

THUNDERBIRD HAS ARRIVED

MTJB ENGINEERING

→ THE FUTURE IN MODULAR UNMANNED SYSTEMS IS HERE!

Why take multiple drone systems into the field when you can have one system that changes to your immediate need as easily as you do.

With a concept based upon modularity and with the end user in mind MTJB Engineering has done just that with their latest Unmanned Air System (UAS) Thunderbird™ (Patent Pending)

Thunderbird™ is a multi-mission semi-autonomous UAS that provides you with an increased capability in the field. By using this fully modular approach in our design the system can be instantly adapted to changing situations and needs.

→ GAME CHANGING FEATURES

Autonomous Missions

Using our support system, the mission is planned and programmed prior to mission start. once launched the suite of on-board sensors allow the system to carry out the mission with full autonomy.

Hot-Swap Mission Modules

Carrying an array of mission modules in the field gives the end user the choice of mission types available. By simply swapping out the mission module the user can go between reconnaissance to search and rescue and back again in a matter of minutes.

Redundancy and In-field Repairs

By having full modularity, the system has an in-built redundancy and repair capability. The simple plug and play methodology mean a damaged part can be changed out in the field almost instantly.

Special Mission Ready

If the system is brought down prematurely then the crash system automatically wipes the mission memory to ensure that all data is kept secure from unintentional access.



APPLICATIONS

- Reconnaissance
- Search and Rescue
- Terrain Mapping
- Situational Awareness
- Force Protection
- extended range comms
- Specialist Missions

And many more possibilities due to Thunderbird's design

MTJB ENGINEERING

We are systems engineering experts that specialize in the design, development and integration of unmanned systems across air, ground, surface and sub-surface environments.

MTJB Engineering take your initial requirements and by working with you enable you to realize your vision.

Point of Contact

Mark Gilbert
thunderbird@mtjb-engineering.com
01174 285 766
Future Space, UWE North Gate,
Bristol, BS34 8RB
www.mtjb-engineering.com

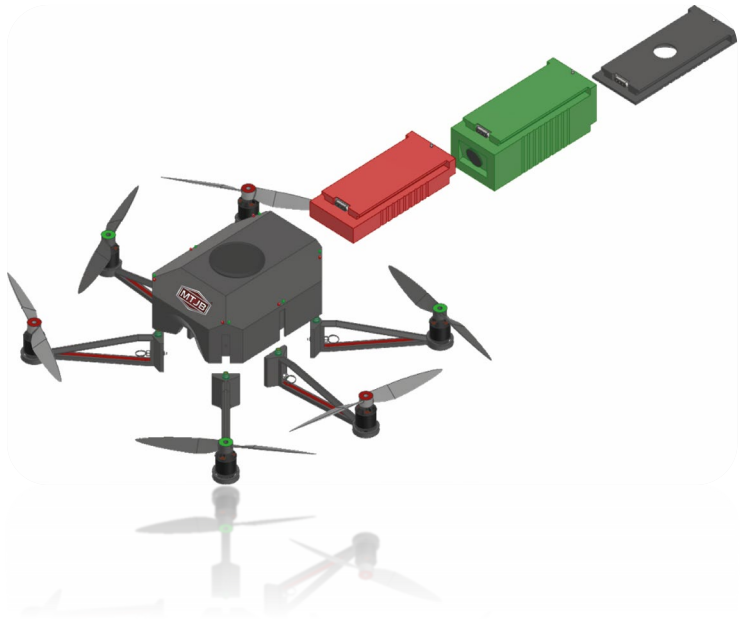


→ FLIGHT MODULE

Our flight module is designed to be the brains of the system. Supplying the drone with the flight critical components of motor speed control, inertial sensors, GPS, and the mother board.

Choosing between four or six rotor configuration gives the end user the choice between payload weight or range. For more critical mission using the six-rotor configuration gives increased reliability during flight.

In line with the modularity of this system the rotor arms are easily attached and detached from the main body to allow easy storage as well as providing in-field repairs when damaged. Simply swap out a bad arm with good.



→ MISSION MODULES

With the end user in mind each mission module is designed to fit into standard webbing pouches and are task specific. The modules come in two sizes depending on the equipment to be carried internally and simply slide into the main body when needed. All modules can be pre-programmed prior to the mission with waypoint navigation, search patterns or end point destination.

TECHNICAL SPECIFICATION

UAS Specification

Total Length (assembled)	57.5cm (22.5 in) diagonal from motor to motor
Total lengths (storage)	19 x 17 x 6.5cm (7.5 x 6.5 x 2.5 in) – Main Body 16.4 x 3.3cm (6.5 x 1.25 in) – Rotor Arms
Mission Module - Single	18 x 7.7 x 3cm (7 x 3 x 1.25 in)
Mission Module – Double	18 x 7.7 x 6cm (7 x 3 x 2.5 in)
Weight	1kg system weight. Designed to carry up to 2.5kg with all 6 rotors attached.
Total Flight Distance	2km – (guidance only as flight distance is dependent on mission modules attached and flight regime)

System Features

Waypoint Navigation	✓
Manual Flight	✓
Pre-Programmed Missions Parameters	✓
Low Battery RTB	✓
Hot Swap Capability	✓
Portable	✓
In-Field Repairs	✓
Configurable	✓
Color	As required
Service Agreement	Optional

THUNDERBIRD™ by MTJB Engineering

THUNDERBIRD USES ITS UNIQUE DESIGN TO GIVE THE PERSON IN THE FIELD THE ULTIMATE IN VERSATILITY, ADAPTABILITY AND RELIABILITY MAKING SURE THEY CAN GET THE JOB DONE.