

A large graphic of a tablet or screen tilted at an angle. The top-left corner shows a landscape with a power line tower against an orange sky. The rest of the screen is a solid blue color with white text.

# Delair Aerial Intelligence Platform

Simple. Secure. Scalable.



## Power & Utilities

The cloud-based platform help you manage, process, view, analyze and collaborate around aerial data. Our industry-specific solutions provide the simplicity, security, and scalability that enterprises require to turn aerial data into business insights.

# Asset Management reinvented.



## SOLUTIONS

TO TURN AERIAL DATA > BUSINESS INSIGHTS

Aerial data plays an important part in any digitization strategy. While capturing data is easier than ever with UAVs, the real challenge enterprises face is harnessing all of this data so that it is consumable, shareable, and actionable

Delair Aerial Intelligence provides a solution to rapidly and repeatedly analyze comprehensive imagery of customer infrastructure to help improve grid reliability and lower operating costs. Our customers get the combined power of an enterprise-focused workflow and powerful industry-specific analytics, to help turn aerial data into actionable business insight.



1/ Acquisition



2/ Upload



3/ Photogrammetry  
or Lidar



4/ Analytics



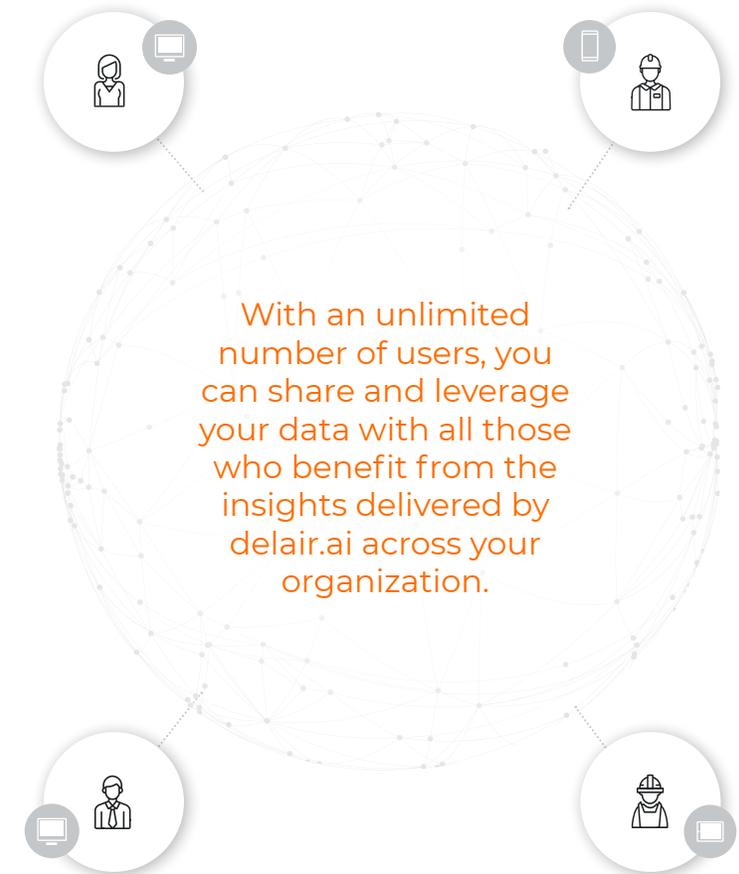
5/ Business  
insights

# Collaboration anywhere, anytime.

## MAXIMIZE COLLABORATIVE TOOLS

TO LOOP IN EVERY  
SUBJECT MATTER EXPERT

- Share surveys and current asset conditions within your organisation and with contractors
- Annotate, tag individuals, discuss findings, upload attachments, and make speedier, more-informed decisions
- Gain a holistic view of your assets and understand risks.



# Open APIs for customization & interoperability.

**The most powerful and comprehensive toolkit for modeling reality, build your digital twins and apply your custom analytics.**

The Delair Aerial Intelligence platform offers an open API and SDK, enabling you to build your own apps and custom solutions based on a comprehensive range of imagery-based analytics and other platform features.



**COMPLETE INTEROPERABILITY WITH OTHER SOFTWARE TOOLS FOR SEAMLESS WORKFLOWS.**

Use the delair.ai standards-based APIs for advanced integrations. Intricate workflows can be easily implemented, and delair.ai analytics can be exported to ERPs, CMMS or FSM software.



