



Precision Agricultural & Crop Spraying Drone

About Oriful

Founded in 2016, Oriful is one of leading professional UAV manufacturers and industrial grade agriculture drone technology and solutions developer in the world.

We have been dedicated to providing farmers worldwide affordable highly reliable and efficient smart agricultural drones and robotics to make farming much easier and successful. We are one of those few drones manufactures focusing on latest state-of-the art agricultural drone technology that can bring farmers most reliable easy to use agricultural drones for precision agriculture. Our agricultural drones feature the following technical advantages.

- 1) Support manually, A-B route and fully autonomous operations
- 2) Automatically resume from last breakpoint exactly
- 3) Low voltage alarm makes flying safer
- 4) GPS/Beidou/Glonass/RTK positioning, easy operation
- 5) Altitude detection, terrain following and fully autonomous obstacle avoidance
- 6) Automatic return when low battery capacity and low pesticide volume are detected
- 7) One button take-off and landing, safer and easy operation
- 8) Android/Windows ground station, voice broadcasting
- 9) Vibration, lost of connection and pesticide volume cut protection
- 10) Flying height auto control radar, support altitude and flying layout setting
- 11) IP67 rating waterproof and dustproof
- 12) Collapsible drone arms
- 13) Night vision FPV camera
- 14) Support D-RTK (Real-time kinematic)

Agricultural Drones List

| | |
|--|----|
| 5L 4 Axis Agricultural drone----- | 3 |
| 10 L 4 Axis Agricultural drone----- | 4 |
| 16 L 4 Axis Agricultural drone----- | 5 |
| 16 L 6 Axis Agricultural drone----- | 5 |
| 20 L 4 Axis Agricultural drone----- | 6 |
| 20 L 6 Axis Agricultural drone----- | 6 |
| 22 L 4 Axis Agricultural drone----- | 7 |
| 30 L 6 Axis Agricultural drone----- | 8 |
| 32 L 6 Axis Agricultural drone----- | 7 |
| 50 L 4 Axis Agricultural drone----- | 8 |
| 30 L 4 Axis Multipurpose Agricultural drone----- | 9 |
| 50 L 4 Axis Multipurpose Agricultural drone----- | 13 |
| 72L 8 Axis Multipurpose Agricultural drone----- | 15 |

5L 4 Axis Agricultural drone



Technical Specifications

| Model | M505 |
|-------------------------------|--|
| Product Name | 5L 4 Axis Agriculture drone for pests and disease monitoring |
| Diagonal Wheelbase | 1200 mm |
| Total Weight | 11.4kg (battery and payload included) |
| Aircraft Weight | 11.4 KG (battery and payload included) |
| Takeoff Weight(Max.) | 11.4kg (full load) |
| Payload | 1.0kg |
| Flight Time | Empty load:≥ 72Min ; Full load≥ 65Min |
| Flight Speed | 4 -14 Meter/S |
| Flight Radius | 10,000 Meters |
| Picture transmission distance | Up to 5KM distance, wireless transmission, 1080P |
| Flight Height | 100 -1000 KM |
| Flight Control | XAG |
| Camera | Optional |
| Wind Resistance | 6 Levels |
| Propulsion System | 100 Kv Motor |
| Battery Capacity | Flight battery :16,000 mAh (12S)*2; Remote control battery : 10,000 mAh *1 |
| Working Voltage | 44-60.9V (12S) |
| Charging Time | 12-24 minutes |
| Recharge Cycles | 300-500 times |
| Operating Temperature | 10~50℃ |
| Dimension | 940*940*520mm(unfolded,arms excluded) |

