



सत्यमेव जयते

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

TYPE CERTIFICATE

No. : **T06220000002**

*This certificate, issued to **M/s CBAI TECHNOLOGIES PVT LTD, Hyderabad** certifies that the Unmanned Aircraft System*

“MODEL V”,

*its technical specifications and operating limitations for which are contained in **datasheet No. T06220000002, dated 17th June, 2022** is of proper design, material, specification, construction and performance for safe operation based on the recommendation of **M/s TQ Cert Services Pvt Ltd** 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 : 17th June, 2022

Director General of Civil Aviation

Technical Specifications of M/s CBAI Technologies Private Limited's UAS model name Model V

Manufacturer's Name	CBAI Technologies Private Limited
Address	12-13-635/4, N G Nagar, Tarnaka, Secunderabad, Hyderabad, Telangana, 500017
UAS Model Name.	Model V
Description	Quacopter rotorcraft, carbon fiber body, 18 inch diameter and 6.1 inch pitch propeller, Carbon fiber and ABS Plastic propellers
UAS Details	
Category/Sub-Category	Rotorcraft/ RPAS
Class	Small
Maximum all-up-weight (including payload) in kg	5.430 Kg
Overall dimensions (l x b x h) in mm	994X994X300
Payload Details	
Details of each Compatible Payload (including Manufacturer Name, Payload Specifications with Model No., Intended Applications)	The model is designed to take the following payloads 1. ADTI 26MP camera 2. Sony Alpha ILCE A6000 3. Micasense Red Edge MX
Variable Load/Consumables (Like fluid etc., if any)	None
Power plant Details	
Engine details (Manufacturer details, Model No.)	Not applicable
Engine/Motor	BLDC T-Motor
Power Rating	754 Watts
No. of Engines/ Motors	4
Total fuel capacity (kg)/ Battery capacity (mAh)	22000 mAh
Propeller details (Diameter, Max RPM)	Diameter - 18 inches, Pitch – 6.1 inches Max RPM – 6000
Equipment Details	
GNSS	Available
Autonomous Flight Termination System or Return Home (RH)	Available
Flashing anti-collision strobe lights	Available
RFID and GSM SIM Card	Not Available
Flight control Module	Available
SSR transponder (Mode 'C' or 'S') or ADS-B OUT equipment(if applicable)	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 App. Version	V4.1
C2 Link	
Equipment details	Skydroid T12
Frequency Band	2.420 – 2.480 (GHz).
ETA issued by WPC Wing, DoT	ETA-SD-20190702917, Date: 25- 07- 2019(ETA generated through Self-Declaration)
Performance Details	
Maximum Endurance (hr/m)	40 minutes
Maximum Range (in km)	0.45 km
Maximum Speed (in m/s)	10 m/s
Maximum Height attainable/ Maximum Ceiling Height (in ft)	400 ft (120 m)
Operating Altitude (in ft)	400 ft (120 m)
Operational Envelope	VLOS Operations only (within the operations/performance limitations specified in the frozen manuals mentioned below)
Engine limits (Maximum RPM) / Max. Battery Temperature (in deg C)	Max. Battery Temperature: 45 deg C
Propeller limits	6000 RPM
Documents / Manuals	
Manufacturer's Operating Manual (as applicable)	Model V Flight Manual, Revision 7, Dated: 06-06-2022
Manufacturer's Maintenance guidelines (as applicable)	End user Maintenance Manual, Revision 1, Dated: 07- 06-2022
Maintenance Inspection Schedule/ Overhaul interval	End user Maintenance Manual, Revision 1, Dated: 07- 06-2022
Maintenance Log Book	End user Maintenance Manual, Revision 1, Dated: 07- 06-2022
Flight Log Book	Log Book, Revision 2, Dated: 25-05-2022
User Guide/ Self Explanatory Information Booklet for end users	Self-Explanatory booklet, Revision 2, Dated: 07-06- 2022
Intended Applications	
Intended Applications	<ul style="list-style-type: none"> • Survey, Photography • Multispectral crop inspection • Surveillance

Limitations & Conditions to M/s CBAI Technologies Pvt Ltd
for manufacturer of UAS model 'MODEL V'

1. Manufacturer shall comply with the regulations, circulars issued by the DGCA from time to time. The manufacturer shall comply with the mandatory safety features (if any) as and when notified by Ministry of Civil Aviation.
2. Design documents and manuals submitted shall be frozen and controlled. Any changes effecting to the Type Certificate/Datasheet, the manufacturer shall approach through Authorised Testing Entity for up-dation of the Type Certificate/Data Sheet.
3. Manufacturer shall ensure that UAS is not tampered at the time of sale and also at the time of maintenance. Manufacturer shall monitor the same as and when required.
4. Manufacturer shall maintain list of their vendors, bill of materials, inventory of UAS including end user details etc. and access to the same shall be provided to DGCA during surveillance and as & when requested for.
5. Manufacturer shall ensure that operations is restricted to Visual Line of Sight Operations only and within the operations/performance limitations specified in the frozen manuals.
6. Manufacturer shall affix fireproof plate for indicating UIN, Manufacturer's name, model no. and serial no. in all the UAS manufactured.
7. Manufacturer shall intimate DGCA about any violations, defects, faults, malfunctions, incidents and accidents involving the subject UAS model periodically and stipulated time frame respectively. .
8. Manufacturer shall be responsible for rights related to design and development of the UAS model "MODEL V" and DGCA shall not be party to any dispute arising due to proprietary right issues.
9. Manufacturer shall abide by the IT Act 2000 and any subsequent revision.
10. 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.