**BUILD YOUR OWN PROCESSING WORKFLOW FROM AVAILABLE ANALYTICS AND ADD THE NEW SOFTWARE BRICKS YOU NEED.**

Thanks to the delair.ai Software Development Tool (SDK) you can generate remote connections to the platform in order to exchange and manage data input and output.



# Secure & reinforced.

**DELAIR IS COMMITTED TO ACHIEVING AND MAINTAINING THE TRUST OF OUR CUSTOMERS.**

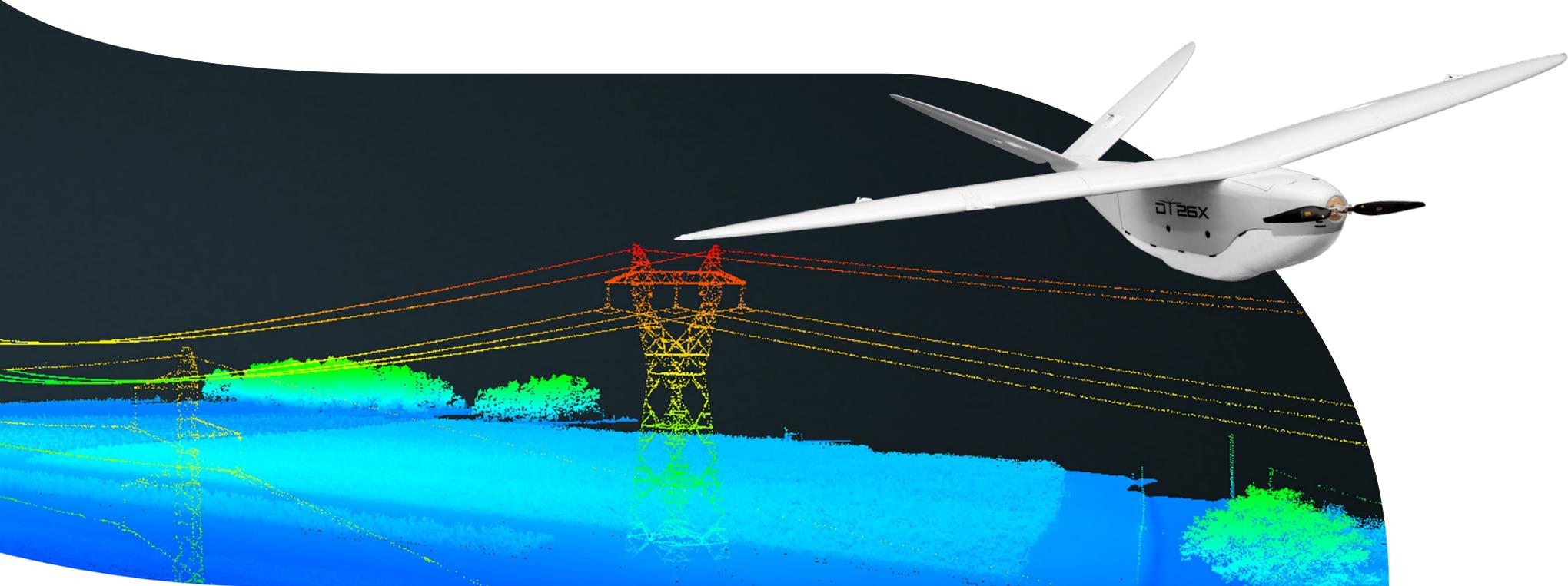
Integral to this mission is providing an enterprise-strength security and privacy program that carefully considers data protection matters across our suite of services.

**Our robust security program is built on the ISO 27001 standard.  
Everything we do is governed by a strict set of policies, procedures, and controls.**

- Data is encrypted in transit and within the platform.
- Security processes are cemented into our secure software development lifecycle.
- Granular role-based access controls allow you to adjust your team members' access to data, toolsets, and editing privileges.
- Audit trails provide a detailed record of every action of every user

# Power & Utilities

SOLUTIONS



# Delair.ai platform.



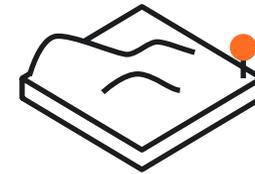
## **BENEFIT FROM THE CLOUD**

Access your data anywhere at anytime without worrying about the infrastructure you need to process data. Give unlimited access to your data to your collaborators and stakeholders



## **EASY TO USE**

Quick access to your data with only a few clicks. View, measure, annotate and share actionable data. Take advantage of the advanced automated measurements and deliver valuable information.