10L 4 Axis Agricultural drone



A100Z



A100

Technical Specifications

| Model | A100Z | A100 |
|------------------------------|--|---|
| Product Name | 10 L 4 Axis Agriculture drone | 10 L 4 Axis Agriculture drone |
| Diagonal Wheelbase | 1000 mm | 1400 mm |
| Total Weight | 11.7kg (1.7 KG battery included) | 12.6kg (1.6 KG battery included) |
| Aircraft Weight | 10.0 KG (battery excluded) | 11.0 KG (battery excluded) |
| Battery Weight | 1.7 KG | 1.6 KG |
| Takeoff Weight(Max.) | 21.0kg (full load) | 21.0 kg (full load) |
| Payload | 10.0kg | 10.0kg |
| Flight Time | Empty load: 20~25Min ; Full load≥10Min | Empty load: 20~25Min ; Full load≥12Min |
| Flight Speed | 2 -8 Meter/S | 4 -5 Meter/S |
| Flight Radius | 1000 Meters | 1000 Meters |
| Flight Height | 1.5 -5 Meters | 2 -8 Meters |
| Flight Control | XAG | Jiyi K++ V2/V9 AG |
| Propulsion System | | |
| Motor | 100 Kv Motor | 100 Kv Motor |
| Battery Capacity | Flight battery :12,000 mAh (6S)*2; Remote control battery : 10,000 mAh *1 | Flight battery :16,000 mAh (12S)*1; Remote control battery : 10,000 mAh *1 |
| Working Voltage | 25.2V (6S) | 44-60.9V (12S) |
| Charging Time | 12-24 minutes | 12-24 minutes |
| Recharge Cycles | 300-500 times | 300-500 times |
| Spray System | | |
| Liquid Tank Capacity/Payload | 10 L | 10 L |
| Configuration | Tank *1, Pump*2, Flowmeter*1, Nozzels *4 | Tank *1, Pump*2, Flowmeter*1, Nozzels *4 |
| Spraying Mode | Pressure Spray | Pressure Spray |
| Water Pump Pressure | 0.35 mPa | 1 mPa |
| Number of Nozzle | 4 pcs high pressure spray misting nozzles | 4 pcs high pressure spray misting nozzles |
| Spray Width | 3~4M | 3~4 M |
| Max Spraying Flow Rate | 5 L/min | 5 L/min |
| Spray Efficiency | 5 Ha/Hour | 5 Ha/Hour |
| Operating Temperature | 10~50℃ | 10~50℃ |
| Dimension | 1300*1300*650mm (unfolded,arms excluded) | 1100*1100*600mm (unfolded,arms excluded), 620*620*600mm(folded) |

16L 4 Axis/6 Axis Agricultural drone



A160



A160S



A160Z

Technical Specifications

| Model | A160 | A160S | A160Z |
|------------------------------|---|---|---|
| Product Name | 16 L 4 Axis Agriculture drone | 16 L 6 Axis Agriculture drone | 16 L 6 Axis Agriculture drone |
| Diagonal Wheelbase | 1600 mm | 1600 mm | 1620 mm |
| Total Weight | 18.1kg (6.1 KG battery included) | 19.1kg (6.1 KG battery included) | / |
| Aircraft Weight | 12.0 KG (battery excluded) | 13.0 KG (battery excluded) | 16.8 KG (battery excluded) |
| Battery Weight | 6.1 KG | 6.1 KG | 4.8 KG |
| Takeoff Weight(Max.) | 38.0kg (full load) | 39.0kg (full load) | 38.8 kg (full load) |
| Payload | 16.0kg | 16.0kg | 16.0kg |
| Flight Time | Empty load: 20~25Min ; Full load: ≥12Min | Empty load: 20~25Min ; Full load: ≥10Min | Empty load: 20~25Min ; Full load: 10~15Min |
| Flight Speed | 4 -5 Meter/S | 4 -5 Meter/S | 4 -5 Meter/S |
| Flight Radius | 1000 Meters | 1000 Meters | |
| Flight Height | 2 -8 Meters | 2 -8 Meters | |
| Flight Control | XAG | XAG | Jiyi K++ V2/V9 AG |
| Propulsion System | | | |
| Motor | 100 Kv Motor | 100 Kv Motor | 100 Kv Motor |
| Battery Capacity | Flight battery :22,000 mAh (12S)*1; Remote control battery : 10,000 mAh *1 | Flight battery :16,000 mAh (12S)*1; Remote control battery : 10,000 mAh *1 | Flight battery :16,000 mAh (12S)*1; Remote control battery : 10,000 mAh *1 |
| Working Voltage | 44-60.9V (12S) | 44-60.9V (12S) | 44-60.9V (12S) |
| Charging Time | 12-24 minutes | 12-24 minutes | 12-24 minutes |
| Recharge Cycles | 300-500 times | 300-500 times | 300-500 times |
| Spray System | | | |
| Liquid Tank Capacity/Payload | 16 L | 16 L | 16 L |
| Configuration | Tank *1, Pump*2, Flowmeter*1, Nozzels *4 | Tank *1, Pump*2, Flowmeter*1, Nozzels *4 | Tank *1, Pump*1, Flowmeter*1, Nozzels *6 |
| Spraying Mode | Pressure Spray | Pressure Spray | Pressure Spray |
| Water Pump Pressure | 1 mPa | 1 mPa | 1 mPa |
| Number of Nozzle | 4 pcs high pressure spray misting nozzles | 4 pcs high pressure spray misting nozzles | 6 pcs high pressure spray misting nozzles |
| Spray Width | 3~4M | 3~4M | 5~8 M |
| Max Spraying Flow Rate | 5 L/min | 5 L/min | 5 L/min |
| Spray Efficiency | 6~7 Ha/Hour | 6~7 Ha/Hour | 6~7 Ha/Hour |
| Operating Temperature | 10~50 °C | 10~50 °C | 10~50 °C |
| Dimension | 1100*1100*600mm(unfolded, arms excluded) 620*620*600mm(folded) | 1500*1720*630mm(unfolded, arms excluded), 1100*1170*630mm(folded) | 1850*1620*670mm(unfolded, arms excluded) 1020*920*670mm(folded) |

