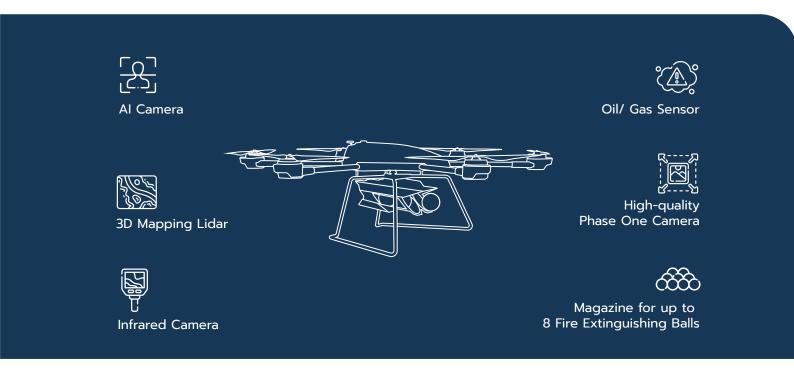


M2 TITUM Solution Drone







TITUM M2 (Multi-rotor & Multi-purpose) is an enterprise drone designed to meet the needs of today's diverse mission payloads on a single launch vehicle. Unlike conventional drones, TITUM M2 has specific applications and special features that enable working in high-risk areas and life-threatening missions. To serve different purposes in the public and private sectors, TITUM M2 comes with the following qualities:

Emergency and Disaster Management

- Radio Communication Repeater
- Search & Rescue
- Wildfire Monitoring and Firefighting
- Disaster Relief

Transportation and Logistics

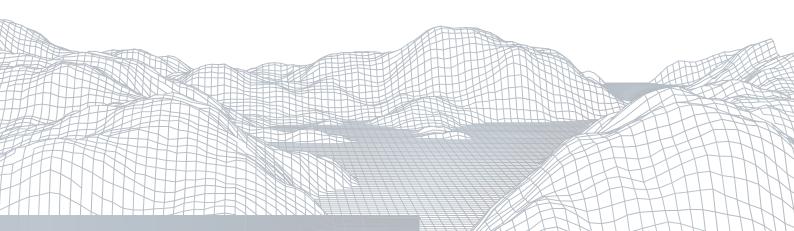
Advanced Delivery Solutions

Surveying and Mapping

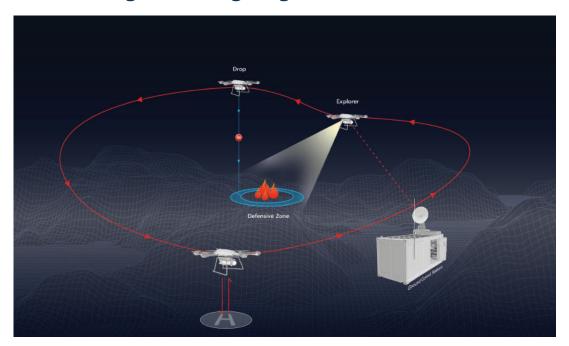
- Agriculture Equipment
- 3D Mapping

Infrastructure Inspection

- Power Transmission Line Inspection
- Railway Inspection
- Oil and Gas Pipeline Inspection



Wildfire Monitoring and Firefighting



Wildfires have been a huge problem in recent years, especially in the northern areas of Thailand with arid climates. It is a significant cause of sparks and the quick spread of wildfires. This contributes to critical damage to the forests and air pollution which greatly affects the ecosystem in the area.

Key features:

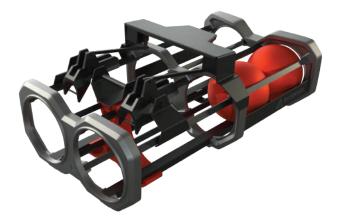
- Flying autonomously or semi-autonomously
- Equipped with specialized detectors that can detect fires based on data captured by a thermal camera in combination with AI analysis
- Capable of flying long hours at low altitude (lower than 300m) and slow speed (lower than 30 km/hour)
- Able to generate real-time maps of wildland fires, by marking and locating fires with high accuracy
- Firefighting equipment such as dropping fireballs to prevent the further spread of fires



