

2024

LANT-380

INDOOR INSPECTION
DRONE

Product Advantages

3D Lidar Positioning

Operable without reliance on lighting, available for all-day use, independent of GNSS satellite signals, barometers, and compasses for assistance, ensuring more precise and reliable indoor positioning!

Automatic Route Flight/Able to Circle/Distance Lock

- Combines automatic charging with automated flight path missions, enabling unattended indoor operation.
- Capable of locking distance, autonomously circling for inspections, making it more practical for inspecting the curved surfaces of storage tanks.

High Reliability Design

Safer indoor flight: Incorporates multiple fusion algorithms, hardware, software redundancy design, and power failure protection (safe landing is possible even with missing propellers).

Fearless in the Dark, 16000 Lumens Brightness

Featuring advanced intelligent lighting, ensuring close-up inspections are clear and visible, with cracks and rust clearly visible right before your eyes.

Small Stature, Lantern Protective Cover

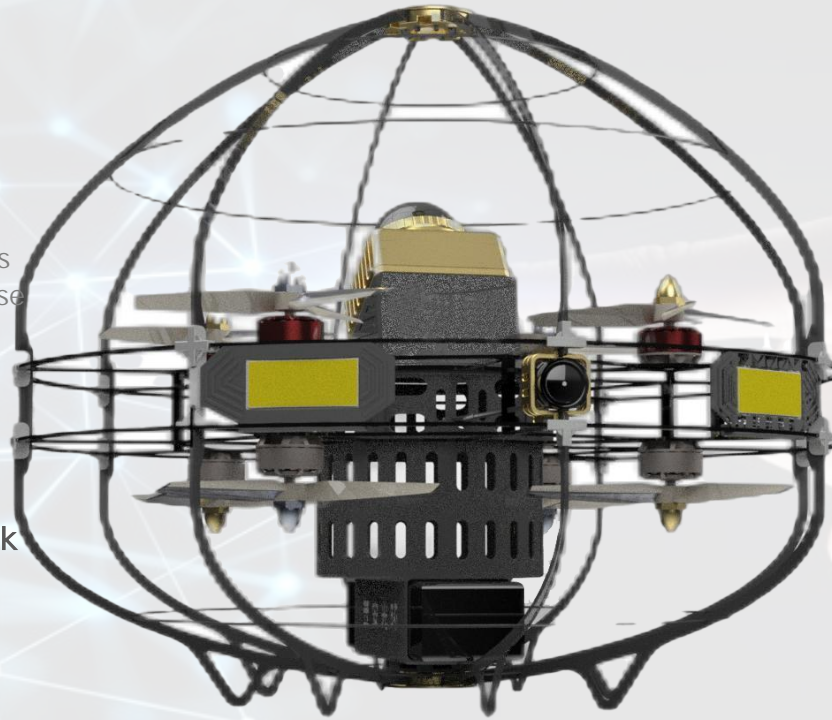
With an outer dimension of 380mm, it can freely navigate through narrower spaces, small stature, big utility!

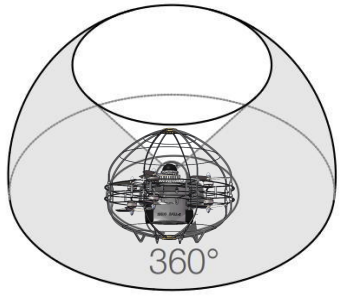
3D Point Cloud Post-Processing

Features ultra-dense point cloud collection and real-time spatial 3D modeling, enabling rapid calculations of material volume and surface area.

