



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

TYPE CERTIFICATE
No.: T0324000001K

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

"RFLY-MICRO"

*its technical specifications and operating limitations for which are contained in Datasheet No **T0324000001K** dated **26th March, 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: 26th March, 2024

Director General of Civil Aviation

**Technical Specifications Of M/S RFLY INNOVATIONS PRIVATE LIMITED's UAS Model
RFLY-MICRO**

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| Manufacturer Name | RFLY INNOVATIONS PRIVATE LIMITED |
| Address | NO. 43, 648/17, T.V.K STREET, PADUR, CHENNAI , Kanchipuram , TAMIL NADU , 603103 , INDIA |
| UAS Model Name | RFLY-MICRO |
| Description | RFLY-MICRO is a Quadcopter Rotorcraft in Micro class having Aerial mapping and surveillance payloads. |
| UAS Details | |
| Category/Sub-Category | rotorcraft (RPAS) |
| Class | MICRO |
| Maximum all-up-weight(including payload) in kg | 1.89 |
| Overall dimensions (l x b x h) in mm | 926.0 x 926.0 x 356.0 |
| Payload Details | |
| Details of each Compatible Payload (including Manufacturer Name, Payload Specifications with Model No., Intended Applications) | ADTI 26 MP Mapping Camera SIYI A8 mini Surveillance Camera |
| Variable Load/Consumables (Like fluid etc., if any) | None |
| Power plant Details | |
| Engine details (Manufacturer details, Model No.) | NA , NA |
| Engine/Motor | MAD 4006 320 KV |
| Power Rating | 268 watts |
| No. of Engines/ Motors | 4 |
| Total fuel capacity (kg)/ Battery capacity (mAh) | 6800.0 mAh |
| Propeller details (Diameter, Max RPM) | Diameter - 17 inches , Pitch - 5.8 , Max RPM - 6000 |
| Equipment Details | |
| GNSS | Available |
| Autonomous Flight Termination System or Return Home (RH) | Available Available |
| Flashing anti-collision strobe lights | Not Available |
| RFID and GSM SIM Card | RFID- Not Available GSM SIM Card- Not Available |
| Flight control Module | Available |

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| 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. | Rfly Navigator |
| GCS App. Version | V 1.0.6 |
| C2 Link | |
| Equipment details | H16 |
| Frequency Band | 2.400- 2.480 GHz |
| ETA issued by WPC Wing, DoT | Details- ETA -1759/2017-RLO(SR) dated 23rd March, 2023 |
| Performance Details | |
| Maximum Endurance (hr/m) | 60 minutes |
| Maximum Range (in km) | 1.3 Km |
| Maximum Speed (in m/s) | 8.0 m/sec |
| Maximum Height attainable/ Maximum Ceiling Height (in ft) | 400.0 ft |
| Operating Altitude (in ft) | 400.0 ft |
| Operational Envelope | VLOS Day |
| Engine limits (Maximum RPM) / Max. Battery Temperature (in deg C) | 55.0 deg C |
| Propeller limits (Maximum) | Max : 6000 |
| Documents / Manuals | |
| Manufacturer's Operating Manual (as applicable) | RFLY-Micro UAS/Flight Manual Ver. Rev 02 Issue No 03 dated 13th February, 2024 |
| Manufacturer's Maintenance guidelines (as applicable) | RFLY Micro UAS Maintenance Manual Ver. Rev 02, Issue No 03 dated 12th February, 2024 |
| Maintenance Inspection Schedule/Overhaul interval | RFLY Micro UAS Maintenance Manual Ver. Rev 02, Issue No 03 dated 12th February, 2024 |
| Maintenance Log Book | UAS Log Book Ver. Rev 0, Issue No 01 dated 31st March, 2023 |
| Flight Log Book | UAS Log Book Ver. Rev 0, Issue No 01 dated 31st March, 2023 |
| User Guide/ Self Explanatory Information Booklet for end users | RFLY-MICRO UAS / USER MANUAL Ver. Version: 1.0.0 Issue No: 01 dated 22nd March, 2023 |

| Intended Applications | |
|------------------------------|-------------------------------|
| Intended Applications | Aerial Mapping & Surveillance |

Limitations & Conditions to RFLY INNOVATIONS PRIVATE LIMITED for manufacturing of UAS Model RFLY-MICRO

1. **M/ s. RFLY Innovations PvtLtd, Chennai**, 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/ Datasheet, the manufacturer shall approach through Authorised Testing Entity for updation of the Type Certificate/ Data Sheet issued there under.
3. Manufacture shall be responsible for all UAS Model “ **RFLY-MICRO**” produced by them conforms to this type certificate & datasheet 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 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 " **RFLY- MICRO** " 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. The manufacturer shall be responsible for ensuring applicable conditions and educate end users accordingly.
10. Manufacturer shall be responsible for rights related to design and development of the UAS model “ **RFLY-MICRO**” and DGCA shall not be party to any dispute arising due to proprietary right issues.
11. Manufacturer shall abide by the IT Act 2000 and any subsequent revision.
12. 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.