

# WISPR<sup>SM</sup>

**Power to the Pro**



## **WISPR RANGER PRO SERIES**

Commercial Unmanned Aircraft Systems  
Made in the U.S.A.

## ■ Propulsion System

WISPR Ranger Pro Series utilizes 465KV motors combined with 18.5" carbon fiber propellers and the 22.8V 6S 25,000mAh battery for superior aerial performance.

- Max payload of 7 lbs and in winds of 50MPH+
- Built-in cooling system maintains optimum temperature for the speed controller/electronics
- Flight Time of 18-33 minutes depending on the payload

## ■ Payload Configurations

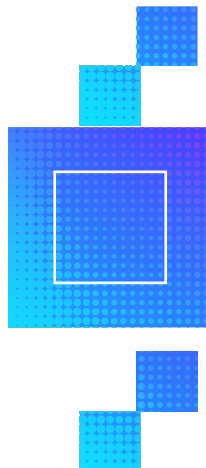
WISPR UAS have the following I/O ports that allow us to communicate, control, and stream live video feeds from the payload

- 2 - HDMI Port
- 24V Power port
- SBUS I/O Ports
- Serial I/O Ports
- PWM I/O Ports
- Single gimbal payloads
- Dual gimbal payloads

## ■ Compactible Frame Design



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## Object Avoidance

The WISPR Ranger Pro Series has two options for collision avoidance: (1) Front collision avoidance available on the WISPR Ranger Pro 1000 and (2) 360 degree collision avoidance available on the WISPR Ranger Pro 1100. The collision avoidance system is LiDAR range finder in based and will work in day or nighttime conditions.

## Position Stability

The WISPR Ranger Pro Series is equipped with a Global Navigation Satellite System (GNSS) receiver compatible with Real Time Kinetics (RTK) GNSS systems. It utilizes a LiDAR range finder for altitude accuracy and vertical stability while flying. To ensure the drone has redundancy in the critical sensors needed for flight, WISPR integrates 2 magnetometers, 2 accelerometers, 2 gyro, and 2 barometers. Lastly, a battery current and voltage sensor is used to track battery level. Together these sensors keep the WISPR Ranger Pro Series safe during flight!

## UAS Hardware Monitoring

WISPR's UAS capture telemetry flight log tracks every single aspect of the UAS rectifying problems before they happen. The data captured allows proper maintenance/repair of your UAS in due course.



# Specifications

WISPR Ranger Pro Series



<b>Maximum Sustainable Payload</b>	7 lbs.
<b>Max Flight Time</b>	18-33 minutes depending on payload
<b>Max Wind Rating</b>	50MPH+ - Tested
<b>Collision Avoidance</b>	Omni-Directional collision avoidance
<b>RTK Availability?</b>	Yes
<b>PPK Availability?</b>	Yes
<b>Diagonal Wheelbase</b>	42" without propellers 21" without propellers folded
<b>Height</b>	15" without landing gear 28" with landing gear
<b>Width</b>	20" folded 29" unfolded
<b>Weight</b>	12 lb.
<b>Max Takeoff weight</b>	25 lb.
<b>Max Speed</b>	50 MPH
<b>Max Operating Temperature</b>	122° F
<b>Min Operating Temperature</b>	-4° F
<b>Frame material</b>	Carbon Fiber
<b>Battery Requirement</b>	1 x 6S, 25000mAh, 22.8V LiHV
<b>Battery Weight</b>	5.7 lb.
<b>Propeller Size</b>	18.5" x 6.3 folding carbon fiber propellers pair, balanced
<b>24V power port?</b>	Yes
<b>HDMI I/O port?</b>	Yes
<b>Serial I/O port?</b>	Yes
<b>PWM I/O port?</b>	Yes
<b>SBUS I/O port?</b>	Yes
<b>Orientation LED light colors</b>	Red, White, Blue
<b>Flight controller</b>	CubePilot Blue H7
<b>Flight controller firmware?</b>	Open Sourced (ArduPilot)
<b>Frame Type</b>	Quad Copter
<b>Made in America?</b>	Yes
<b>NDAA Compliant?</b>	Yes

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