

# Erizon Aerial Solutions

Advanced Mapping, Aerial  
Surveying and Aerial Product  
Application





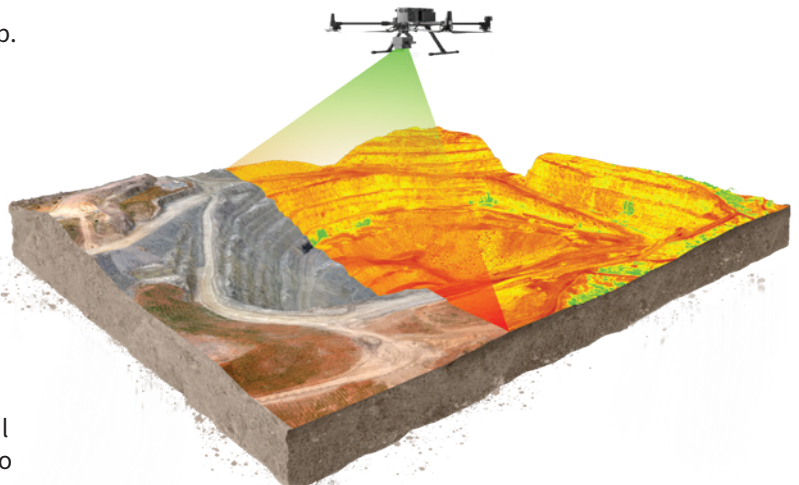
# Introducing Erizon Aerial Solutions

Innovation and ground-breaking technologies will always underline the foundation for Erizon's approach to pioneering environmentally sustainable and safe solutions.

As our project capacity and capabilities increase by partnering with clients in their environmental projects, we aim to be continually aware of the latest in highly sophisticated equipment within our current asset line-up.

Determined to provide unprecedented project results to our clients each time, we maintain our position as an industry leader by supporting projects with a greater detail of information, advanced innovation, timely client help and cost efficiency for solution-driven results.

As Erizon continues to utilise drone technology to help deliver effective environmental solutions across Australia, we aim to maintain our understanding of this new, game-changing technological and engineering advancement. Our continual insight into advanced innovations will help ensure we are providing the highest quality and most effective services that meet the rising substrate and safety issues presented to us, Australia wide.

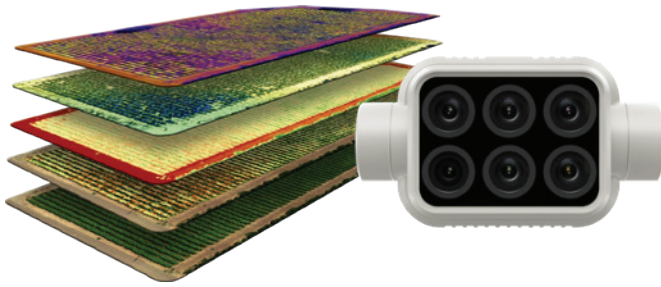


# Benefits

		FULL FRAME SENSOR	LIDAR	THERMAL IMAGING	MULTISPECTRAL	AERIAL SEEDING	AERIAL SPRAYING
Safely Operate in Inaccessible Areas							
Rehabilitation Performance Monitoring							
Digital Elevation Map (DEM)							
3D Model							
Greater Accuracy & Efficiency							
RTK Autonomous High Precision Operation							
Detailed Orthomosaics using Photogrammetry							
50ha Imagery Collection in a Single Flight							
Real-time Visual Monitoring							
Weed Management							
Aerial Product Application							
Asset Inspection							



# Drone Survey Capabilities



## Multispectral Imaging

Using a combination of multispectral and thermal imaging cameras, along with NDVI, OSAVI, DSM and NDRE, our analysis can detect areas under heat and drought stress, plant height and health, and the nitrogen and chlorophyll content of plants.

## Thermal Imaging

Converting the invisible radiation pattern of an object (i.e., vegetation) into visible images for analysis, thermal imaging can determine the temperature distribution of any object or area, predict water stress for the site and detect diseases and pathogens in vegetation.

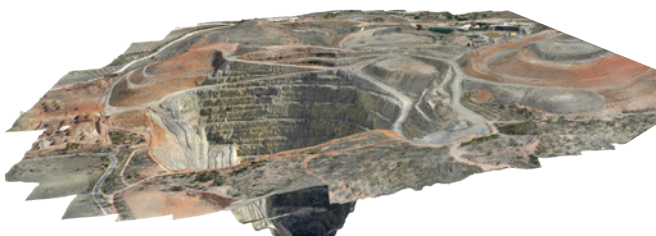


## LiDAR Survey

LiDAR can provide remarkable levels of 3D accuracy even in harsh weather conditions and low light, with a horizontal accuracy of 1cm and a vertical accuracy of 1-2cm, even penetrating areas with up to 90% vegetation cover.

## Photogrammetry

With some of the most advanced photogrammetry sensors available, our drones will capture high-resolution images over your site that translate into a 3D map, inclusive of elevation, texture, shape, and colour for all points on the map. Photogrammetry can penetrate areas with up to 60% vegetation cover, and with accuracy rates of 1cm horizontally and 2-3cm vertically.



