



**GOVERNMENT OF INDIA
DIRECTORATE GENERAL OF CIVIL AVIATION
DRONE DIRECTORATE**

TYPE CERTIFICATE
No.: T1024000002B

This certificate, issued to **M/s MARUT DRONETECH PRIVATE LIMITED** certifies that the Unmanned Aircraft System

"AG 365H"

*its technical specifications and operating limitations for which are contained in Datasheet No **T1024000002B** dated **14th October, 2024** is of proper design, material, specification, construction and performance for safe operation based on the recommendation of **UL INDIA PRIVATE LIMITED** as required by the Certification Scheme for Unmanned Aircraft Systems notified by the Ministry of Civil Aviation vide S.O. 347(E) dated the 26th of January, 2022.*

This Type Certificate is issued under the provision of Rule 8 and Rule 9 (3) of the Drone Rules 2021.

This certificate shall remain valid until suspended or cancelled.

Date: 14th October, 2024

Director General of Civil Aviation

Technical Specifications Of M/S MARUT DRONETECH PRIVATE LIMITED's UAS Model AG 365H

Manufacturer Name	MARUT DRONETECH PRIVATE LIMITED
Address	Door no 2-53/23/2/1, T- Hub Foundation, Himalaya Block- D, IIIT, GACHIBOWLI, Ranga Reddy, Telangana, , K.V.Rangareddy , TELANGANA , 500032 , INDIA
UAS Model Name	AG 365H
Description	AG 365H is a Medium class rotorcraft (Hexacopter) configuration with maximum allowed capacity of 10 liters tank for agrochemical spraying, 08 kg granule for spreader and Remote Pilot Training.
UAS Details	
Category/Sub-Category	rotorcraft (RPAS)
Class	MEDIUM
Maximum all-up-weight(including payload) in kg	29.49
Overall dimensions (l x b x h) in mm	2045.0 x 1849.0 x 650.0
Payload Details	
Details of each Compatible Payload (including Manufacturer Name, Payload Specifications with Model No., Intended Applications)	Configuration 1 : Spraying Payload with flat jet nozzles Configuration 2 : Spraying Payload with centrifugal nozzles Configuration 3 : Spreader Payload
Variable Load/Consumables (Like fluid etc., if any)	Sprayer payload :- 10Ltrs agrochemicals for spraying. Spreader payload :- 08 kg granule.
Power plant Details	
Engine details (Manufacturer details, Model No.)	NA , NA
Engine/Motor	Hobbywing X6 plus BLDC Motor
Power Rating	1802 watts
No. of Engines/ Motors	6
Total fuel capacity (kg)/ Battery capacity (mAh)	25200.0 mAh
Propeller details (Diameter, Max RPM)	Diameter - 24 inches , Pitch - 8 , Max RPM - 5467
Equipment Details	
GNSS	Available
Autonomous Flight Termination System or Return Home (RH)	Available Available

Flashing anti-collision strobe lights	Available
RFID and GSM SIM Card	RFID- Not Available GSM SIM Card- Available
Flight control Module	Available
SSR transponder (Mode 'C' or 'S') or ADS-B OUT equipment (if applicable)	Not Available Not Available
Barometric equipment (with capability for remote sub-scale setting) (if applicable)	Not Available
Geo-fencing Capability	Available
Detect and Avoid Capability (if applicable)	Available
Remote Pilot Station	
Ground Control Station Model No.	AeroGCS Green
GCS App. Version	V1.39
C2 Link	
Equipment details	SIYI MK15
Frequency Band	2412-2472 MHz
ETA issued by WPC Wing, DoT	Details- ETA-SD-20220806796 dated on 14.04.2023
Performance Details	
Maximum Endurance (hr/m)	13.51 minutes
Maximum Range (in km)	1.5 Km
Maximum Speed (in m/s)	15.0 m/sec
Maximum Height attainable/ Maximum Ceiling Height (in ft)	328.1 ft
Operating Altitude (in ft)	328.1 ft
Operational Envelope	VLOS Day and Night
Engine limits (Maximum RPM) / Max. Battery Temperature (in deg C)	50.0 deg C
Propeller limits (Maximum)	5467
Documents / Manuals	
Manufacturer's Operating Manual (as applicable)	Flight Manual Ver. 1.8 dated 18th September, 2024
Manufacturer's Maintenance guidelines (as applicable)	Maintenance Manual Ver. 1.4 dated 5th July, 2024
Maintenance Inspection Schedule/Overhaul interval	Maintenance Manual Ver. 1.4 dated 5th July, 2024
Maintenance Log Book	Log book Ver. 1.5 dated 18th August, 2024
Flight Log Book	Log book Ver. 1.5 dated 18th August, 2024