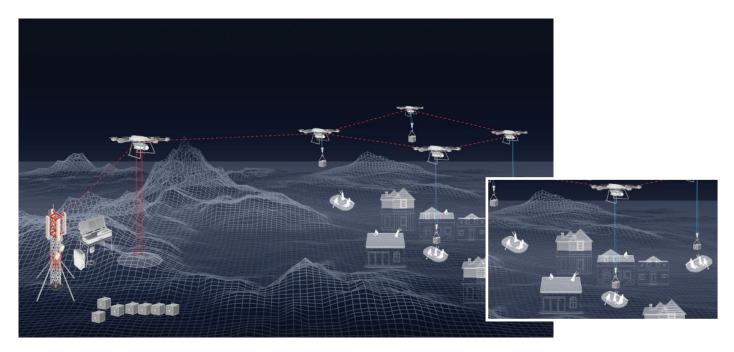
Medium Altitude Flight Area 350 m to 5500 m - Fixed-Wing UAV





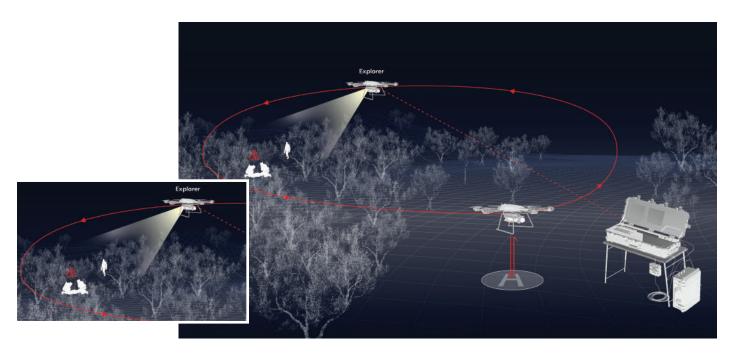


Disaster Relief



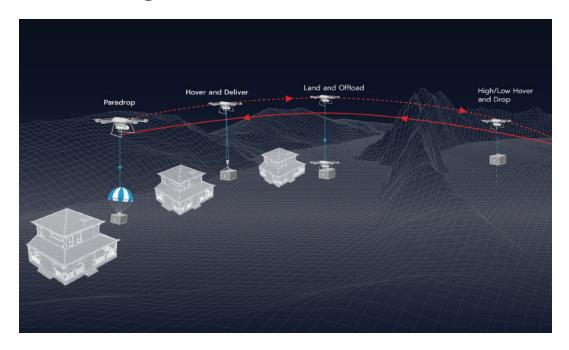
Payload Drop Systems: Whether it be floods, damaged roads, or building rubble, many things can get in the way of emergency responders getting needed supplies to people trapped or injured. TITUM M2 can easily fly over these obstacles and carry significant payloads like relief aid and then drop them wherever is needed.

Search & Rescue



One basic add-on that is immensely useful in Search and Rescue operations is a simple spotlight. For night-time rescue missions, a light attached to a drone, in tandem with live video streaming, makes it practical and straightforward to search large areas in a short space of time.

Transportation and Logistics

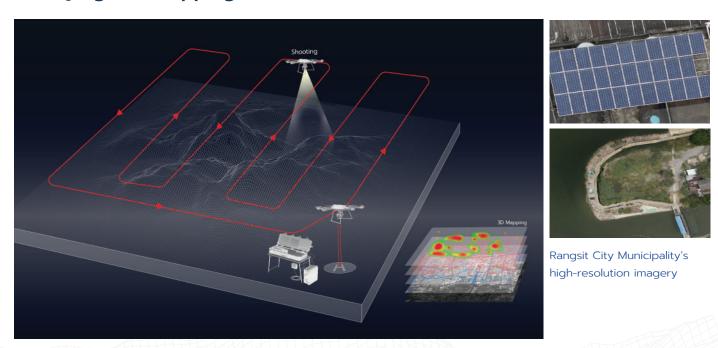


TITUM M2 is designed to be a heavy lift drone and can carry up to 30kg of equipment. With Beyond Visual Line of Sight (BVLOS) operational capability, the drone can be utilized in a wide range of logistic operations.