## **DAY-TO-DAY TOOL**

Operational tool enabling you to interact with the digital twin of your infrastructure, giving you a precise and reliable view of your assets



## **TURN YOUR MEASUREMENTS INTO KPIS**

Optimize your operations and have a better control of what's happening to your assets with advanced KPIs coming from accurate information

## Power & Utilities Solutions

# View, measure, share & annotate.

Commercial drones are changing the way the power & utility industry inspects and surveys generation facilities, transmission and distribution infrastructure, terrain, and assets' surroundings such as vegetation, buildings, and roads. **This technology enables the rapid, repeatable, and safe analysis of high-resolution imagery of difficult-to-access equipment.**

Delair provides complete aerial intelligence solutions for the power & utilities industry, whether it be for scheduled site surveys, infrastructure inspections, or in response to outages that need immediate attention. Customers can capture valuable asset data and can continue the commitment to keep employees safe, while delivering reliable high quality service their customers know and expect.



### ENHANCE WORKER SAFETY

Minimize lineman exposure to injury by reducing the need to climb transmission towers and other infrastructure for inspections. Reduce risk related to low altitude flights with helicopters.



### IMPROVE SYSTEM RELIABILITY

More efficiently inspect and assess the condition of transmission and distribution system infrastructure to help improve system reliability.



### REDUCE INSPECTION COSTS

Minimize the use of helicopters and ground vehicles for network inspections and vegetation management surveys.



### INCREASE SUSTAINABILITY

Use low noise fixed wing drones equipped with electric engines for a more sustainable approach to O&M activities.

# Cloud-based maps and models.

**GENERATE THE DIGITAL TWIN OF YOUR ASSET** with our cloud-based photogrammetry and lidar tools, visualize your entire area of interest and be ready to get the most out of it.

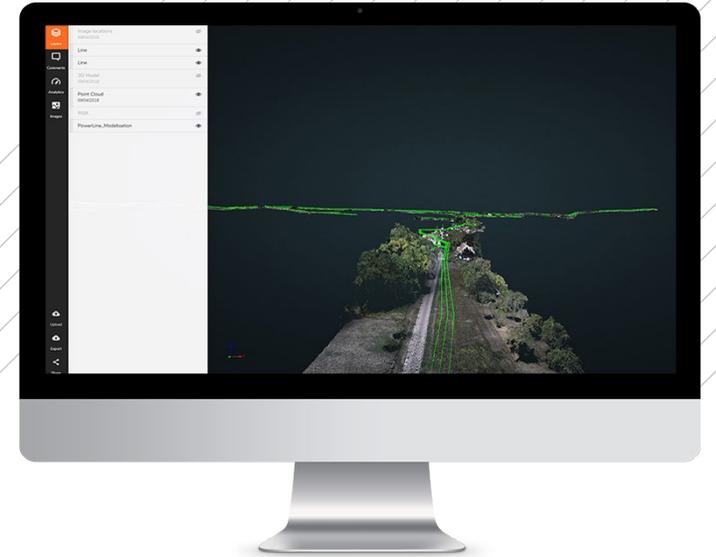
## Photogrammetry.

**PROFESSIONAL-QUALITY MAP PRODUCTS FROM IMAGES.** View RGB photogrammetry deliverables including a point cloud, digital surface model, orthomosaic image, and 3D mesh for vivid maps of the environment around the infrastructure.

## Lidar.

**DETAILED 3D POINT CLOUDS OF YOUR INFRASTRUCTURE AND SURROUNDING ENVIRONMENT.**

Lidar is incredibly powerful at providing a highly detailed digital twin of infrastructure, capturing even the smallest components. Simultaneously, view the surrounding environment to address risks, such as dangerous trees or buildings too close to lines.