20L 4 Axis/6 Axis Agricultural drone



A200Z



A200

Technical Specifications

| Model | A200Z | A200 |
|------------------------------|---|---|
| Product Name | 20 L 4 Axis Agriculture drone | 20 L 6 Axis Agriculture drone |
| Diagonal Wheelbase | 1810 mm | 2940 mm |
| Total Weight | TBD | 25.0kg (6.5 KG battery included) |
| Aircraft Weight | 18.0 KG (battery excluded) | 18.5 KG (battery excluded) |
| Battery Weight | 7.2 KG/Pcs | 6.5 KG/Pcs |
| Takeoff Weight(Max.) | 47.0kg (full load) | 45.0 kg (full load) |
| Payload | 20.0kg | 20.0kg |
| Flight Time | Empty load: 20~25Min ; Full load: 8-14Min | Empty load: 20~25Min ; Full load: 15Min |
| Flight Speed | 4 -5 Meter/S | 4 -8 Meter/S |
| Flight Radius | 1000 Meters | 1000 Meters |
| Flight Height | 2 -8 Meters | 2 -8 Meters |
| Flight Control | Jiyi K++ V2/V9 AG | Dji |
| Propulsion System | | |
| Motor | 100 Kv Motor | 100 Kv Motor |
| Battery Capacity | Flight battery :22,000 mAh (14S)*1; Remote control battery : 10,000 mAh *1 | Flight battery :20,000 mAh (14S)*4; Remote control battery : 10,000 mAh *1 |
| Working Voltage | 44-60.9V (14S) | 51.8V (14S) |
| Charging Time | 12-24 minutes | 12-24 minutes |
| Recharge Cycles | 300-500 times | 300-500 times |
| Spray System | | |
| Liquid Tank Capacity/Payload | 20 L | 20 L |
| Configuration | Tank *1, Pump*1, Flowmeter*1, Nozzels *6 | Tank *1, Pump*1, Flowmeter*1, Nozzels *10 |
| Spraying Mode | Pressure Spray/Centrifugal Spray (Centrifugal Pump) | Pressure Spray |
| Water Pump Pressure | 1 mPa | 1 mPa |
| Number of Nozzle | 4 pcs high pressure spray misting nozzles, 2 pcs brushless centrifugal nozzles | 10 pcs high pressure spray misting nozzles , |
| Spray Width | 5~8M | 8~12 M |
| Max Spraying Flow Rate | 5 L/min | 5 L/min |
| Spray Efficiency | 6 Ha/Hour | 11~12 Ha/Hour |
| Operating Temperature | 10~50 °C | 10~50 °C |
| Dimension | 1385*1385*763mm(unfolded,arms excluded), 770*790*775mm(folded), | 3700*2100*520mm(unfolded,arms excluded), |

