



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

**TYPE CERTIFICATE**

**No.: T01230000009**

*This certificate, issued to **M/s Thanos Technologies Private Limited, Hyderabad** certifies that the Unmanned Aircraft System*

**“SYENA-H10”,**

*its technical specifications and operating limitations for which are contained in datasheet No **T01230000009**, dated the **12<sup>th</sup> January, 2023** is of proper design, material, specification, construction and performance for safe operation based on the recommendation of **M/s 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 26<sup>th</sup> 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 : 12<sup>th</sup> January, 2023**

**Director General of Civil Aviation**

**Technical Specifications of M/s Thanos Technologies Pvt Ltd.'s UAS model SYENA-H10**

Manufacturer's Name	Thanos Technologies Private Limited
Address	Flat No.101, Gayatri Nest, Municipal No.2-48/46/GN/101, Telecom Nagar, Hyderabad – 500032, Telangana
UAS Model Name.	SYENA-H10
Description	SYENA-H10 is a Remotely Piloted Aircraft System (RPAS)/Hexacopter of Medium class rotorcraft UAS with 10 litres payload tank capacity. It is made to be utilized in spraying operations for agricultural applications.
<b>UAS Details</b>	
Category/Sub-Category	Rotorcraft / RPAS
Class	Medium
Maximum all-up-weight (including payload) in kg	29.4 Kg
Overall dimensions (l x b x h) in mm	2375mm x 2375mm x 710mm
<b>Payload Details</b>	
Details of each Compatible Payload (including Manufacturer Name, Payload Specifications with Model No., Intended Applications)	Sprayer tank with maximum capacity of 10 litres/Kg for spraying mode only.
Variable Load/Consumables (Like fluid etc., if any)	Agrochemicals
<b>Power plant Details</b>	
Engine details (Manufacturer details, Model No.)	Not applicable
Engine/Motor	Combo X8 BLDC Motor
Power Rating	2826 Watts
No. of Engines/ Motors	6
Total fuel capacity (kg)/ Battery capacity (mAh)	Battery Capacity: 25200mAh
Propeller details (Diameter, Max RPM)	Diameter-30" Pitch-9" & Maximum RPM-5100
<b>Equipment Details</b>	
GNSS	Available
Autonomous Flight Termination System or Return Home (RH)	Available
Flashing anti-collision strobe lights	Available
RFID and GSM SIM Card	Not Available
SSR transponder (Mode 'C' or 'S') or ADS-B OUT equipment(if applicable)	Not Available

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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
<b>Remote Pilot Station</b>	
Ground Control Station Model No.	Aero GCS software
GCS App. Version	2.2
<b>C2 Link</b>	
Equipment details	Skydroid T10
Frequency Band	2.4 – 2.48 GHz
ETA issued by WPC Wing, DoT	ETA-SD-20220302255 dated 25 <sup>th</sup> March, 2022
<b>Performance Details</b>	
Maximum Endurance (hr/m)	18.28 minutes
Maximum Range (in km)	0.5 km
Maximum Speed (in m/s)	10 m/s
Maximum Height attainable/ Maximum Ceiling Height (in ft)	164 ft
Operating Altitude (in ft)	164 ft
Operational Envelope	VLOS Operations (within the operations/performance limitations specified in the frozen manuals mentioned below)
Engine limits (Maximum RPM) / Max. Battery Temperature (in deg C)	60 degrees Celsius
Propeller limits	Maximum RPM-5100
<b>Documents / Manuals</b>	
Manufacturer's Operating Manual (as applicable)	Flight Manual version 3.0 dated 29 <sup>th</sup> December, 2022
Manufacturer's Maintenance guidelines (as applicable)	Maintenance Manual V 1.1 dated 9 <sup>th</sup> December,2022
Maintenance Inspection Schedule/ Overhaul interval	Maintenance Manual V 1.1 dated 9 <sup>th</sup> December,2022
Maintenance Log Book	RPA Log Book V 1.1 dated 9 <sup>th</sup> December, 2022
Flight Log Book	RPA Log Book V 1.1 dated 9 <sup>th</sup> December, 2022
User Guide/ Self Explanatory Information Booklet for end users	Flight Manual version 3.0 dated 29 <sup>th</sup> December, 2022
<b>Intended Applications</b>	
Intended Applications	SYENA-H10 is an agriculture drone mainly used for agrochemical spraying over the crops.

**Limitations & Conditions to M/s Thanos Technologies Pvt Ltd  
for manufacturing of UAS model 'SYENA-H10'**

1. Manufacturer shall comply the regulations, requirements and 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/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 quarterly and as when sought for.
8. Manufacturer shall be responsible for rights related to design and development of the UAS model "**SYENA -H10**" 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.