Datasheet: GuardianUTM™ Cloud
Drone operational data and UTM services

GuardianUTM™ Cloud gives drone software developers and manufacturers the ability to integrate airspace information and UTM services critical to the safe operation of drones directly into their existing applications or hardware.

Through GuardianUTM™ Cloud, organisations can deliver added value to end-users by providing accurate, reliable and detailed airspace data, as well as advanced UTM services which open more of the sky to drone operators.
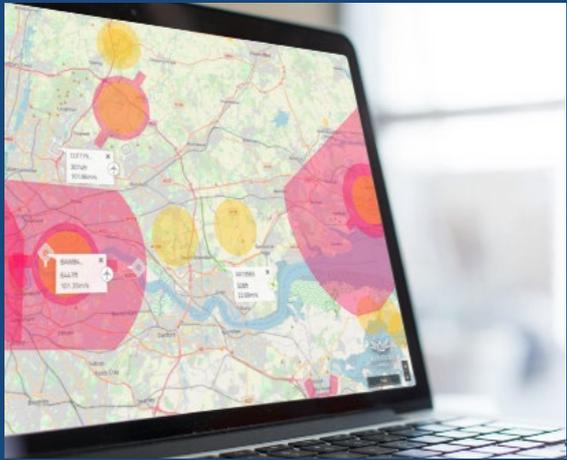
Comprehensive geo-awareness data

Altitude Angel's GuardianUTM™ Cloud platform is a conduit for accessing a rich and extensive dataset of aeronautical drone-centric data. Our rest-based APIs aggregate data from only the most authoritative sources, and include a wide range of datasets and categories including; NOTAMs, TFRs, airports, drone flight reports, powerlines, public service infrastructure and more.

Advanced deconfliction capability

GuardianUTM™ Cloud's Conflict Resolution Service (CRS) provides pre-flight and in-flight deconfliction services during drone operations. Through the dedicated CRS APIs, software and hardware developers are able to integrate configurable proximity warnings and conflict notifications when overlapping flight plans are submitted or deliver alternative flight routing when a potential conflict is detected mid-flight.

Easy to integrate

As a core function, GuardianUTM™ Cloud standardises and de-duplicates vast amounts of data from numerous sources on the server side, meaning the data you access is easy-to-consume and accurate whenever you request it. All the APIs are designed to be implemented quickly and supported by an extensive knowledge base and dedicated support team.

GuardianUTM™ Cloud in Brief

- Provides easy access to extensive airspace and ground hazard data critical for safe operation of unmanned aerial vehicles.

- Supports safe integration of manned and unmanned aircraft through greater situational awareness and deconfliction tools.

- Trusted by a wide range of commercial organisations, from drone manufacturers to insurance providers; serving over 800,000 API requests a day.

- Able to be integrated quickly and efficiently

Client sends a command   JSON   GET   PUT   HTTPS request made   HTTP   Server fulfils request

Developer Packages

PLANNER

Airspace Map Data	Advanced Airspace Map Data layers from 70 distinct airspace classifications and warnings, and 80 ground-based hazards – in GEO-JSON formats.
Flight Report Submissions	Allows the publishing and cancelation of flight plans through Altitude Angel's GuardianUTM network.
Strategic Conflict Resolution Service	Identifies conflicting flight plans in conjunction with Flight Report Submissions
Area Reporting (inc. Weather)	Generates a summarised report of hazards, including an overall risk score, within any given area.
Airspace Alerts	Capable of detecting and alerting to manned aircraft operating within definable areas, most commonly as part of an active Flight Report Submission.
Surveillance	Delivers live aircraft surveillance data directly from sensor devices into GuardianUTM.
Universal Flight Gateway*	Enables Flight Reports Submissions to be submitted for approval by the relevant authority and notified of Accept or Reject status.

* Service subject to API availability with relevant Authority.

NAVIGATOR

Tactical Conflict Resolution Service	Receive advanced notification of conflicting flight activity mid-flight and intelligent routing advisement for mitigating collisions.

Be UTM ready

Through GuardianUTM™ Cloud, you can be guaranteed to meet the strictest compliancy criteria on Geo-Awareness requirements. Whether you're directly utilising the data as part of unmanned trials, or delivering the data to your customers through your own platform, GuardianUTM™ Cloud will give you the assurance you need to grow your businesses in an environment of changing rules and regulations.

Deliver more

Connect to and deliver the next generation of drone services to users through our comprehensive UTM services and provide game-changing features which delivers added value to your customers and unlocks new revenue opportunities. Leverage advanced capabilities which can open more airspace and promote safe, compliant drone operations.

Expand your business

Access world-leading global airspace data through an easy-to-implement API; enabling your business to expand across borders without compromising safety. Enhance situational awareness for your users, wherever they are in the world, by accessing and contributing to a global network of live flight reports.

PARTNERS & INTEGRATORS