

DATASHEET

## Scalable airspace management solution

Whether you're flying, building or managing next-gen aircraft, our proven, instant-deploy solutions get you up and running quickly, with full backup from the world's leading experts.

### Summary

## An introduction to GuardianUTM™

GuardianUTM is an intuitive, cost-effective solution for providing a consolidated integrated airspace view. The solution gives greater situational awareness and the ability to manage flight plans and access for unmanned aerial vehicles (UAVs), enabling the airspace to be opened to more flights as UAV-use continues to increase.

Hosted on a secure and stable cloud environment, GuardianUTM is rapidly deployable and configurable by organisations of any size; providing a flexible platform for enabling UAVs to be safely integrated for greater operational control and unlocking a wide variety of use-cases.



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# Key points

### Highly configurable

GuardianUTM gives managers of airspace, whether this be around airports, property or other infrastructure, the ability to easily provide digital approval to UAV operators within defined airspace zones. Offering high levels of automation, including routing and approvals of certified operations, keeping costs down. The solution is also able to integrate with aerial surveillance equipment as required.

### Easy to use

Designed to quickly and easily give an overview of the sky around your enterprise location, GuardianUTM features a simple, easy-to-use interface, which requires minimal training, and no additional on-site hardware to be deployed. An intuitive top-down view allows users to clearly distinguish authorised and unauthorised UAVs in real-time and take appropriate actions.

### A broader airspace economy

One of the key challenges is funding the work of reviewing and approving UAV flights in restricted airspace. GuardianUTM solves this problem by welcoming UAV operators into the wider airspace economy, with Approval Service fees. Ensuring those who benefit from opening up restricted airspace contribute towards keeping it safe.

### Constantly evolving

Cloud-based infrastructure allows GuardianUTM to continuously update with the latest and most accurate aeronautical data available. The platform offers unlimited scalability, able to respond to growing numbers of UAV flights or increased areas of responsibility. Whilst our approval workflows can automate common tasks, enabling scalable UAV operations by minimising manual processes.

### Safety through situational awareness

GuardianUTM provides a single source-of-truth which provides a moment- to-moment situational awareness of airspace regions, enabling direct engagement with approved UAV operations, and quick identification of rogue incursions from unidentified aircraft. This helps ensure UAVs and other airspace users are safely managed and deconflicted, contributing to safer, more efficient operations.

### **UAV Flights**

Rogue/ Denied

Requested/ Approved

### **Surveillance Feeds**

ADS-B, Flarm, Remote ID, Arrow Towers\*\*, Radar, MLAT

### Airspace Data

Ground Hazards, CTRs.. and more

### **GuardianUTM**

Security Alerting

Flight Routing

Airspace Awareness

**Zone Configuration** 

**Administration Tools** 

### **UTM Services**

Deconfliction, Capacity Management, Geofencing, Flight Route Planning, Registration, Airspace Protection... and more

NOTAMs, TFRs, NFZs,

### Accessible anywhere, online always

\*\*Requires a deployment of Altitude Angel's Arrow Drone Zone technology. Contact our sales team to find out more.

As a cloud-based SaaS solution, GuardianUTM provides remoteaccess everywhere. Users may approve, reject or amend flights within pre-defined 'zones' from anywhere in the world, through a secure online platform. The solution also enables airspace managers to directly interface with UAV operators mid-flight, allowing them to declare emergencies or request immediate landing of UAVs.

### Enable the skies of tomorrow, today

GuardianUTM gives organisations the ability to offer UAV operators critical safety features and priority access to airspace for commercial purposes. Through a central access platform connected to Altitude Angel's comprehensive global UTM network, organisations can be ready as UAV use increases by directly accessing Altitude Angel's unrivalled deconfliction services and Al-guided routing of aircraft to support highly-automated flights.





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### **Feature list**

SLA-assured	Supported by a guaranteed SLA of 99.95%
Integration Agnostic	GuardianUTM Cloud surveillance API readily integrates with 3rd party systems.
Hosting	Microsoft Azure cloud; deployable to additional regions if needed. Further information: https://azure.microsoft.com/engb/global-infrastructure/geographies/.
Security	SSO-enabled login, MFA and comprehensive user-management tools.
Real-time data feeds	Data displayed through GuardianUTM is received directly from Altitude Angel's suite of rest-based APIs which aggregate the most accurate data available to industry and deliver them directly into the solution.
C-UAS Compatibility	DJI AeroScope*, Involi*, Droniq*, uAvionix*, Asterix CAT48, Asterix CAT62, Asterix CAT21, FRQ smartSIS, Dedrone*, Senhive Sen-ID+, DroneShield (others available on request).
Surveillance & Telemetry Integration	ADS-B (including CAT21), Radar* (including CAT48, CAT62), MLAT, FLARM, RF, Optical, Lidar, GCS, On- board Trackers.

\*Previous integration with.



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### GuardianUTM in brief

- Enables organisations of all sizes to manage airspace access in definable zones (facilities or regions).
- Provides an end to end solution for UAV operations, supporting the creation and submission of flight plans through to review, approval and collection of Approval Service fees all on a single platform.
- A single cloud-based platform ensures the platform is able to be deployed live from day one and anywhere in the world.

Reduces operational expenditure and training burden by increasing efficiency cost-effectively.

- Contributes to existing UAV management strategies, protecting from costly disruption by quickly distinguishing unauthorised UAVs from approved operations.
- Provides increased overview of UAVs through an intuitive visual user interface.
- Able to automatically approve UAV operations using automated approval workflows, in lower risk environments, reducing costs while letting you focus on what's important.
- Delivers uncompromising safety features and next-generation UAV-services functionality through Altitude Angel's world-leading UTM.



### Contact

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