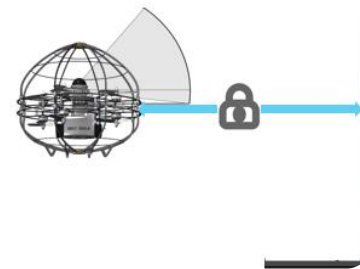
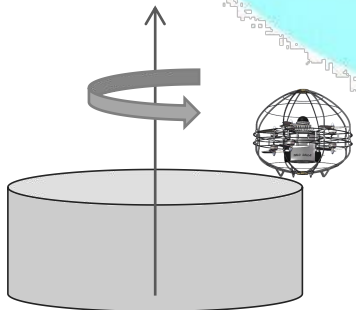
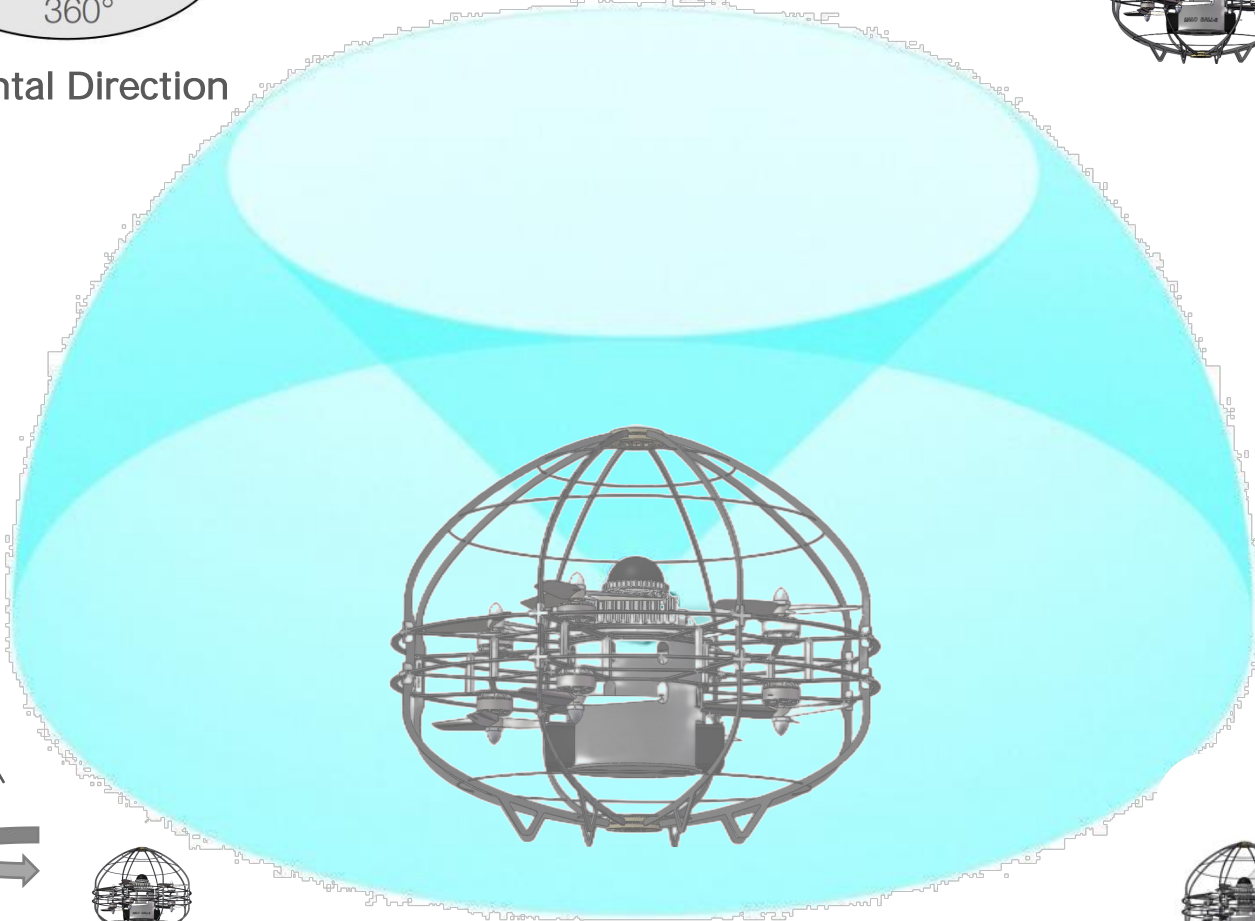
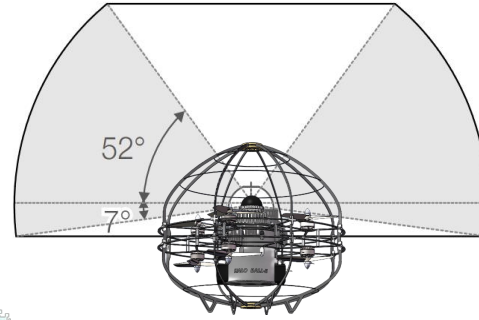
Low Latency Real-Time Image Transmission

