

16L Agri Drone  
Specifications

<b>AIRFRAME</b>	
Structure	Hexacopter Structure, FOS = 3
Diagonal wheelbase of frame	1683 mm
Foldable Size (L x B x H)	990 mm * 1120 mm * 630 mm

<b>KEY FEATURES</b>	
Flight Mode	Fully Autonomous, Loiter Mode
Return to Launch (RTL)	Empty Tank, Battery Drained, Mission Complete, Geofence Breached
Battery fly time	Up to 20 Minutes with payload
Flying Range	500 meters radius (VLOS)
RADAR based collision avoidance	Detects any obstacle comes into the path of drone in both front and rear direction & reroute the path.
RADAR based terrain following	Detects variable height of crops and maintain constant spray height upto 10 meters.
Smart battery fails safe	Smart battery failsafe detects low battery and performs return to launch automatically.
Resume Mission	Autonomous mission resume function to resume the spraying to cover large area.
Live video streaming on GCS	2 MP HD camera to navigate the drone with High Lumens LED lights for low light.

<b>PROPULSION</b>	
Motor	Hobbywing X8 Motors
Stator size	81 * 20 mm
KV Rating	100 Kv
Max power	900 Watt
Weight	1150 grams

<b>SPRAYING SYSTEM</b>	
Liquid Tank	16 Liter
Volume	16 Liter
Standard operation payload	16 Liter of Spraying Liquid
Nozzle	TeeJet High Pressure Flat Spray Brass Sprayer with Carbon Fiber Body for Heavy Duty Operation.
Nozzle Quality	6 Pcs
Maximum Spray Speed Per Nozzle	1.1 L/min with heavy duty Brushless Pump.
Spray Width	8 Meters (6 Nozzles, 2 meter above the crops)

<b>FLIGHT PARAMETERS</b>	
Maximum Take off Weight	39 Kg
Maximum Flight Time	20 Minutes
Maximum Hovering Time	20 Minutes
Maximum Height	92 Meters or 300 feet above ground level
Max operation Speed	12 m/s
Max Flight Distance	500-meter radius (VLOS)
Operating temp	-15 °C to +55 °C
GNSS	Here 3 Plus u-blox high precision GNSS module (GPS L1C/A, GLONASS L1OF, BeiDou B1I)

<b>BATTERY</b>	
Capacity	2 x 22000 mAh (6S) LiPo 25C
Voltage	44.4 V (12S - 2 Batteries Connected in Series)
Connector	AS150
Charging Time	30 to 40 minutes
Life	270 Cycles 80% DOD

<b>REMOTE CONTROLLER</b>	
Model	Skydroid T12
Operation frequency	2.4 GHz
Max Transmission range	500-meter radius
Build in Battery	4000 mAh
Operation temperature	-10 °C to +50°C
Storage temperature	-10 °C to +50°C
GCS Screen	7 inch, 1920x1080p Full HD.

<b>COMPATIBILITY</b>	
1. DGCA approved model	
2. Drone can be compatible with Multispectral Camera for crop health monitoring and broadcaster for granule broadcasting.	