22L/32L 4 Axis/6 Axis Agricultural drone



A200



A320

Technical Specifications

| Model | A220 | A320 |
|------------------------------|---|---|
| Product Name | 22 L 4 Axis Agriculture drone | 32 L 6 Axis Agriculture drone |
| Diagonal Wheelbase | 1730 mm | 1996 mm |
| Total Weight | 29.2kg (9.55 KG battery included) | 30.3kg (8.5 KG battery included) |
| Aircraft Weight | 19.65 KG (battery excluded) | 21.8KG (battery excluded) |
| Battery Weight | 9.55 KG | 8.5 KG/Pcs |
| Takeoff Weight(Max.) | 51.4kg (full load) | 62.0 kg (full load) |
| Payload | 22.0kg | 32.0kg |
| Flight Time | Empty load: 21Min ; Full load: 10Min | Empty load: 20~25Min ; Full load: 9.5~18Min |
| Flight Speed | 6 Meter/S | 7 Meter/S |
| Flight Radius | 1000 Meters | 1000 Meters |
| Flight Height | 2 -2.5 Meters | 2 -8 Meters |
| Flight Control | V7-AG | V7-AG |
| Propulsion System | | |
| Motor | 100 Kv Motor *4 | 100 Kv Motor *6 |
| Battery Capacity | Flight battery :19,000 mAh (14S)*1; Remote control battery : 10,000 mAh *1 | Flight battery :28,000 mAh (14S)*4; Remote control battery : 10,000 mAh *1 |
| Working Voltage | 51.8V (14S) | 51.8V (14S) |
| Charging Time | 18-20 minutes | 12-24 minutes |
| Recharge Cycles | 300-500 times | 300-500 times |
| Spray System | | |
| Liquid Tank Capacity/Payload | 22 L | 32 L |
| Spraying Mode | Pressure Spray/Centrifugal Spray | Pressure Spray |
| Water Pump Pressure | 0.2-0.4 mPa | 0.2-0.3 mPa |
| Number of Nozzle | 8 pcs high pressure spray misting nozzles, 4 pcs brushless centrifugal nozzles | 8 pcs high pressure spray misting nozzles |
| Spray Width | 4~6M | 5~8 M |
| Max Spraying Flow Rate | 1.8-2.5L /Min(single pump) 3.6-5L /Min (dual pumps), Max.: 5L /Min | 4 L/min |
| Spray Efficiency | 10 Ha/Hour | 14.5 Ha/Hour |
| Operating Temperature | 10~50 °C | 10~50 °C |
| Dimension | 2150*2150*670mm(unfolded,in operation), 820*850*670mm(folded), | 3700*2100*520mm(unfolded,arms excluded), |

30L/50L 6 Axis/4 Axis Agricultural drone



A300



A500

Technical Specifications

| Model | A300 | A500 |
|------------------------------|--|--|
| Product Name | 30L 6 Axis Agriculture drone | 50L 4 Axis Agriculture drone |
| Diagonal Wheelbase | 1950 mm | 2170 mm |
| Total Weight | 37.8kg (10 KG battery included) | 38.0kg (13.3 KG battery included) |
| Aircraft Weight | 27.8 KG (battery excluded) | 24.7 KG (battery excluded) |
| Battery Weight | 10 KG | 13.3 KG |
| Takeoff Weight(Max.) | 92.0kg (full load) | 93.0kg (full load) |
| Payload | 30.0kg | 50.0kg (70L spreader) |
| Hover Time | Empty load: 40Min ; Full load: 10Min | Empty load: 30~40Min ; Full load: 8~10Min |
| Flight Time | Empty load: 20~25Min ; Full load: 10~12Min | Empty load: 30~40Min ; Full load: 8~10Min |
| Flight Speed | 3 -10 Meter/S | 3 -12 Meter/S |
| Flight Control | Jiyi K++ | Jiyi K++ |
| Propulsion System | | |
| Motor | Hobbywing xrotor pro X9 plus | Hobbywing xrotor pro X11 MAX |
| Battery Capacity | Flight battery :28,000 mAh (14S)*1; Remote control battery : 10,000 mAh *1 | Flight battery :30,000 mAh (18S); Remote control battery : 10,000 mAh *1 |
| Working Voltage | 53.2V (14S) | 68.4V (18S) |
| Charging Time | 12-24 minutes | 15-20 minutes |
| Recharge Cycles | 300-500 times | 300-500 times |
| Spray System | | |
| Liquid Tank Capacity/Payload | 30L | 50L |
| Spraying Mode | Pressure Spray/Centrifugal Spray | Pressure Spray |
| Water Pump Pressure | 1mPa | 1mPa |
| Number of Nozzle | 8 pcs high pressure spray misting nozzles , 2 pcs brushless centrifugal nozzles | 8 pcs high pressure spray misting nozzles , 2 pcs brushless centrifugal nozzles |
| Spray Width | 6~8 M | 6~9 M |
| Max Spraying Flow Rate | 10 L/min | 10 L/min |
| Spray Efficiency | 500-1000 acres / day (6 hours) | 500-1500 acres / day (6 hours) |
| Operating Temperature | 10~50°C | 10~50°C |
| Dimension | 2050*1610*780mm(unfolded,arms excluded), 1050*620*780mm(folded) | 1711*1341*700mm(unfolded,arms excluded), 1010*760*780mm(folded) |
| Packaging Size | 1050*1050*980 mm | 1100*850*1000 mm |