30ms low latency 1080p HD image transmission ; FPV immersive flight goggles available.





Horizontal Direction



- **360° Omnidirectional Wide FOV**
- **0.1m Minimal Blind Spot for Superior Performance**
- **Active Interference Resistance**
- **Resistant to Strong Outdoor Light**
- **3D Real-Time Scanning**
- **Distance locking, capable of autonomous circular flight**

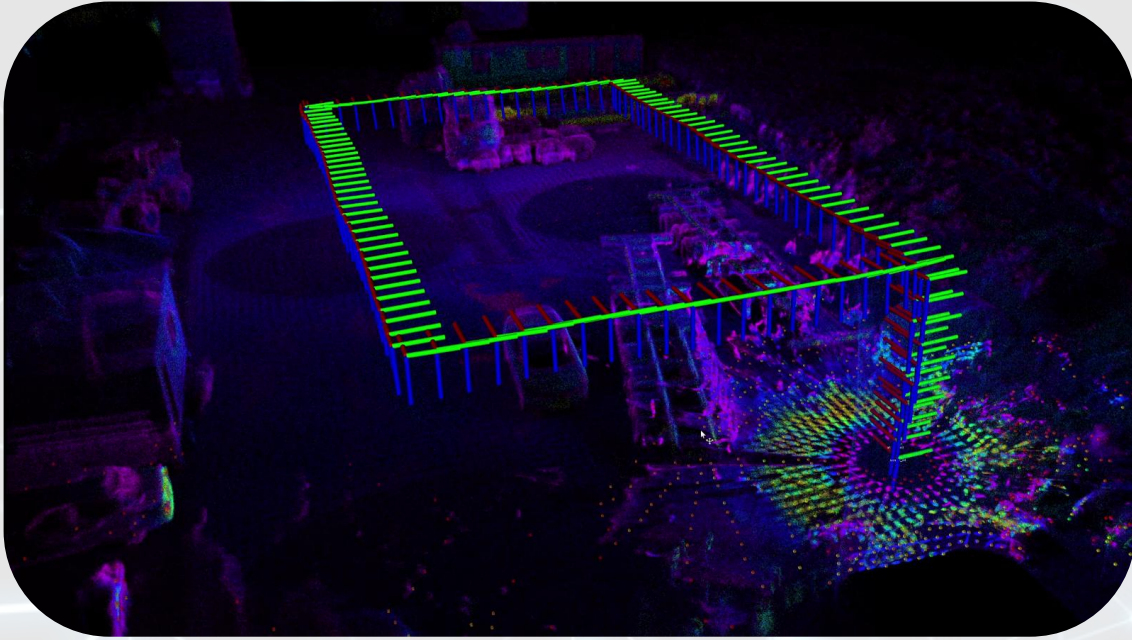
Smaller Outer Dimensions



Compact 3D radar-equipped drone, engineered with precision navigation for full protection, designed to operate in tight spaces such as tunnels, boilers, and underground utility corridors.