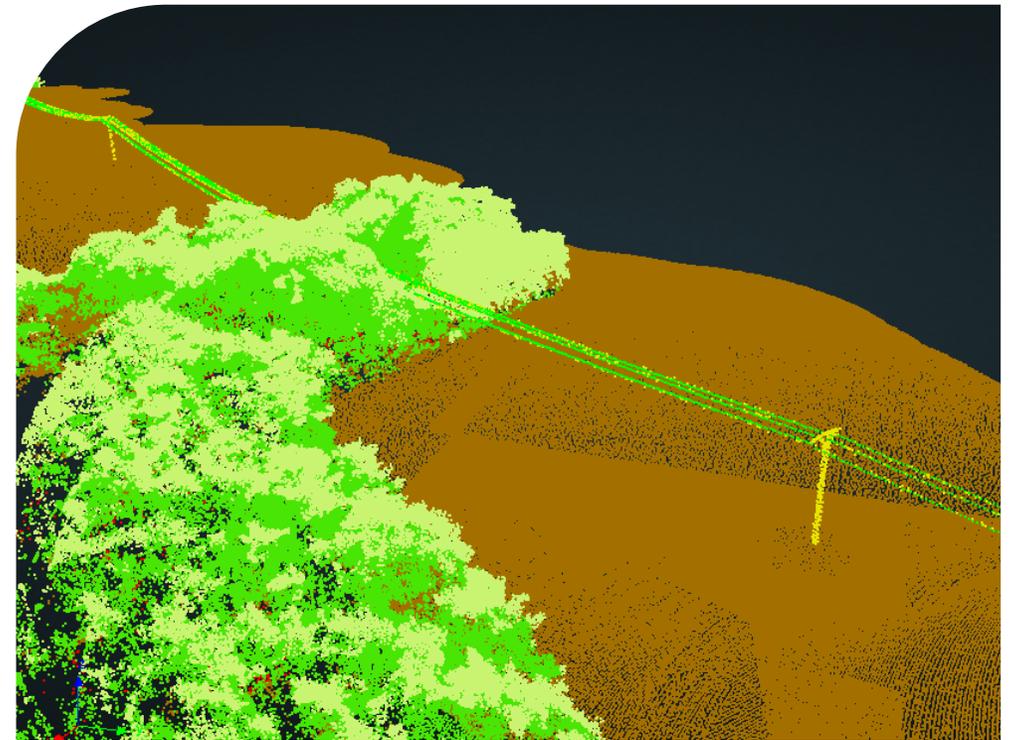
Deliverables
1/ Orthophoto
2/ Digital Surface Model
3/ 3D Point Cloud
4/ 3D Mesh
5/ 3D Model
6/ Slope Map
7/ Change Map
8/ Digital Surface Model Contours

## ANALYTICS

**Delair's powerful analytics help improve grid reliability and lower operating costs by giving you greater visibility of the state of your assets to be proactive and mitigate risks.** Defect detection propagates through all layers of your digital twin by leveraging lidar point clouds and photogrammetry. Time series comparisons can be made with past flights to notice any damage, wear, or unanticipated equipment changes. Analytics can be integrated with your existing enterprise asset system.