A300S

The A300S crop spraying drone is one of the most user friendly highly efficient agricultural drones in the market. It is a high performance multipurpose agriculture drone specially designed for orchard, flower and vegetable gardens where farmers need highly precise autonomous obstacle avoidance and ultra fine spraying effect. It is equipped with dual atomized spraying system and highly advanced smart binocular vision that can detect obstacle and plant canopy accurately and apply pesticide solution to targeting plant canopy only 0.7 meter away from plant canopy. Droplet sizes are adjustable according to actual needs. It is suitable for fine spraying and spreading over small fruit trees, flowers and vegetables as well as tall crops.

Key features

- 1) 30L large capacity, 30kg spraying payload, up to 10L/min flow rate and 12 ha/hour
- 2) Advanced binocular vision, fully autonomous environment obstacle sensing and detection
- 3) Fully autonomous dynamic continuous obstacle avoidance
- 4) Able to fly autonomously and safely over hills or mountains with 90 degrees slopes and below
- 5) Dual peak atomized spraying system
- 6) Precise Point by point spraying, autonomous targeting and spraying exactly over where the crops are
- 7) Night vision capability enables the drone to operate at night
- 8) Front 120 degrees wide view angle FPV camera
- 9) 0.7M ultra low safe terrain following flying distance to reduce invalid spraying and protect environment effectively
- 10) Smart navigation system allows the drone fly continuously and safely even if the RTK is disconnected

30L 4 Axis Multipurpose Agricultural Drone

Technical Specifications

| | |
|--|---|
| Model | A300S |
| Product Name | 30L 4 Axis Agriculture drone |
| Diagonal Wheelbase | 2200 mm |
| Total Weight | 41.2kg (10.8 KG battery included) |
| Aircraft Weight | 30.4 KG (battery excluded) |
| Battery Weight | 10.8 KG |
| Takeoff Weight(Max.) | 73.6kg (full load) |
| Payload | 30.0kg |
| Hover Time | Empty load: 19Min ; Full load: 8Min |
| Flight Time | Empty load: 8~10Min ; Full load: 3~5Min |
| Flight Speed | 5 -10 Meter/S |
| Safe Distance | 0.7~1.5 meters away from the top of the plant canopy |
| Propulsion System | |
| Motor | 95 RPM/V |
| Battery Capacity | 18S 51.8V 29,000 mAh lithium-ion polymer battery *2 |
| Charging Time | 11 minutes |
| Recharge Cycles | 1000 times |
| Spray System | |
| Liquid Tank Capacity/Payload | 30L |
| Configuration | Pump *2, Tank*1, Flowmeter *1, Nozzles*2 |
| Spraying Mode | Centrifugal Spray |
| Water Pump Pressure | 0.8~1.2mPa |
| Type of Nozzle /Nozzle Quantity | 2 pcs brushless centrifugal nozzles |
| Atomized Droplet Size | 10~100 µm |
| Effective Spraying Width | 3~8 M |
| Max Spraying Flow Rate | 10 L/min |
| Spray Efficiency | 10-12 Ha/Hour |
| Spreader System | |
| Tank Capacity | 36 L |
| Spreading payload | 30.0 KG |
| Spreading Range | 6-8 Meters(Max.) |
| Support Particle Size | 1 ~6mm diameter particles |
| Application | Suitable for spreading seed, fertilizer and fish feeding |
| Flight Control & Obstacle Avoidance | |
| Control Method | Fully autonomously , manually (GNSS disable) |
| Global navigation satellite system (GNSS) | GPS, BEIDOU, GLONASS |
| Hovering Accuracy | Vertical/horizontal: ±100 mm (with GNSS RTK) |
| Obstacle Avoidance | Front AI binocular vision obstacle avoidance |
| FPV camera | 120 degrees , front and bottom view |
| Remote Control | Remote Control with 5.5inch HD display, 1.5KM max. control distance |
| Aircraft IP Rating | IP67 |
| Operating Temperature | 10~50℃ |
| Dimension | 2400*2810*670mm(unfolded), 1260*630*620mm(folded) |
| Packaging Size/CBM/G.W. | 1380*750*860mm*2 wooden boxes, 200.00KGS |
| Packaging List | Aircraft *1, Battery Charger*1, Battery *2 or *4, Remote control*1 |

