilitate informed decision-making on the platform's potential integration into public sector and emergency service operations, with no immediate procurement obligation implied. Follow-up steps may include technical briefing, configuration selection and extended pilot deployment.

Specifications, payload capacity and environmental protection levels depend on TITAN configuration and subsystem.