Automatic Flight Path

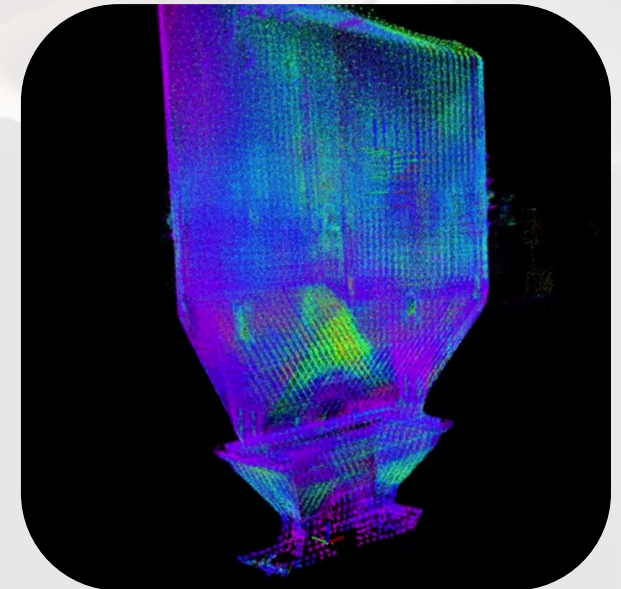
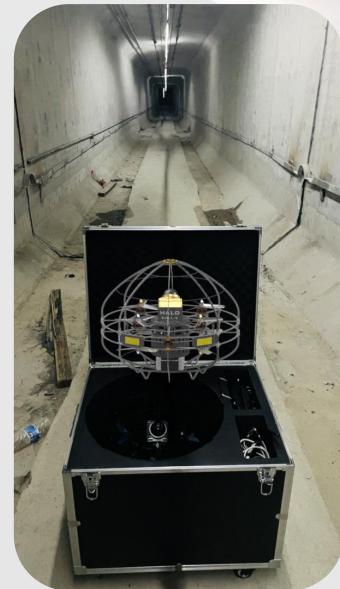
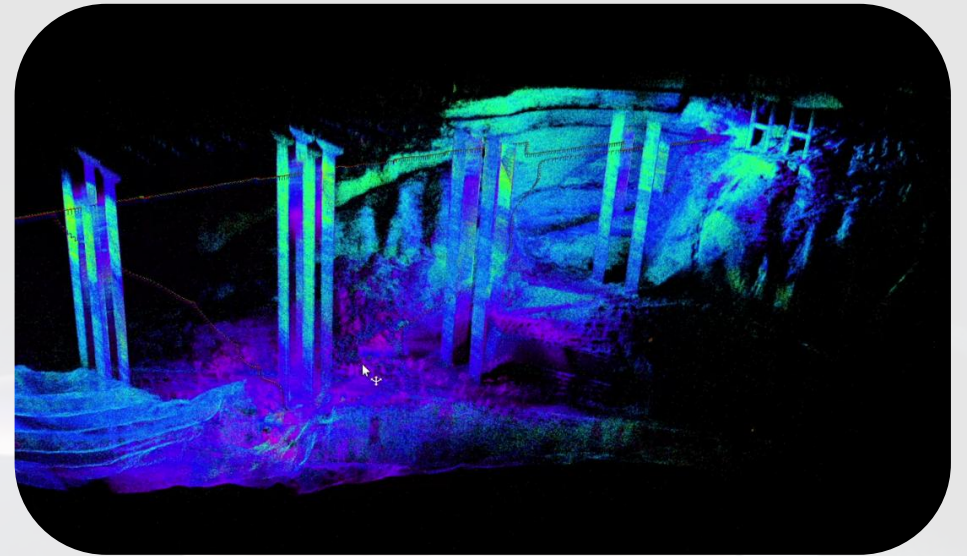
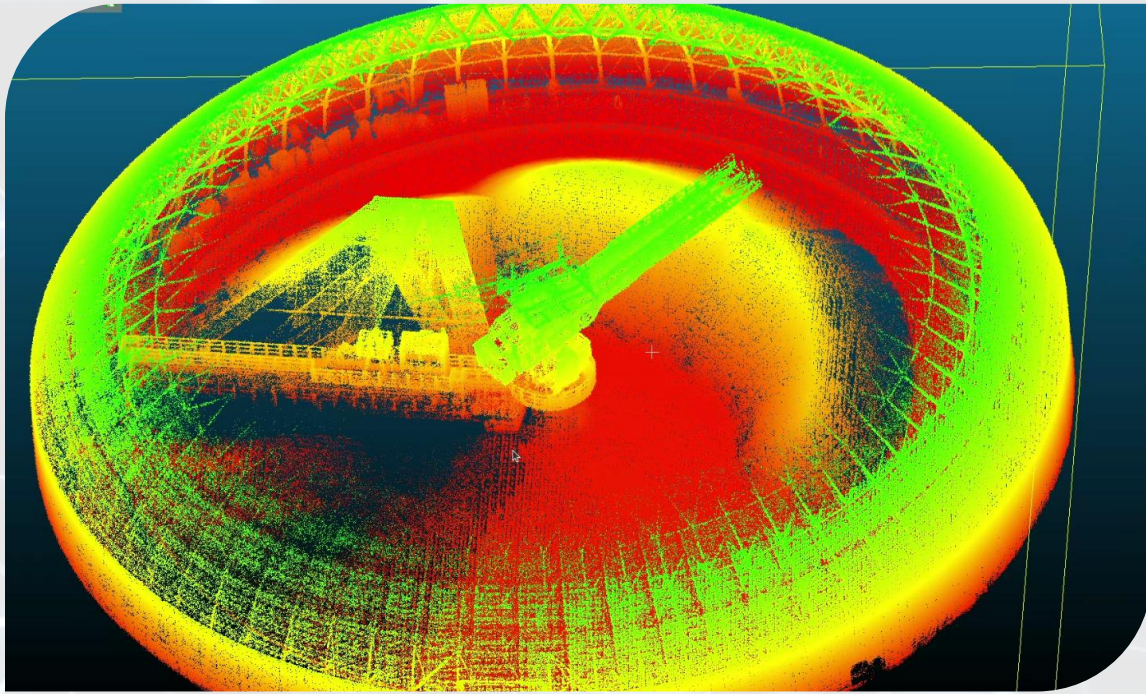