30L 4 Axis Multipurpose Agricultural Drone



A300Z (unfolded)



A300Z (folded)

The A300Z crop spraying drone is one of the most user friendly easy to use agricultural drones in the market. It is a high performance multipurpose agriculture drone specially designed for farmers who love autonomous obstacle avoidance and anti-drifting blocking free nozzles. Is it autonomous? Yes, it is fully autonomous including smart obstacle avoidance over uneven terrains. Will the nozzles be blocked easily then? No, it is well-designed to avoid any blocking and reduce particle drift. It is also a highly reliable drone that features simple to fly and easy to maintain.

Key features

- 1) 30L large spraying tank ,45L spreading container, 30kg spraying payload, 8M spray range, up to 8.1L/min flow rate and 14.5ha/hour
- 2) Flight control methods: fully autonomously, manually, A-B route planning
- 3) Precise altitude detection and terrain following
- 4) Fully autonomously front and rear obstacle avoidance, obstacle detected from 40M far away
- 5) Automatic border scanning to ensure full flying coverage over small areas and corners
- 6) Equipped with pressure auto-releasing valve to remove air inside the hose effectively
- 7) High pressure anti-drifting nozzles to avoid and minimize particle drift
- 8) Centrifugal nozzles optional for preventing nozzles from being blocked by pesticide powder
- 9) Spread by soft air blowing force to protect seeds and shoots from being hurt
- 10) Anti-corrosion washable spreader to avoid nozzles from being blocked
- 11) Able to detect and report the actual weight of container load in real time to avoid overweight load and ensure safer flying
- 12) No pesticide solution leak
- 13) Sunlight readable remote control display
- 14) Night vision, able to work at night
- 15) Main aircraft frames made of 100% airborne aluminum materials make aircraft light weight and highly durable
- 16) Modular design, easy to repair
- 17) IP67 waterproof and dustproof

30L 4 Axis Multipurpose Agricultural Drone

Technical Specifications

| | |
|--|--|
| Model | A300Z |
| Product Name | 30L 4 Axis Multipurpose Agriculture drone |
| Diagonal Wheelbase | 1970 mm |
| Net Weight | N.W. with battery: 40.6kg |
| Takeoff Weight(Max.) | 77.8kg (full load) |
| Payload | 30.0kg |
| Hover Time | Empty load: 20Min ; Full load: 8Min |
| Flight Time | Empty load: 8~20Min ; Full load: 5~8Min |
| Flight Speed | 8 Meter/S |
| Safe Distance | 2.5~3 meters away from the top of the plant canopy |
| Propulsion System | |
| Battery | 18S 51.8V 30,000 mAh LiPo battery *2 |
| Charging Time | 10 minutes |
| Recharge Cycles | 1000 times |
| Spray System | |
| Liquid Tank Capacity/Payload | 30L |
| Configuration | Pump *1, Tank*1, Flowmeter *1, Nozzles*12 |
| Spraying Mode | Pressure Spray/Centrifugal Spray |
| Water Pump Pressure | 1mPa |
| Type of Nozzle /Nozzle Quantity | 12 pcs high pressure spray misting nozzles |
| Atomized Droplet Size | 170~265 μm |
| Effective Spraying Width | 5~7M (Max.) |
| Max. Spraying Flow Rate | 8.1 L/min |
| Spray Efficiency | 14.5 Ha/Hour |
| Spreader System | |
| Container Capacity | 45 L (Max. 36kg payload) |
| Spreading Range | 7 Meters(Max.) |
| Support Particle Size | 0.5 ~5mm diameter particles |
| Efficiency | 50 L/Min |
| Application | Suitable for spreading seed and fertilizer |
| Flight Control & Obstacle Avoidance | |
| Control Method | Fully autonomously (autopilot) , manually (GNSS disable) |
| Global navigation satellite system (GNSS) | GPS, BEIDOU, GLONASS |
| Hovering Accuracy | Vertical/horizontal: ±100 mm (GNSS RTK enable) |
| Obstacle Avoidance | Fully autonomously front and rear obstacle avoidance, obstacle detected from 40M far away |
| Remote Control | Remote Control with sunlight readable FHD display |
| FPV camera | 120 degrees , front and bottom view, 720p HD |
| Transmission Range | (Max.) |
| Aircraft IP Rating | IP67 |
| Aircraft Operating Temperature | 10~50℃ |
| Aircraft Dimension | 2515*1650*788 mm(unfolded), 1040*1010*788 mm(folded) |
| Packaging Size & Weight | Aircraft: 1100*1100*930 mm ; Fertilizer spreader container: 850*460*400mm; Battery: 500*310*300mm(2 pcs battery), Charger: 450*320*380mm , G.W.:101.10kgs, N.W.:80.80kgs |
| Packaging List | Aircraft *1, 7200W Battery Charger*1, Battery *2, Remote control*1, Mapper*1 |