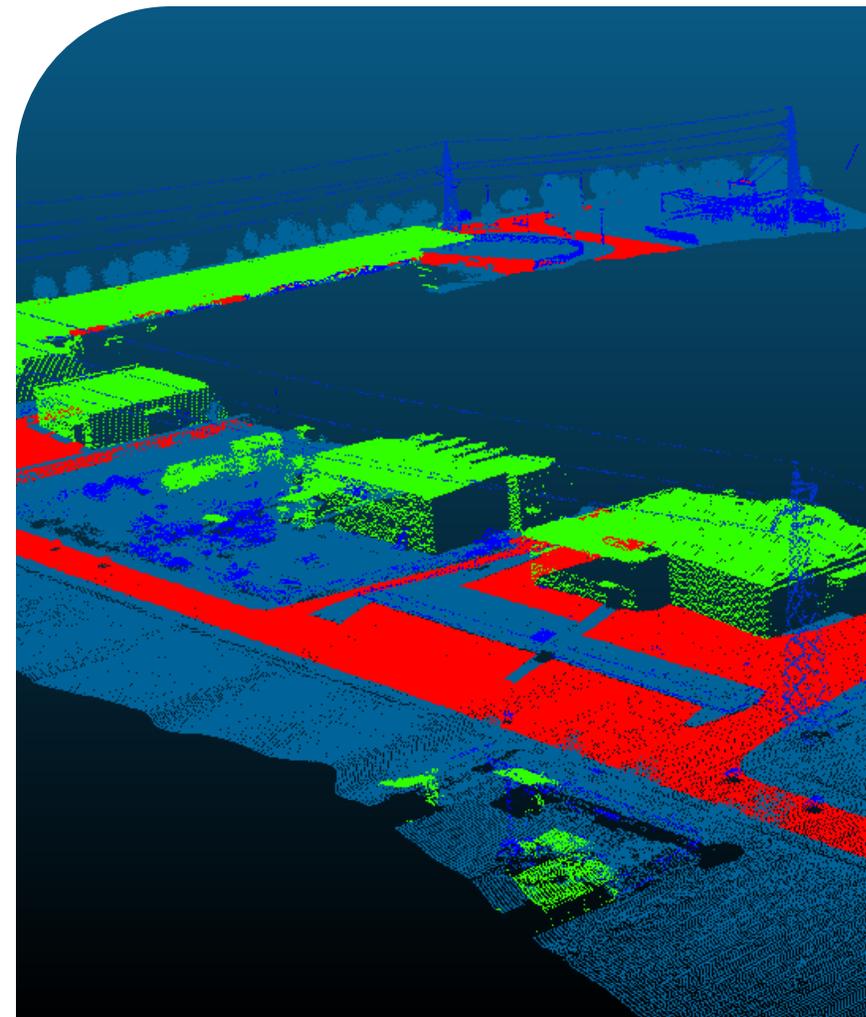
# Automated Lidar Point Cloud Classification. (Basic)

Power line corridors stretch for many kilometers and would require significant manual labor to identify objects throughout the point cloud. Delair automates the process by classifying objects as lines, poles, vegetation and terrain. This basic feature set is a great starting option, which can be supplemented with more advanced analytics.



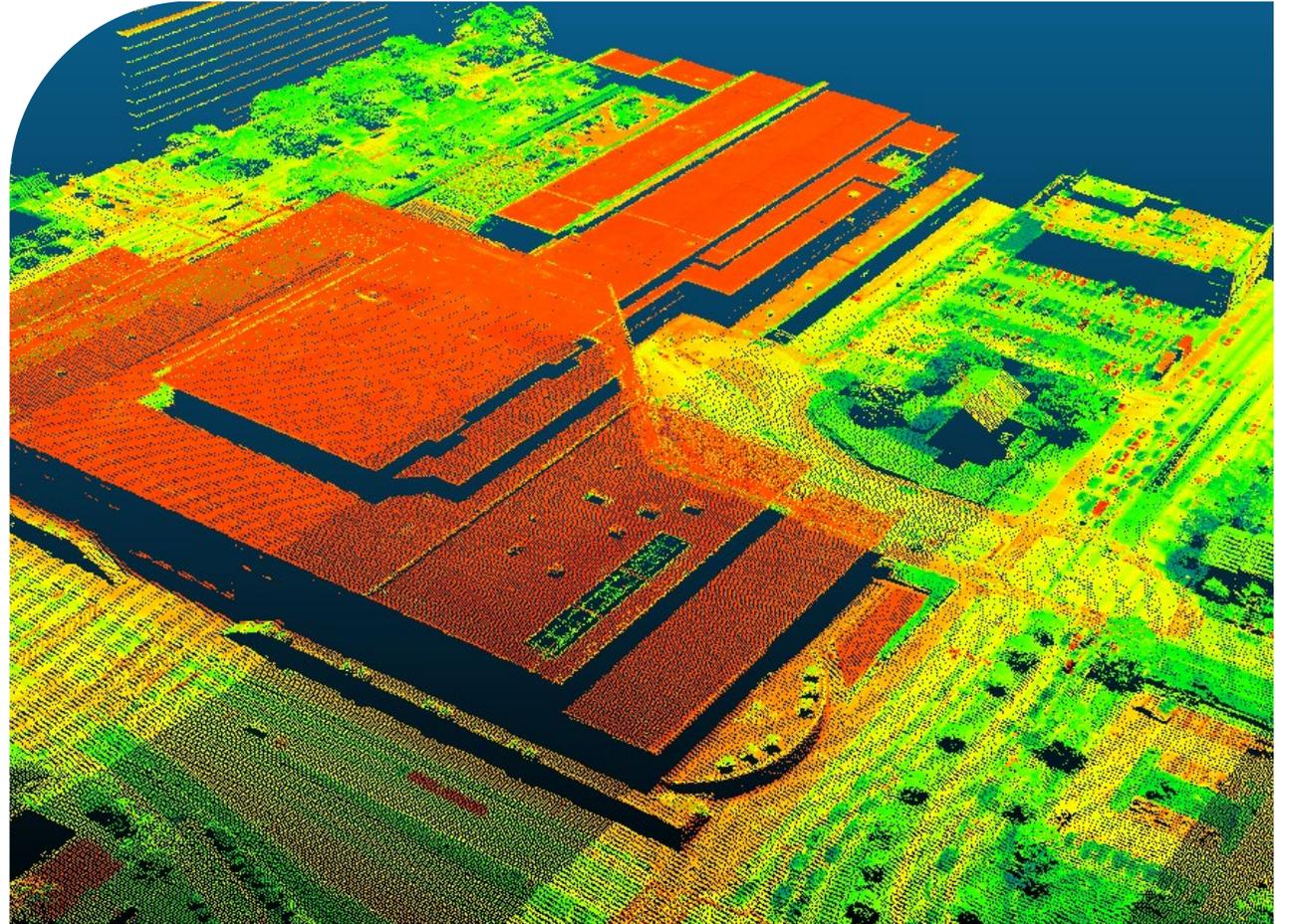
# Automated Lidar Point Cloud Classification. (Advanced)

