

## 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  
Denver, Colorado 80205  
Phone 303-384-3469  
FAX 303-322-7242  
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
- GSP Software
- Charger, 2 Channel
- Maintenance Kit
- Hard-Sided Case with Pre-Cut Foam
- Spare Blades



Leptron RDASS HD2 Kit with iPad

#### Leptron Unmanned Aircraft Systems, Inc.

2650 East 40th Avenue  
Denver, Colorado 80205  
Phone 303-384-3469  
FAX 303-322-7242  
www.leptron.com

**1-800-722-2800**

# Leptron RDASS HD2

## Unmanned Quadcopter

### 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

#### 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.



Navigation Lighting



Emergency Lighting



**Leptron Unmanned Aircraft Systems, Inc.**

2650 East 40th Avenue  
Denver, Colorado 80205  
Phone 303-384-3469  
FAX 303-322-7242  
www.leptron.com

**1-800-722-2800**

# Leptron RDASS HD2

## Unmanned Quadcopter

### CAMERA & GIMBAL CONFIGURATIONS

#### Stabilized Single-Camera Gimbal with GoPro Hero4 Black

Eliminate tilt and vibration to capture high-quality video and still images used for inspection, search and rescue, aerial photography, and many other applications with the Stabilized Single-Camera Gimbal.

#### Stabilized Dual-Camera Gimbal

The Stabilized Dual-Camera Gimbal by Leptron UAS, Inc. integrates both Infrared (IR) and Electro-Optical (EO) camera technology used for a wide range of UAS applications. Precision three-axis tuning prevents video rotation caused by aircraft movement. Additionally, the gimbal's vertical camera position is easily adjusted in-flight.

- Available in Wide or Zoomed Field of View
- IR - 640 x 512 IR Resolution at 30Hz.
- EO - 1920 x 1080 to 4k Video Resolution with 12.1 MP Still Image Resolution

#### Fixed Sony Alpha a6000 Camera Mount

Leptron designed the a6000 Camera Mount to provide a lightweight, versatile and advanced aerial data acquisition solution. The image processor produces high-resolution 24.3 MP still images and full HD video for professional aerial data collection.

#### Leptron GeoReferencer

The GeoReferencer is a camera add-on that uses its onboard GPS to provide a stand-alone geotagging and triggering solution. It easily integrates the Sony Alpha a6000 for a best-in-class aerial data collection solution.

- Stand-alone geotagging solution
- Intelligent and efficient camera triggering
- Option to embed position data

#### RedEdge Multi-Spectral

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.



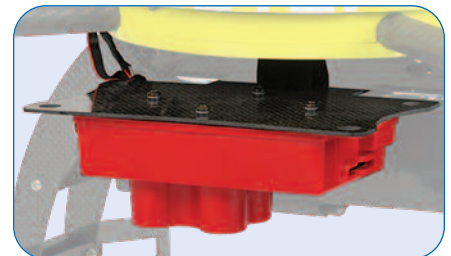
Stabilized Single-Camera Gimbal with GoPro Hero4 Black



Stabilized Dual-Camera Gimbal



Fixed Sony Alpha a6000 Camera Mount



RedEdge Multi-Spectral

### Leptron Unmanned Aircraft Systems, Inc.

2650 East 40th Avenue  
Denver, Colorado 80205  
Phone 303-384-3469  
FAX 303-322-7242  
www.leptron.com

1-800-722-2800