M2 platform offers advanced delivery solutions for long-distance transportation:

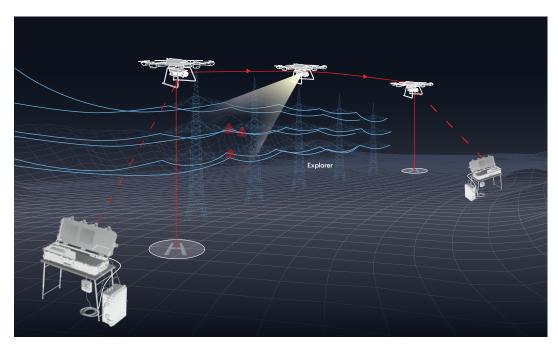
- High/Low Hover and Drop (Hover and drop the load from low or high altitude)
- Land and Offload (Drone lands and the user removes the payload)
- Paradrop (Load can be dropped by parachute from any altitude)
- Hover and Deliver (Drone delivers the load through a sling from a low altitude and user unhooks the sling)

Surveying and Mapping

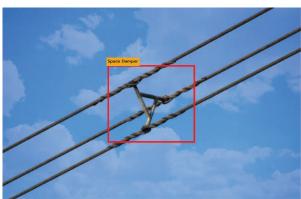


There are a variety of use cases for drone Surveying and Mapping applications such as land surveys, GIS (geographic information system), Planning and Design, Construction, and many more.

Power Transmission Line Inspection







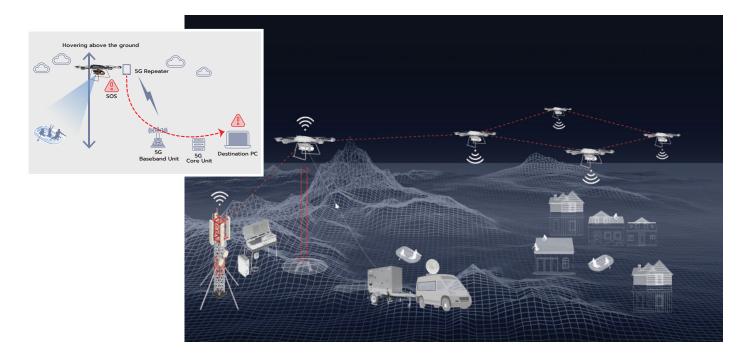
Power transmission lines are built to transmit large amounts of electricity at high voltage without loss. The inspection of power transmission networks is of great importance in the Power and Utilities Industry. Power outages can cause a substantial loss of power and financial loss to all stakeholders. Hence, reducing power line failure is the highest priority.

Key features of TITUM M2:

- Fault detection technologies
- Real-time image transmission
- Al analysis, detection, and diagnosis of any issue on the power transmission line network

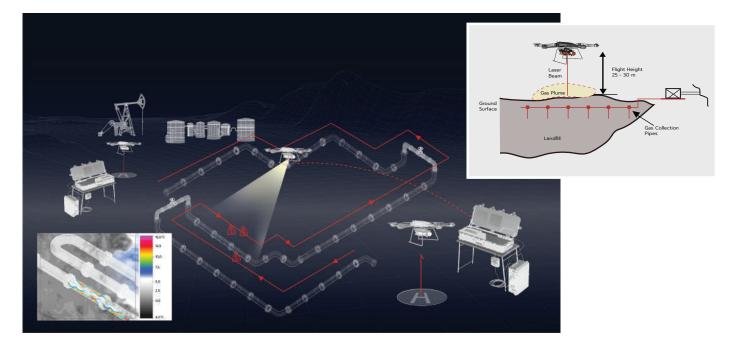
TITUM M2 can operate in hostile environments, including negative weather conditions. Power Transmission Line Inspection contributes to improving the entire performance and efficiency of power transmission and distribution infrastructure with a suitable configuration in place.

Wi-Fi/ Cell Hotspot: Communication can be an issue when significant infrastructure damage has occurred as a result of natural disasters like a flood, an earthquake, or a hurricane. TITUM M2 offers a unique abilityto create temporary Wi-Fi or Cell hotspots, enabling communication in disastrous areas during emergencies.



Oil and Gas Pipeline Inspection

Oil and Gas Pipeline Inspection was once a slow-moving service that could easily miss any faults or issues. However, with TITUM M2 for pipeline inspection, we can identify and localize defects to pipeline insulation and leakages using gas sensor detection.



Key features

- A variety of sensors, such as thermal imaging camera sensors or methane detection sensor
- Inspect pipeline insulation and heat loss, in conjunction with AI analysis
- Spot leakages for over and underground pipelines
- Focus in detail on any areas of interest (AOI) while taking thousands of images and videos that can be processed using cloud-based software