50L 4 Axis Multipurpose Agricultural Drone



A500Z

The A500Z crop spraying drone is one of our state of the art easy to use multipurpose agricultural drones. It is a highly reliable agriculture drone specially designed for farmers who love autonomous obstacle avoidance and dual pumps spraying. It is fully autonomous. Farmers can easily control and operate it manually, semi-autonomously via AB route and fully autonomously. It is equipped with RTK precise positioning system that makes hovering and flying accuracy up to centimeter level.

Key features

- 1) 50L super big capacity spraying and spreading, 50kg payload, 6-8M spraying and 15M spreading range, up to 16L/min flow rate, 10~15ha/hour spraying & 45kgs/hour spreading efficiency
- 2) Spraying height: 2.5~3 meters away from plant canopy
- 3) Support operation modes: Manual operation, A point to B point (AB/A-B) route planning operation and fully autonomous
- 4) RTK precise positioning
- 5) Automatically return when pesticide solution is used up
- 6) Automatically resume from last breakpoint exactly
- 7) Terrain following, automatic pilot flying, fully autonomous obstacle avoidance
- 8) Detachable plug and spray pesticide tank
- 9) Smart dual-pumps spraying mode
- 10) Front 120 degrees wide angle FPV camera
- 11) Collapsible arms, 4 axis, fast folding
- 12) Night vision enables the drone to operate at night
- 13) Modular design, quick detachable structure, easy to repair
- 14) IP67 rating waterproof and dustproof

50L 4 Axis Multipurpose Agricultural Drone

Technical Specifications

| | |
|--|---|
| Model | A500Z |
| Product Name | 50L Multipurpose 4 Axis Agriculture drone |
| Diagonal Wheelbase | 2170mm |
| Net Weight | 38.0kg (13.3 KG battery included) |
| Takeoff Weight(Max.) | 94.0kg |
| Payload | 50.0kg |
| Hover Time | Empty load: 30~40Min ; Full load: 8~10Min |
| Flight Time | Empty load: 30~40Min ; Full load: 8~10Min |
| Flight Speed | 7 Meter/S |
| Safe Distance | 2.5~3 meters away from the top of the plant canopy |
| Propulsion System | |
| Motor | 60 RPM/V |
| Battery Capacity | 30,000 mAh (18S) |
| Working Voltage | 68.4V (18S) |
| Charging Time | 15-20 minutes |
| Recharge Cycles | 300-500 times |
| Spray System | |
| Liquid Tank Capacity/Payload | 50L |
| Configuration | Pump *2, Tank*1, Flowmeter *1, Nozzles*4 |
| Spraying Mode | Pressure Spray |
| Water Pump Pressure | 1mPa |
| Type of Nozzle /Nozzle Quantity | 4 pcs brushless centrifugal nozzles |
| Atomized Droplet Size | 80~250 μm |
| Effective Spraying Width | 6~8 M |
| Max Spraying Flow Rate | 16 L/min |
| Spray Efficiency | 10-15 Ha/Hour |
| Spreader System | |
| Tank Capacity | 50 L |
| Spreading payload | 50kgs |
| Spreading Range | 15 Meters(Max.) |
| Support Particle Size | 0.5 ~5mm diameter particles |
| Efficiency | 50 kg/Min |
| Application | Suitable for spreading seed, fertilizer and fish feeding |
| Flight Control & Obstacle Avoidance | |
| Control Method | Fully autonomously , manually (GNSS disable) |
| Global navigation satellite system (GNSS) | GPS, BEIDOU, GLONASS |
| Hovering Accuracy | Vertical/horizontal: ±100 mm/300mm (GNSS RTK enable) |
| Obstacle Avoidance | Fully autonomously front and rear obstacle avoidance, obstacle detected from 20M far away |
| FPV camera | 120 degrees , front and bottom view |
| Remote Control | Remote Control with 5.5inch HD display, 1.5KM max. control distance |
| Aircraft IP Rating | IP67 |
| Aircraft Operating Temperature | 10~50℃ |
| Dimension | 1711*1341*700mm(unfolded,arms excluded), 1010*760*780mm(folded) |
| Packaging Size/CBM/G.W. | 1120*1120*900mm, weight :G.W.:90.00kgs, N.W.:45.00kgs |
| Packaging List | Aircraft *1, Battery Charger*1, Battery *4, Remote control*1 |



