

# DRONE MODEL: D1 DISINFECTING DRONE

## DESCRIPTION

The Lucid Disinfecting Drone is the ideal drone for disinfecting surfaces. All Lucid drones are built at the Lucid manufacturing facility in Charlotte, NC. The drone incorporates 360-degree obstacle avoidance, while having a downward facing sensor to maintain consistent altitude. Additionally, the drone features an upward facing distance sensor to ensure safe flights for indoor operations. Contact us at [contact@luciddronetech.com](mailto:contact@luciddronetech.com) to learn more.

## PROCESS

### Chemicals – EPA Approved

We recommend using EPA Approved chemicals with our drones

- More specifically, when claiming to sanitize/disinfect in the fight against Covid-19, we recommend use of products that have specifically been approved by the EPA on [List N](#).

Our drone is chemical agnostic, meaning that we can spray many different types of solutions.

- In other words, if a specific customer requests that you use a certain chemical for their property, our drone has versatility and can easily interchange the type of solution being used.

If you have questions about which solutions to use, please feel free to contact us for guidance.

The chemical solutions are stored in an on-board tank, allowing for flexibility when flying.

- Please note, we do also have a tethered solution available.

### Application

Our system utilizes highly atomized nozzles for a wide coverage. Our drone is capable of electrically charging the atoms within the chemical solution so that they actively repel one another. This enables the chemical to seek out the most even distribution on a surface.

The propellers on our motors generate significant “propwash,” which helps distribute the chemicals more evenly over a larger surface area.

The drone is manually operated and can fly indoors and outdoors.

## GUIDELINES

**Vertical clearance – when flying indoors, it is recommended that the pilot have at least 5 feet clearance between the drone and the ceiling.**

To ensure safety, we have programmed an upward facing sensor that will stop a drone when it is 5 feet away from the ceiling.

**Horizontal clearance – it is recommended that the pilot have at least 5 feet clearance on all sides of the drone when flying.**

To ensure safety, we have programmed obstacle avoidance that will stop the drone when it senses an object 5 feet away.

## USE-CASES

### Interior

Warehouses, gyms, athletic stadiums, malls, airports, metro stations, distribution centers, etc.

### Exterior

Shipyards, stadiums, playgrounds, campuses, pop-up hospitals, restaurant patios, etc.



## SPECIFICATIONS

### AIRCRAFT:

Configuration	Hexacopter
Weight (including batteries and propellers)	29 lbs.
Diagonal Size (propellers excluded)	53"
Carry Case Size	24" x 24" x 24"
Satellite Positioning System	GPS
Non-GPS Flight Mode	Cameras
Max Payload	27 lbs
Flight-time at 0 lb payload	27.2 min
Flight-time at 6 lb payload	21.6 min
Flight-time at 10 lb payload	18.8 min
Flight-time at 0 max (27 lb) payload	11.3 min
Ground Clearance to Undercarriage	17 5/8"
360 Obstacle Avoidance	LiDAR Sensors
Altitude Positioning	Radar Altimeter
Square Feet/Hour	150,000
Distance from Ceiling	2 ft
Distance from Objects	2 ft
On-Board Tank	2.5 gallons
Flow Rate	0.1-0.5 GPM
Electrostatic Nozzles	2

### REMOTE CONTROLLER:

Model	12 Transmitter
Channels	12 Channels
Frequency	2.4-2.4833 GHZ
Working Voltage	3.7V (1S Li-ion)
Working Current	130mA
Modulation	New FHSS
Weight	1.2 lbs.
Firmware	APP Online
Dimension	8.9" x 4.8" x 1.4"
Duration	25 hrs
Battery Capacitor	4000mA
Charging Port	Micro-USB

### FLIGHT BATTERIES

	Stats per Battery
Number of Batteries	2
Capacity	1400 mAh per
Voltage	22.2 V
Discharge Rate	25 C
Max Burst Discharge Rate	50 C
Configuration	6S1P
Weight	4.1 lbs
Dimensions	9.3" x 2.7" x 2.2"
Wire Gauge	10 #
Discharge Wire Length	6.3"
Balance Connector Type	JST-XHR-7P
Balance Wire Length	2.6"