User Guide/ Self Explanatory Information Booklet for end users	Flight Manual Ver. 1.8 dated 18th September, 2024
Intended Applications	
Intended Applications	Agrochemical spraying & Granule spreader for Agriculture purpose and Remote Pilot training .

Limitations & Conditions to MARUT DRONETECH PRIVATE LIMITED for manufacturing of UAS Model AG 365H

1. **M/s. Marut Dronetech Private Limited, Hyderabad** henceforth referred as manufacturer in this documents shall comply with the applicable Rules, Regulations & Requirements issued from time to time. The manufacturer shall comply with mandatory safety features (if any) as and when mandated by Ministry of Civil Aviation/DGCA.
2. Design documents and manuals submitted shall be frozen and controlled. Any changes effecting to the Type Certificate/Data sheet, the manufacturer shall approach through Authorised Testing Entity for up-dation of the Type Certificate/Data Sheet issued there under.
3. Manufacturer shall be responsible for all UAS Model "**AG 365H**" produced by them conforms to this type certificate & data sheet and shall issue a certificate of conformity for each UAS produced.
4. Manufacturer shall ensure that their UAS is not tampered at the time of sale and also at the time of maintenance. Manufacturer shall monitor the same and notified to DGCA as and when required.
5. Manufacturer shall maintain list of their vendors, bill of materials, inventory of UAS including buyer details with configurations sold to them etc. and access to the same shall be provided to DGCA during surveillance and as & when requested for. It shall be the responsibility of the manufacturer to ensure that their UAS are sold to bonafide customers.
6. **Manufacturer shall ensure that operations is restricted to Visual Line of Sight & for day and night operations only and within the operations/ performance limitations specified in the frozen manuals.**
7. Manufacturer shall affix fireproof plate for indicating UIN, Manufacturer's name, model no. and serial no. in all the UAS manufactured before it is transferred to the buyer
8. Manufacturer shall intimate DGCA about any violations, defects, faults, malfunctions, incidents and accidents involving the subject UAS model quarterly and as when sought for.
9. UAS Model "**AG 365H**" can be used for intended applications only. Manufacturer shall ensure that the drone is flown away (30m) from uninvolved people and not flown over the crowd/ uninvolved people.
10. **The endurance of UAS model "AG 365H" with full (tank) payload (without dispensing) is 13 mins and 51 seconds and the endurance with empty (tank) payload is 23 minutes and 22 seconds. This note is included in the "Limitations & Conditions" section of TCDS due to current limitation in the digital sky platform.**
11. The manufacturer shall be responsible for ensuring applicable conditions and educate end users accordingly.
12. Manufacturer shall be responsible for rights related to design and development of the UAS model "**AG 365H**" and DGCA shall not be party to any dispute arising due to proprietary right issues.
13. Manufacturer shall abide by the IT Act 2000 and any subsequent revision.
14. In case of violation of any of the above mentioned conditions and/ or operating requirements & restrictions specified in this Type Certificate, penal action shall be initiated in line with the Drone Rules, 2021 and other Rules/ Regulations issued from time to time.