

Specifications

Model Name	AS-H1
Dimensions	3.9 x 2.7 x 1.0 m (W x L x H)
Weight	57 kg (including battery)
Max Speed	120 km/h (34 m/s)
Cruise Speed	80 km/h (22 m/s)
Battery	15S3P - 32400mAh × 4 (BMS compatible)
Flight Time	1.5 hours (at 1000m altitude, 10kg payload) 3.4 hours (at 100m altitude, no payload)
Flight Distance	120 km (at 1000m altitude, with 10kg payload) 250 km (at 100m altitude, no payload)
Max Payload	13 kg
Dust/Water Protection	IP45
Wind Resistance	Fixed-Wing (Cruising): 20 m/s Multicopter Mode: - Headwind: 20 m/s - Crosswind: 20 m/s - Tailwind: 13 m/s
Takeoff/Landing Area	10 m × 10 m
Operating Temp.	-20°C to 45°C (excluding battery)
Safety Features	Forward Safety Monitoring: Visual camera, infrared camera, 250m radar Downward Safety Monitoring: Visual camera, 100m radar BLDC Motors x10: 8 for multicopter mode, 2 for fixed-wing mode Battery Configuration: 4 parallel-connected packs Dual Flight Controllers: Redundant control system for enhanced reliability Dual Airspeed Sensors: Ensures accurate flight speed data Parachute System: Under consideration for emergency deployment
Other Features	Night flight, long-range communication system
Certification	Type 1 Aircraft Certification (Japan) – Application in Progress
Country of Manufacture	Japan
Payload Options	Still/video/infrared cameras, LiDAR, containers, etc.

Feel free to contact us for inquiries regarding drone adoption or custom development.

Specifications and appearance are subject to change without prior notice due to ongoing product improvements.
Actual performance may vary depending on flight conditions and usage. Please operate with due consideration of real-world circumstances.



<https://aerosense.co.jp>

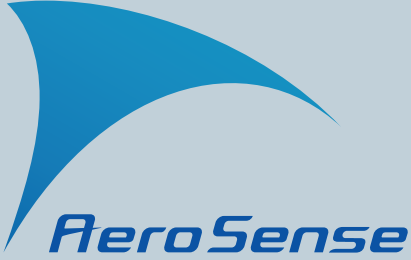


Aerosense Inc. youtube
<https://www.youtube.com/c/AerosenseJpn>

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AS-H1



Type 1 Aircraft Certification (Japan)
Enabling safe BVLOS flights over populated areas



AEROBO[®]
wing

Disaster Relief eVTOL Drone

- ▶ High-level safety performance for BVLOS operations over populated areas
- ▶ Flight range over 250 km
- ▶ Maximum payload capacity: 13 kg

A next-generation eVTOL designed for disaster relief.

Delivering essential aid from the sky—rapidly and reliably.

AS-H1 Advantages

Long Flight Range of 250km



Thanks to the development of a high-efficiency airframe, AS-H1 can fly up to 250km. It enables long-distance transport between cities or remote islands—tasks traditional drones struggle with. Useful for disaster monitoring, delivery of emergency supplies, and wide-area aerial surveys.

Flyable Even in Bad Weather

With wind resistance up to 20m/s and IP45-level waterproofing, the AS-H1 can fly immediately after disasters—even under severe weather conditions.

Safe Operation Over Populated Areas



AS-H1 is designed to meet strict safety standards for flying over inhabited areas. Features include redundant flight systems, obstacle detection via front radar, and dual airspeed sensors. Safety is ensured even in case of system failure.

Direct Access to Disaster Areas

VTOL capability allows for operations from compact or temporary sites without runways. Even from distant cities, AS-H1 can deliver up to 13kg of emergency supplies directly to shelters in affected areas.

Comparison with Conventional Models

AS-H1
Optimized for
Disaster Response



	AS-H1	Conventional
Size	3.9 × 2.7 × 1.0 m	2.2 × 1.2 × 0.4 m
Range	250 km	50 km
Payload	13 kg	1 kg
Wind Resistance	20 m/s (Cruising)	10 m/s (Headwind)

Use Cases

Emergency Response



Deliver supplies or monitor disaster-struck areas via LTE remote control, even when infrastructure is down. Greatly improves initial response speed, reduces workload, and optimizes aid delivery.

Remote Area Logistics



Perfect for regular or urgent deliveries to remote islands or mountain regions. VTOL eliminates the need for large takeoff areas and enables reliable delivery of essential medical and daily goods regardless of infrastructure availability.

Infrastructure Inspection & Surveying



With LiDAR or high-res cameras, AS-H1 enables rapid collection of detailed geographic and infrastructure data. Ideal for inspecting hard-to-access areas like dams or transmission lines without exposing personnel to danger.