## Photography & Video

Using cutting-edge drone technology, we can capture every inch of your site in ultra-high resolution. Full frame cameras capture up to 45 megapixel still images and have the ability to record 4k video. Our drone operators are qualified, certified, and highly experienced, often working in Australia's most demanding environments.



# Drone Application Capabilities



## Aerial Spraying

With the ability to cover varied and uneven terrain, drones are quickly becoming the ultimate precision spraying tool.

Targeting specific areas where treatment of fertiliser and soil ameliorants is necessary, aerial spraying can treat an area up to 40 times faster than manual spraying operations, reducing disease and increasing efficiency. For projects that require extended flight times, hybrid drones that utilise an onboard generator can be deployed.



## Aerial Seeding

Drone Seeding is an extremely cost-effective solution for aerial seeding.

The manoeuvrability of the UAV (Unmanned Aerial Vehicle) allows our pilot to service isolated or difficult access areas and sites which require rehabilitation and/or stabilisation. Combined with Aerial Survey, our drones can be utilised to service broadacre or specific areas where treatment is necessary.

ERIZON  
IONS DIVISION

## Aerial Dust Suppression

Save water, time, money, and energy by choosing aerial dust suppression. Consistently achieving significantly better dust control results, our non-toxic dust control and soil stabilisation materials have been engineered and rigorously tested in some of the harshest conditions Australia wide.

With unmatched efficiency, drone application of dust suppression is extremely suited for remote sites with steep or rugged terrain, limited vehicle access and where safety concerns are paramount. For large scale dust suppression projects, hybrid or tethered drone options can be considered, to increase both flying time and access to our product.

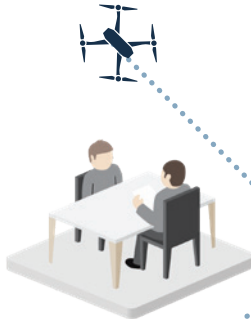


# OUR PROCESS

Dependent on your site requirements and project, our process will alter slightly. One thing that won't change is our attention to safety and detail, ensuring a successful outcome for your project every time.

## 1 Initial Consultation

When you contact us to start the discussion about your site or project, we'll aim to get as many initial details as possible to plan the best course of action using our Aerial Division solutions.



## 2 On-site Inspection

An Erizon representative will come out to your site to meet, visually scope the surrounding environment, and note specifications to plan your project.



## 3 Prepare Solution / Mission Plan

Each project comes with a tailored Quality Management Plan and an Inspection & Test Plan (ITP) to identify and record project specifications and requirements.



## 4 Safety Checks and Set Flight Coordinates

Our operators have undertaken a variety of intensive training courses and licencing qualifications, to provide you peace of mind with their ability to carry out flight and drone missions safely and effectively.



## 5 Deploy Mission

Our highly trained operators will deploy the mission based on the specifications set in your tailored plan, maintaining safety and ensuring a successful outcome.



## 6 Analyse Results & Create Report

We'll collate and analyse all the results from the mission and create a tailored report detailing your project and site. Erizon is committed to keeping you informed every step of the way.





## DRONE OPERATORS

At all times while in flight, we will have a licenced drone pilot that can visually scope the surrounding environment for any outlying obstructions that may affect the application process.

Our drone pilots have undertaken a variety of intensive training courses and licencing qualifications, to provide you with ease of mind in their ability to carry out flight and drone missions safely and effectively.



Australian Government  
Civil Aviation Safety Authority



## DRONE SAFETY

With a focus on safety and innovation at the heart of our company, we are committed to finding new and improved ways to keep our staff and customers safe while on site.

Drones have ease of access unmatched by personnel, with the ability to get into unstable, hazardous, and hostile areas onsite, minimising and often eliminating many safety risks, while providing increased accuracy with reporting.

The rapid advancement of drone automation has provided the ability for us to invest in the latest technology to cooperate with the framework of our safety operations policy 'Vision Zero'.

With a comprehensive range of drone solutions available, we can provide options for your site, and back it up with our 'Supply, Apply, Guarantee' outcome. By not relying on third-party operators or products, we can ensure the best results every time.





## SUPPLY

Our products and services are supported by the expertise and consultation of our specialist team of agronomists, horticulturalists, soil scientists and engineers. We are confident you will achieve project success the first time around.



## APPLY

Our highly trained operators utilise specialist equipment to apply products with precision and accuracy, meeting Australian Safety, Environmental and Quality standards. Our ability to utilise drone technology for the application of solutions improves the quality and efficiency of our operations.



## GUARANTEE

Our scientifically developed solutions and expert application methods enable us to deliver an end-to-end solution which makes our guarantee possible. Each project solution is tailored for specific site requirements and longevity targets, which drive a tailored guarantee to ensure our clients reach their goals.

## Industries We Serve



Mining



Energy & Resources



Agriculture



Civil & Construction



Engineering



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