



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

TYPE CERTIFICATE
No.: T0524000001Q

This certificate, issued to ***M/s AITMC VENTURES LIMITED*** certifies that the Unmanned Aircraft System

"VIRAJ"

*its technical specifications and operating limitations for which are contained in Datasheet No **T0524000001Q** dated **14th May, 2024** is of proper design, material, specification, construction and performance for safe operation based on the recommendation of **TQ Cert Services 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 May, 2024

Director General of Civil Aviation

Technical Specifications Of M/S AITMC VENTURES LIMITED's UAS Model VIRAJ

Manufacturer Name	AITMC VENTURES LIMITED
Address	12th and 13th Floor, Tower 7, Pent House No. 2 , Takshila Heights, Sector 37C, Gurugram, Haryana , Gurgaon , HARYANA , 122001 , INDIA
UAS Model Name	VIRAJ
Description	VIRAJ is a Small class hexacopter RPAS UAS having a tank of filling capacity of 10L for Agrochemical spraying or 9Kg filling capacity seed broadcaster configuration. Also, the UAS can be used for remote pilot training.
UAS Details	
Category/Sub-Category	rotorcraft (RPAS)
Class	SMALL
Maximum all-up-weight(including payload) in kg	24.9
Overall dimensions (l x b x h) in mm	1784.0 x 1964.0 x 735.0
Payload Details	
Details of each Compatible Payload (including Manufacturer Name, Payload Specifications with Model No., Intended Applications)	1. Seed Broadcaster with tank having maximum 9Kg filling capacity . 2. Sprayer with tank having maximum 10L Liquid filling Capacity
Variable Load/Consumables (Like fluid etc., if any)	1. Seed Broadcaster:-9Kg seed for spreading. 2. Sprayer payload :-10Ltrs Liquid for spraying
Power plant Details	
Engine details (Manufacturer details, Model No.)	NA , NA
Engine/Motor	Hobbywing X6 Plus BLDC motor
Power Rating	2398.6 watts
No. of Engines/ Motors	6
Total fuel capacity (kg)/ Battery capacity (mAh)	16000.0 mAh
Propeller details (Diameter, Max RPM)	Diameter - 24 inches , Pitch - 8 , Max RPM - 5442
Equipment Details	
GNSS	Available
Autonomous Flight Termination System or Return Home (RH)	Not Available Available
Flashing anti-collision strobe lights	Available

RFID and GSM SIM Card	RFID- Not Available GSM SIM Card- Not 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)	Not Available
Remote Pilot Station	
Ground Control Station Model No.	Qground control GCS software
GCS App. Version	V 4.1.1
C2 Link	
Equipment details	Skydroid H12
Frequency Band	2.402-2.4835 GHz
ETA issued by WPC Wing, DoT	Details- ETA-SD-20210704378 dated 24th July, 2021.
Performance Details	
Maximum Endurance (hr/m)	10 minutes
Maximum Range (in km)	1 Km
Maximum Speed (in m/s)	8.0 m/sec
Maximum Height attainable/ Maximum Ceiling Height (in ft)	98.4 ft
Operating Altitude (in ft)	98.4 ft
Operational Envelope	VLOS Day and Night
Engine limits (Maximum RPM) / Max. Battery Temperature (in deg C)	50.0 deg C
Propeller limits (Maximum)	5442 RPM
Documents / Manuals	
Manufacturer's Operating Manual (as applicable)	FLIGHT MANUAL-VIRAJ Ver. 6 dated 26th April, 2024
Manufacturer's Maintenance guidelines (as applicable)	END USER MAINTENANCE MANUAL & SCHEDULE-VIRAJ Ver. 5 dated 10th April, 2024
Maintenance Inspection Schedule/Overhaul interval	END USER MAINTENANCE MANUAL & SCHEDULE-VIRAJ Ver. 5 dated 10th April, 2024

Maintenance Log Book	VIRAJ UAS MAINTENANCE LOG BOOK Ver. 2 dated 10th January, 2024
Flight Log Book	VIRAJ FLIGHT LOG BOOK Ver. 2 dated 10th January, 2024
User Guide/ Self Explanatory Information Booklet for end users	FLIGHT MANUAL-VIRAJ Ver. 6 dated 26th April, 2024
Intended Applications	
Intended Applications	<ol style="list-style-type: none"> 1. Seed Broadcasting 2. Agrochemical spraying for Agriculture purpose 3. Remote Pilot training