This feature expands upon the basic classification feature set by automatically identifying additional classes of objects in your lidar imagery, including buildings, crossing lines, roads, and railways.



# Custom Lidar Point Cloud Classification.

Customers sometimes require custom classifiers that may be specific to a certain geography or type of infrastructure. Delair can help providing classification tailored on customer's needs.



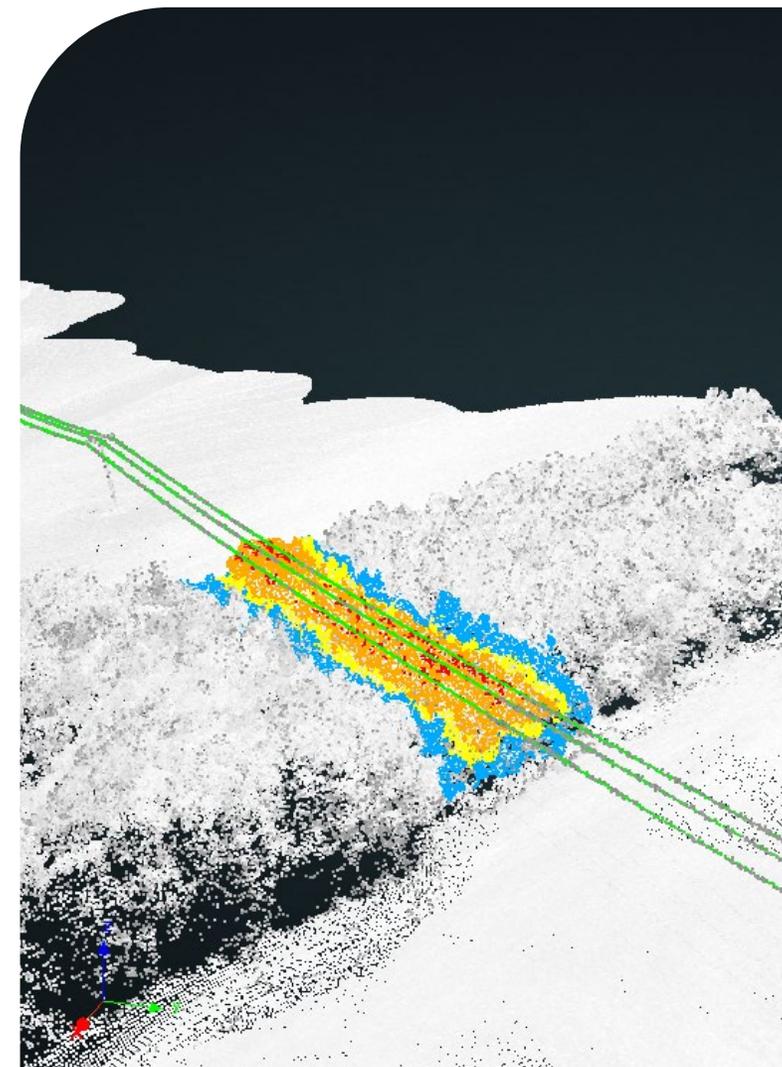
# Automated RGB Classification. (Basic)

Photogrammetry is useful to visualize the ground surrounding your asset.  
This tool will classify basic objects in your terrain orthomosaics.