Paired with an Automatic Charging Nest,
Enables autonomous flight in indoor, enclosed
spaces, facilitating unattended operations.

Enables the drone to follow pre-programmed routes automatically, making operations more efficient and reducing the workload for pilots, offering more comprehensive coverage for flight photography.



Powerful 3D Point Cloud Post-Processing Capability



High-precision point cloud models enable accurate measurements of volume, surface area, and more.

Technical Specifications

◆ Drone Specifications

Configuration	Quadcopter
Dimensions	Outer contour $\leq 380\text{mm}$
Weight	1700g (including battery)
Flight Modes	Lidar-SLAM Mode, ATTI-Attitude Mode
Flight Duration	14+ Minutes
Max Ascent/Descent Speed	2m/s (SLAM mode) 5m/s (Attitude mode)
Max Takeoff Weight	2000g
Max Wind Resistance	3m/s (SLAM mode) 5m/s (Attitude mode)
Materials	Carbon Fiber Composite High-quality Thermoplastic
Motor Type	Brushless Motor
Noise Level	85dB
Onboard Computer	Linux Kernel System
Operating Temperature	0°C to 50°C
Propellers	3-blade propeller*8 5 inches
Autonomous Flight Path	Support



Specifications

◆ Camera/Videolink Parameters

(Dual Sensor Camera Optional)

