

UAV Requirement Specification Table

Parameter	Specification / Requirement
UAV Type	Hybrid / Fixed Wing BVLOS Drone
Take-off and Landing	Vertical Take-off and Landing (VTOL)
Minimum Payload Capacity	4 kg
Endurance	Minimum 60 minutes
Operating Range	Minimum 80 km on a single charge / without battery change, in hilly terrain
Elevation in Range	Minimum 2000 meters (2 km)
Maximum Delivery Time	50 km within a maximum of 35 minutes
Operational Wind Speed	Minimum 35 km/h or better
Navigation (GNSS)	GPS / GLONASS / NavIC
Operating Temperature Range	-10°C to +50°C or better
Operational Ceiling Height	4000 meters AMSL
Safety Features	- Redundant Propulsion- Redundant Communication- Wind Failsafe- Battery Failsafe
Ground Control Station (GCS)	All essential arrangements to establish a ground control station at no additional cost
Compliance	Must comply with Drone Rules 2021 (amendment 2022) and be listed as an approved model on the DGCA DigitalSky platform
Emergency Recovery Mode	Ability to return to home/base in case of communication failure, low battery/power, or beyond operational wind speed
Communication Link	2.4 GHz or better with 128-bit AES encryption (ETA certificate required)
Weather & Terrain Capability	All Weather, All Terrain
Operating Altitude	400 ft AGL or better
Minimum Distance per Day	100 km (may vary depending on sorties and operations)
Make in India Compliance	Minimum 50% Indian components
Power Source	Fully Electric
Pilot Requirements	DGCA Approved Pilots
Experience / Work Orders	Existing MoU or Work Order with any State/Central Government Department
Work Experience	Minimum 1000 km of delivery flights completed
Vendor Eligibility	Vendor should not be blacklisted by any client agency
Real-Time Monitoring Capability	Required
Inventory Management	Internal order tracking, inventory tracking, admin rights, invoicing, and order reports
Duration of Service	12 months
Drones Available at Site	2 at all times
Service Type	Drone-as-a-Service Vendor