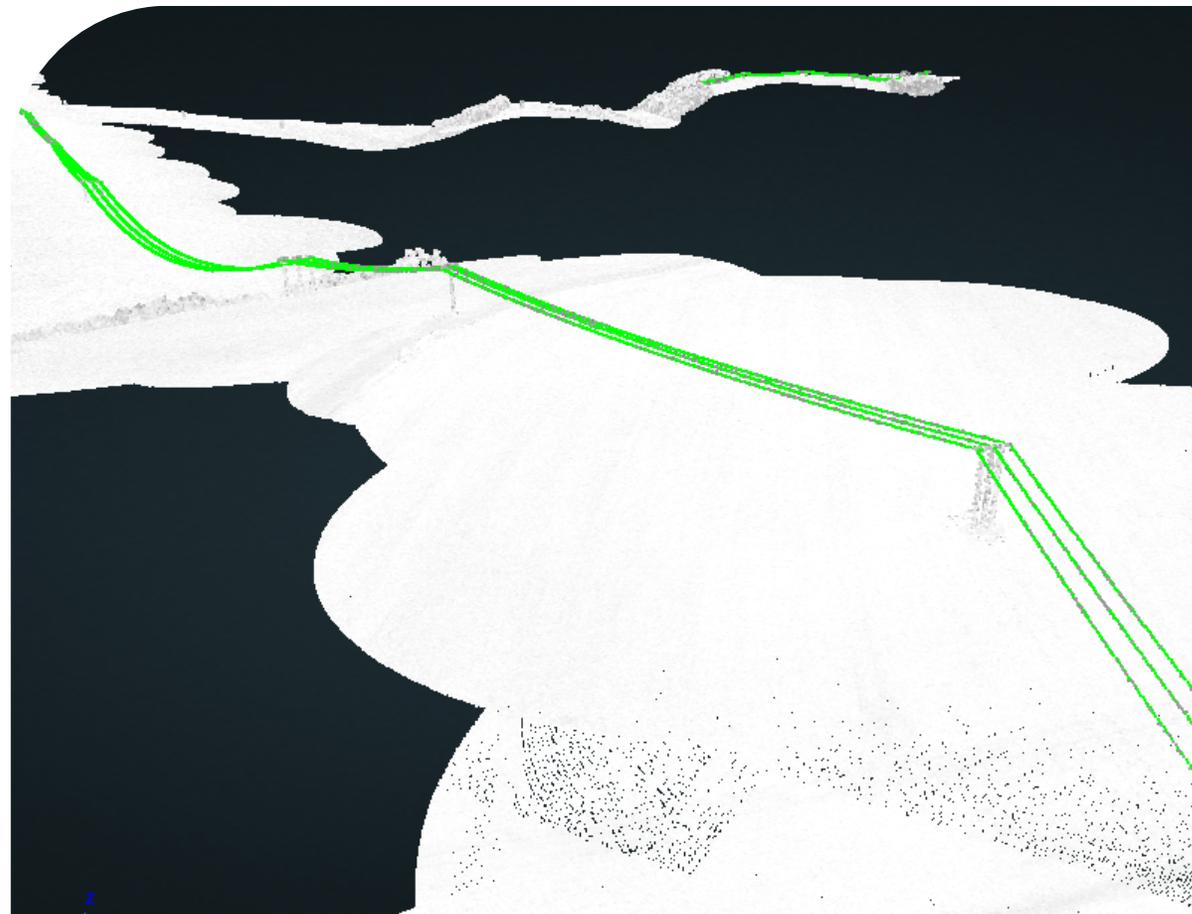
# Automated Vegetation Analysis.

