



## Leptron RDASS HD2 Unmanned Quadcopter



The RDASS HD2 is a commercial-grade unmanned aircraft system (UAS, or Drone) engineered for professionals. The RDASS features manual or autonomous flight modes, intelligent fault detection, and strong wind and sub-freezing temperature flight capability. The RDASS is configurable for multiple remote sensor payloads, night navigation lighting, first responder strobe, and additional video streaming options.



### FEATURES

- Rapid Deployment
- Flight Autonomy
- Altitude Position Hold
- Point of Interest Orbit
- Live Video with Flight Data Touch Screen Display
- Multiple Remote Sensor and Camera Configurations
- Dual Battery Rapid Charging Station
- Weather Resistant
- Intelligent Fault Detection with Return Home
- Unprecedented U.S. Support
- Made in U.S.A.

Leptron RDASS HD2 with optional Stabilized Dual-Camera setup using FLIR VUE Pro and GoPro Hero4 cameras, and optional Navigation Lights

**Leptron Unmanned Aircraft Systems, Inc.**

2650 East 40th Avenue  
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www.leptron.com

**1-800-722-2800**

# Leptron RDASS HD2

## Unmanned Quadcopter

### SPECIFICATIONS

<b>Platform Type</b>	Multi-Rotor (four fixed-pitch rotors)
<b>Rotor Tip to Rotor Tip Dimensions</b>	31½ inches (80.1 cm)
<b>Operating Temperature</b>	-10°C – 50°C
<b>Take-off Weight</b>	7 lbs. 13 oz. (3539 g)
<b>Weight without Battery</b>	5 lbs. (2269 g)
<b>Hovering Accuracy (GPS Mode)</b>	Vertical: ±31 in. (0.8 m) Horizontal: ±98 in. (2.5 m)
<b>Maximum Yaw Angular Velocity</b>	180°/s
<b>Maximum Tilt Angle</b>	35°
<b>Maximum Horizontal Flight Velocity</b>	35 mph (30 knots, 15 m/s)
<b>Wind Limits</b>	35 mph (30 knots, 15 m/s) continuous or gusts of 25 mph (22 knots, 11 m/s)
<b>Vertical Speed Limits</b>	800 feet/min. (4.1 m/s)
<b>Supported Flight Battery</b>	LiPo 6S
<b>Operational Ceiling</b>	12,000 feet DA (3650 m)
<b>Maximum Payload</b>	1 lb. 8 ounces (680 g)
<b>Operational Range</b>	1.5 mi. (2.4 km)
<b>Maximum Power Consumption</b>	800 Watts (1.1 hp)

### RDASS HD2 UNMANNED SYSTEM KITS INCLUDE

- RDASS HD2 Quadcopter
- 2-4 Flight Batteries with Protective Storage Bags
- Radio Wireless Remote Control
- iPad Mini or iPad Pro
- GPS Software
- Charger, 2 Channel
- Maintenance Kit
- Hard-Sided Case with Pre-Cut Foam
- Spare Blades



Leptron RDASS HD2 Kit with iPad

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## TAP & GO WAYPOINT FLIGHT

GS Pro is an iPad app designed to plan automatic flights. Through a clear and concise interface, complex flight missions can be planned with a few taps. The image data captured during flight can be input into 3D reconstruction software to generate 3D maps.

- Up to 99 Waypoints are Available
- Adjustable Parameters
- Set Virtual Fence



## OPTIONAL ACCESSORIES

### Navigation Lighting

Leptron designed the aircraft navigation light ring to assist with maintaining visual orientation and position of the RDASS HD during both day and night operations. The pilot can select between strobe or steady illumination. The LEDs are bright and low power consuming.

- Green** – Aircraft Right
- Red** – Aircraft Left
- White** – Aircraft Tail



Navigation Lighting

### Emergency Lighting

Designed for emergency responders, the RDASS HD can be equipped with the blue & red strobe to assist with aircraft positioning and signal that help is on the way.



Emergency Lighting



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## CAMERA & GIMBAL CONFIGURATIONS

### GoPro with Stabilized Gimbal

Eliminate tilt and vibration to capture amazingly smooth footage in the air.

- Available with GoPro Hero4 Black, Hero5 Black, and Hero6 Black

### FLIR Duo Pro R with Stabilized Gimbal

The FLIR DUO Pro R combines high resolution, radiometric thermal imager, 4K color camera, and a full suite of on-board sensors that features a powerful dual-sensor imaging solution.

- Available with FLIR Duo Pro R 336 x 256 or 640 x 512 30hz cameras

### GoPro and FLIR Vue Pro with Stabilized Gimbal

The Stabilized Dual-Camera Gimbal incorporates a GoPro and FLIR VUE series thermal/IR camera. The precision three-axis tuning maintains video stability during flight.

- Available with FLIR Vue, FLIR Vue Pro, or FLIR Vue Pro R

### Sony Camera with Gimbal

Leptron designed the Sony Camera-Gimbal to provide a lightweight, versatile and advanced aerial mapping camera. The image processor produces high-resolution still images and full HD video for professional aerial data collection.

- Available with RTK/PPK

### RedEdge Multi-Spectral Camera with Gimbal

The MicaSense RedEdge is an advanced, lightweight, multispectral camera optimized for use on small unmanned aircraft systems. RedEdge provides accurate multi-band data for agricultural remote sensing applications.



Stabilized Gimbal with GoPro  
Hero4 Black



GoPro and FLIR Vue Pro  
with Stabilized Gimbal



Sony Alpha a6000 with Gimbal



RedEdge Multi-Spectral

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