

## Technical spec for DGCA approved agriculture Kisan Drone

Sno	Particulars	Requirements
<b>(A) DRONE</b>		
1	UAS Model Name	
2	UAS Class	SMALL or MEDIUM
3	Mission	Sprayer Drone for Agriculture
4	Type	Multi-Rotor. Vertical Landing & Take-off
5	No. of rotors	Hexa-copter (6 rotors)
6	Flight modes	Manual, Autonomous
7	Tank capacity	8 -10 litres
8	Tank Material of Construction	HDPE
9	Maximum flying speed upto	5 - 10 m/s
10	Maximum height of flying upto	49 - 82 ft
11	Maximum take-off weight (AUV)	24 - 29.64Kg
12	Flight time (with payload)	07-19 min.
13	Flight range upto	0.5 -1.5 Kms
14	Compact frame design	Foldable arms (Downwards foldable preferable)
15	GPS module accuracy	+/- 1m accuracy
16	GNSS	Required
17	Return to Launch site with Auto Landing in case of Empty Tank or Battery threshold reached	Required
18	Bacon LEDs on each propeller	Required
19	Drone Box	Required. Pl mention box dimensions and box weight
20	Operational Manual	Required
21	Tool Kit for Drone	Required
<b>(B) SPRAYING ASSEMBLY</b>		
1	Type of nozzle	Flat Jet
2	No. of nozzles (01 Set)	Each Set will have Flat Jet (set of 4 nozzles) and Centrifugal (Set of 2 nozzles)
3	Nozzle Make	T-Jet
4	Spray width / swath	4 m
<b>(C) BATTERY (1 Set of 2 Batteries with Charger and Hub)</b>		
1	Type	Lithium Polymer/ Lithium Ion
2	Capacity	16000mAH - 25000mAH
3	Cycle	minimum 250
<b>(D) REMOTE CONTROLLER</b>		
1	Operating frequency	2.4 – 2.48 GHz
2	Max transmission range	1.5 Km
3	Operating temperature	0° C to 50° C
<b>(E) GENERAL CONDITIONS</b>		
1	The vendor should have Type Certified Model in small or medium Agri-Drone Sector in Recent Past.	Required
2	Minimum no of Type Certified drones in Agri-Sector	50
3	Existing Type Certificate	Required
4	Vendor should have minimum 2-3 Years operational experience in the field of Drone manufacturing	Required
<b>(F)</b>	<b>Onsite Warranty</b>	<b>2 Year</b>