

MAPHAWK

AUTONOMOUS INDOOR MAPPING DRONE



GPS-Denied Navigation | Real-Time 3D Mapping | Confined Space Scanning

Overview

MapHawk is a mid-size autonomous drone engineered for high-accuracy mapping and scanning in GPS-denied indoor environments. Equipped with real-time 3D mapping and obstacle avoidance capabilities, it is ideal for warehouse inspections, industrial site surveys, intruder detection and stockpile monitoring. MapHawk delivers reliable spatial intelligence for asset tracking, safety audits and complex indoor navigation with precision and safety.

Key Advantages

Designed for Indoor Safety: Ducted, collision-safe frame for operations in tight, enclosed environments

Stable Hover & Endurance: 7-inch class propellers combined with high-capacity Li-ion battery deliver 15–20 minutes of flight time

Visual Navigation: Advanced visual mapping system enables accurate indoor autonomy without GPS

Precision Output: Generates real-time, high-accuracy 3D indoor maps for analysis and planning

Obstacle Avoidance: Built-in collision avoidance enhances autonomous performance in cluttered spaces

Secure Indoor Control: Reliable, low-latency control link for stable indoor operation

Mission Profiles

Warehouse Inventory Scanning

Industrial Safety & Maintenance Audits

Confined Space Inspection (tanks, tunnels, basements)

Intruder Detection & Internal Surveillance

Construction & Retrofit Mapping

Underground or Infrastructure Survey

Technical Specifications

Specifications	Functionalities
Frame	: Ducted, collision-safe design
Propulsion	: 7-inch class propellers
Battery	: High-capacity Li-ion for extended indoor flight
Flight Time	: 15–20 minutes
Navigation	: Visual SLAM (Simultaneous Localization and Mapping)
Control	: Reliable indoor link
Features	: Real-time 3D mapping, obstacle avoidance
Output	: High-accuracy spatial maps for industrial and security use