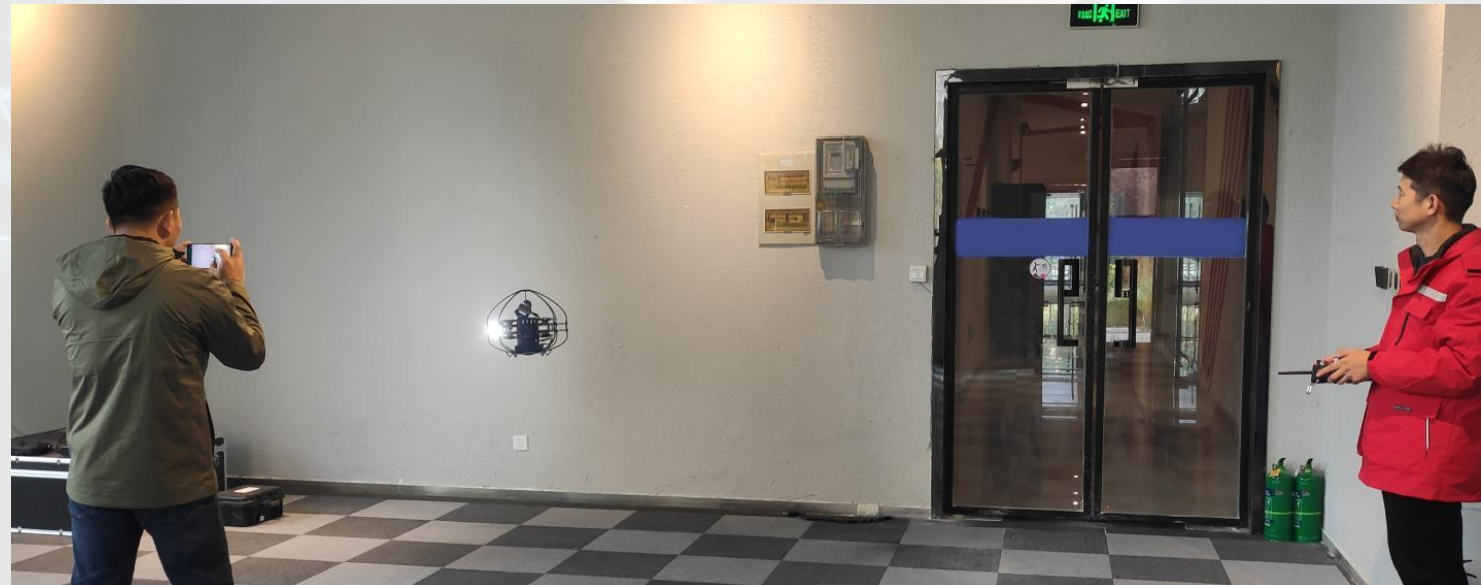
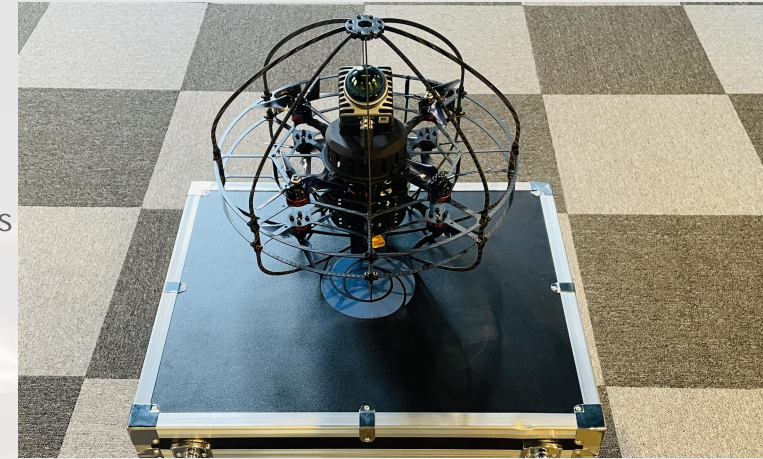
Sensor	1/1.7 inches
Resolution	48 Megapixels
Video	1080P H.265 High-definition
Field of View	155° Wide-angle
Videolink Latency	30ms
Transmission Distance	10km (open area)

◆ Battery

Battery Replacement Time	Within 10 second
Battery Type	4S lithium battery
Charging Cycles	<30 Mins
Battery Capacity	8200 mAh
Weight	421 g

◆ Lidar

Wavelength	905nm
Human Eye Safety	class 1
Min Object Distance	0.1m
Point Cloud Density	200,000 points/s
Detection Range	40m



Application