A720

The A720 crop spraying drone is one of the most powerful large volume easy to use agricultural drones in the market. It is a high performance multipurpose agriculture drone specially designed for pesticide spraying, seed, fertilizer and fish feed spreading use. It's super large tank design makes seeding, fertilizing and fish feeding much easier and highly efficient. It is equipped with high performance 120 degrees wide view angle HD FPV camera and highly precise GPS positioning system which bring farmers higher spraying and spreading accuracy. Farmers also love it's fully autonomous obstacle avoidance over uneven terrains so much as well.

Key features

- 1) 72L super big capacity spraying and spreading, 110kg payload, 15M spraying and spreading range, up to 16L/min flow rate, 30ha/hour spraying and 50 kg/Min spreading efficiency
- 2) A-B route operation, automatic spraying
- 3) Automatically resume from last breakpoint exactly
- 4) Real time battery status monitoring and alarm makes flying safer
- 5) Highly precise GPS positioning system
- 6) Altitude detection, terrain following and fully autonomous obstacle avoidance
- 7) Empty tank alarm and reminder
- 8) Vertical view 120 degrees wide view angle HD FPV camera
- 9) IP67 rating waterproof and dustproof

72L 8 Axis Multipurpose Agricultural Drone

Technical Specifications

| | |
|---|--|
| Model | A720 |
| Product Name | 8 Axis 72L Agriculture drone |
| Total Weight | 52.0kg (battery included) |
| Takeoff Weight(Max.) | 147.0kg (full load) |
| Payload | 110.0kg |
| Flight Time | Empty load: 7~18Min ; Full load: 5~8Min |
| Flight Speed | 1 -20 Meter/S |
| Safe Distance | 4~5 meters away from the top of the plant canopy |
| Propulsion System | |
| Battery | 14S 60.9V 42,000 mAh LiPo battery *2 |
| Charging Time | 12-24 minutes |
| Recharge Cycles | 1000 times |
| Spray System | |
| Tank Capacity/Payload | 72L |
| Configuration | Pump *1, Tank*1, Flowmeter *1, Nozzles*8 |
| Spraying Mode | Pressure Spray |
| Water Pump Pressure | 1mPa |
| Type of Nozzle /Nozzle Quantity | high pressure atomizing nozzles |
| Atomized Droplet Size | 60~500 μm |
| Effective Spraying Width | 8~15 M |
| Max Spraying Flow Rate | 16 L/min |
| Spray Efficiency | 30 Ha/Hour |
| Spreader System | |
| Container Capacity | 72 L |
| Spreading Range | 15 Meters(Max.) |
| Support Particle Size | 0.5 ~5mm diameter particles |
| Efficiency | 50 kg/Min |
| Application | Suitable for spreading seed, fertilizer and fish feeding |
| Flight Control & Obstacle Avodiance | |
| Control Method | Fully autonomously(autopilot) , manually (GNSS disable) |
| Global navigation satellite system (GNSS) | GPS, BEIDOU, GLONASS |
| Hovering Accuracy | Vertical/horizontal: ±100 mm (with GNSS RTK) |
| Obstacle Avodiance | Fully autonomously front and rear obstacle avoidance |
| Remote Control | Remote Control with FHD display |
| FPV camera | 120 degrees , front and bottom view |
| Aircraft IP Rating | IP67 |
| Operating Temperature | 10~50 °C |
| Dimension | 3920*3920*930mm(unfolded), 1050*900*2100mm(folded) |
| Packaging Size | 1100*850*1000 mm |
| Packaging List | Aircraft *1, Battery Charger*1, Battery *2, Remote control*1 |

Get in Touch

Email: sales@oriful.com

Tel.: +86-755- 2350 0700 2350 0200(direct)

Skype: fultape01,

Whatsapp: 0086 181 2370 6080

<https://www.oriful.com>