

# Connected UAV Platform - AWS Cloud-Ready Drone for Data-Driven Missions

## Challenges

### Accelerating mission-critical drone applications with secure cloud integration

The Connected Drone UAV Platform is a lightweight, modular firmware foundation that seamlessly bridges drones with the cloud, solving common challenges like complex backend integration, poor data quality, and custom dashboard development. Built on Avnet's /IOTCONNECT™ and Amazon AWS services, the platform delivers secure telemetry streaming, real-time monitoring, and AI-driven analytics optimized for high-mobility aerial systems. By combining reliable drone-to-cloud connectivity with scalable infrastructure, the platform reduces development time, lowers integration costs, and empowers operators to manage fleets, track mission data, and unlock predictive insights - enabling applications from precision agriculture and infrastructure inspection to logistics and remote asset monitoring.

## Indeema Smart UAV Solution

### Unlock smarter operations with modular drone technology and actionable, cloud enabled insights

The Indeema Connected Drone Solution is a highly customizable and scalable drone framework that supports a wide range of hardware platforms. Its cloud connectivity, powered by Avnet's /IOTCONNECT™, ensures secure data transmission, real-time monitoring, and AI-driven analytics. By providing a pre-integrated, scalable platform, /IOTCONNECT™ reduces development complexity, accelerates deployment, and gives operators real-time visibility into missions, fleet performance, and environmental conditions. With these insights, businesses can make smarter decisions, optimize operations, reduce costs to unlock new opportunities across industries from precision agriculture to infrastructure inspection and remote asset monitoring.



## Benefits

Enables near real-time drone data exchange with AWS, reducing integration complexity and accelerating deployment across industries.



### Modular, Hardware-Agnostic Framework

The firmware supports a wide variety of UAV platforms, allowing flexibility in hardware selection while maintaining consistent cloud connectivity and operational performance



### Real-Time Fleet & Asset Tracking

The platform provides live telemetry from drones and connected assets, giving operators instant visibility into fleet locations and mission progress for faster, smarter decision-making.



### Simplified Cloud Integration

Built on Avnet's /IOTCONNECT™, the solution streamlines drone-to-cloud connectivity, reducing backend complexity and accelerating deployment without custom infrastructure.



### Actionable AI Insights

AI-driven analytics turn raw telemetry into predictive insights, enabling predictive maintenance, optimized operations, and better mission planning.

# Indeema's UAV Platform on AWS

Indeema's modular, connected drone solution combines AWS cloud services and Avnet's /IOTCONNECT™ to deliver a seamless drone-to-cloud platform. AWS provides scalable infrastructure and all backend services needed to build IoT systems, while /IOTCONNECT™ aggregates them into a single pane of glass, simplifying the creation, deployment, and management of IoT solutions. Together with Indeema's firmware, the drone platform reduces integration complexity, accelerates deployment, and provides operators with real-time insights into fleet performance and mission outcomes - empowering businesses to optimize operations and make data-driven decisions.



## Case Study: Smarter Farming

### Challenges

The customer needed a reliable way to capture and analyze aerial imagery of large crop fields. Manual inspections were slow, labor-intensive, and often missed early signs of crop stress or disease due to limited data frequency.

### Solution

Indeema's UAV Cloud Connectivity Platform, built on AWS and integrated with /IOTCONNECT™, enabled drones to automatically upload high-resolution field images in near real time. /IOTCONNECT™ simplified cloud integration, streamlined data management, and allowed immediate processing for actionable insights.

### Results

The customer reduced field inspection time by 70% and detected crop health issues up to two weeks earlier. Real-time aerial data enabled faster decision-making, improved yield forecasting, and optimized fertilizer and irrigation planning for more efficient and productive operations.



## Features

### Modular, Flexible Framework

Indeema's modular drone framework supports a wide range of UAV platforms, giving developers flexibility to choose the hardware that best fits their needs. This hardware-agnostic design allows teams to experiment, iterate, and scale deployments without being locked into a single vendor. Combined with /IOTCONNECT™, it simplifies integration, data collection, and analytics to enable rapid development and deployment of customized drone solutions across diverse applications.

### Real-Time Fleet & Asset Tracking

Indeema's platform streams live telemetry from drones and connected assets securely through /IOTCONNECT™, leveraging its AWS-validated cloud integration to give operators instant visibility into asset locations, status, and environmental conditions. When combined with Edge AI deployments on the drone fleet, this enables near real-time decision making at both the operator and edge levels ensure mission critical decisions are made quickly to keep the drones operational and trips efficient.

Visit [AWS Marketplace](#) or [Indeema website](#) to purchase.

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