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Airpeak ARS S1 Drone

World‘s Smallest Drone That Can Carry A Full Frame Alpha Series Mirrorless Camera

Product Highlights:

- World‘s smallest drone that can carry a full frame Alpha series mirrorless camera
- Max speed of 55.9mph (25m/s)1, maximum angular velocity of 180°/s2 and attitude angle up to 55°3
- Sony developed propulsion device and flight control system
- Flight time up to 22 minutes without a payload.
- Stable in winds up to 44.7 mph (20m/s)5
- Retractable landing gear for unobstructed camera field of view
- Detachable propellers for fast easy replacement and transport
- Sony developed stereo cameras and vision sensing processor with original algorithm for real time 3D spatial awareness
- Achieves stable flight in enclosed spaces or when out of range of Global Navigation Satellite System (GNSS)
- Equipped with obstacle braking function by multi-directional sensing
- RCR-VH1 remote controller operates the aircraft, gimbal, and camera while providing real-time image output.
- Use with “Airpeak Flight” mobile app to control, monitor and manage the aircraft, remote controller, camera, and gimbal in-flight.
- Dual Operation Mode for independent control of Aircraft and Gimbal/Camera.
- Equipped with flexible flight modes to make flying and creating even easier
- “Airpeak Base” web app for integrated management of flight plans, flight logs, and equipment

Automatic Return to Home

“Return to Home (RTH)” will automatically activate if the battery is low or the signal is lost, bringing the aircraft safely back to the home point. And if the return route has restricted airspace or obstacles, the aircraft can automatically calculate a bypass route. The “Return to Home” feature is also convenient to bring the aircraft safely back to the home point at the end of an aerial imagery project.

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Better Integration for More Creativity

The Airpeak system enhances creativity for a seamless drone experience, Airpeak S1 is supported by a remote controller, an app and cloud service which work together to create a high-performance aircraft system. From piloting and camera work to flight programming and data management, the Airpeak system is comprehensive and easy to use.

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Multi-Directional Sensing for Obstacle Avoidance

Airpeak S1 combines five directional stereo cameras with infrared range sensor for optimal obstacle avoidance. The automatic deceleration and braking functions allow it to intuitively respond to the environment and its situation. The “obstacle brake function” can be enabled in both automated and manual modes, and there is the option to restrict sensing to a specific direction, or disable the braking function altogether.

Retractable landing gear for unobstructed camera field of view

Airpeak S1 is fitted with a landing gear with open/close legs in-flight, allowing the gimbal to pan without worrying about them appearing into images.

SONY AIRPEAK DRONE	S1
Diagonal Wheelbase	Approx. 25.5 inch (without propellers)
Max Speed	25m/s (55.9 mph) without payload, obstacle brake disabled
Max Ascent Speed	7m/s (without payload, obstacle brake disabled)
Max Descent Speed	4m/s (without payload, obstacle brake disabled)
Acceleration	Approx. 3.5 seconds (from 0 to 49.7mph, without payload)
Max Angular Velocity	Pitch: 180°/s, Yaw: 180°/s, Roll:180°/s (Vision Positioning disabled)
Max Pitch Angle	55° (Obstacle brake disabled), 35° (Obstacle brake enabled)
Max Flight Time	Approx.22 minutes （without payload） Approx.12 minutes （with a7SIII and SEL24F14GM） *without payload, cruising speed(9m/s) , sea level, no wind
Hovering Accuracy Range	Vertical：±0.3ft , Horizontal：±0.3ft （GNSS and Vision Positioning enabled） Vertical：±1.6ft , Horizontal：±4.9ft （GNSS enabled and Vision Positioning disabled）
Operating Frequency	2.4 – 2.4835GHz, 5.15 – 5.25GHz, 5.725 – 5.82GHz
EIRP	2.4 – 2.4835GHz：23.8dBm, 5.15 – 5.25GHz：18dBm, 5.725 – 5.82GHz：25.6dBm
Max Transmitting Distance	2.4 - 2.4835 GHz：1.2 mile 5.15 - 5.25 GHz：0.6 mile 5.725 - 5.82 GHz：1.2mile *Unobstructed, free of interference
Propeller Model	PPL1785

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https://youtu.be/U8KA55Vu07c

Advanced camera control for flexible shooting

With Airpeak S1, the camera can be controlled from the remote controller. The user can check and change camera settings at-a-glance. With the latest system update, more settings such as focus area settings can be controlled and focus point can be selected by tapping the screen.