Tree and vegetation management is critical to ensure the safe and uninterrupted operations of your electric service. Delair's machine learning algorithms automatically identify all vegetation surrounding your asset. The software automatically flags risk areas and triages severity by color code. This automated process reduces the time spent analyzing risks. It also provides insights, such as a volumetric report of trees to be removed, which you can share with your tree trimming contractors.



# Vectorized Conductors.

Your transmission lines and conductors are vectorized and represented in 3D space so you can visualize them clearly. This enables you to understand the actual condition of your line, such as sway and swag, and distance to ground. 3D representations of your transmission lines and towers can be utilized in maintenance and build plans.



# Thermal mapping.

Thanks to thermal orthomosaics maps of your solar farms you will be able to detect defects on panels thus preventing from any decrease in the efficiency of your plants.



# Platform-as-a-Service.

One of the unique aspects of Delair's enterprise solution is our Platform-as-a-Service (PaaS) offering.

Customers may want to add custom algorithms to their analytics toolset to automatically detect unique defects (due to voltage levels, country variations, particular operational and maintenance workflows, etc.). This could be time-intensive and complicated, requiring outside support; however, we've made it very simple with Delair.ai.

Delair.ai is also a cloud development platform, providing a PaaS solution, that makes it intuitive and fast, for anyone at your company, to add custom defect detection algorithms, which we call "bricks." Applied data scientists and developers can combine these "bricks" to tailor the platform to your company's needs via easy-to-use AI design tools.

**So with this PaaS solution you will be able to reach a new level of flexibility: you will have the power to combine standard Delair.ai catalogue analytics with your own algorithms, "easily and quickly," thus generating your tailored AI solution.**

Delair.ai is a powerful tool that your employees can leverage to accelerate your drone-powered digital transformation and focus on turning insights into action.



# UAV Recommendation /1



 DELAIR  
UX11

The smartest flying camera  
ever made for mapping



**BTOL - Launch and land like a bird**

THE DRONE IS THE CAMERA...

- Real-time camera to GCS link for on-the-fly quality control
- Control camera settings and quality from GCS
- Fully-integrated industrial camera
- Designed by Delair
- Up to 1 cm GSD imagery

**PPK-as-you-go**

A scalable alternative to achieve  
high-accuracy results anytime

# UAV Recommendation /2



## DT 26X LIDAR

### Twice the data in half the time

A scalable alternative to manned aircraft for corridor and large-area mapping

#### LIDAR SENSOR SPECIFICATIONS

- Up to 100 000 meas./sec
- Max range: 200 m (657 ft)
- Range accuracy: 15 mm (0.5 inches)
- Point density: 35 pts/m<sup>2</sup> @ 120 m AGL (394 ft AGL)

# UAV Recommendation /3



## DT 26X SURVEILLANCE

**The night and day long range  
surveillance solution**

Long-range UAV  
Secure sensitive areas over large distances

### SENSOR SPECIFICATIONS

- Gyrostabilized EO/IR video camera
- Videotracking, geotracking, «click and track» feature

## Cloud-based maps & models Credits



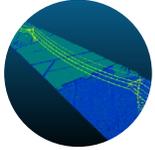
<b>Photogrammetry</b>	per 2000 photos*	<b>1</b>
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\*Any larger data set would trigger one more credit consumption per extra 2 000 photos

## Power & Utilities analytics Credits



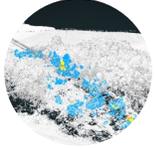
<b>Basic RGB classification</b>	5 classes, per 5km	<b>1</b>
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<b>Basic LiDAR point cloud classification</b>	5 classes, per 5km	<b>1</b>
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<b>Advanced LiDAR Classification*</b>	9 classes, per km <sup>2</sup> or per 5km	<b>2</b>
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<b>Vegetation encroachment</b>	per 5km	<b>1</b>
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<b>Vectorized conductors</b>	for 1 circuit = 3 conductors, per 5km	<b>1</b>
	for 2 circuits = 6 conductors, per 5km	<b>2</b>

\* For custom LiDAR classification over 9 classes please contact your Sales Representative

# Pricelist.



## Storage Options Credits

Initial storage	500 Gb - First year	<b>free</b>
Extra storage	500 Gb - Per year*	<b>1</b>
Data archiving	1 Tb - Per year	<b>1</b>

\*It is possible to add extra storage at any time



[www.delair.aero](http://www.delair.aero)