



ELIOS 3

**DIGITIZING  
THE INACCESSIBLE**





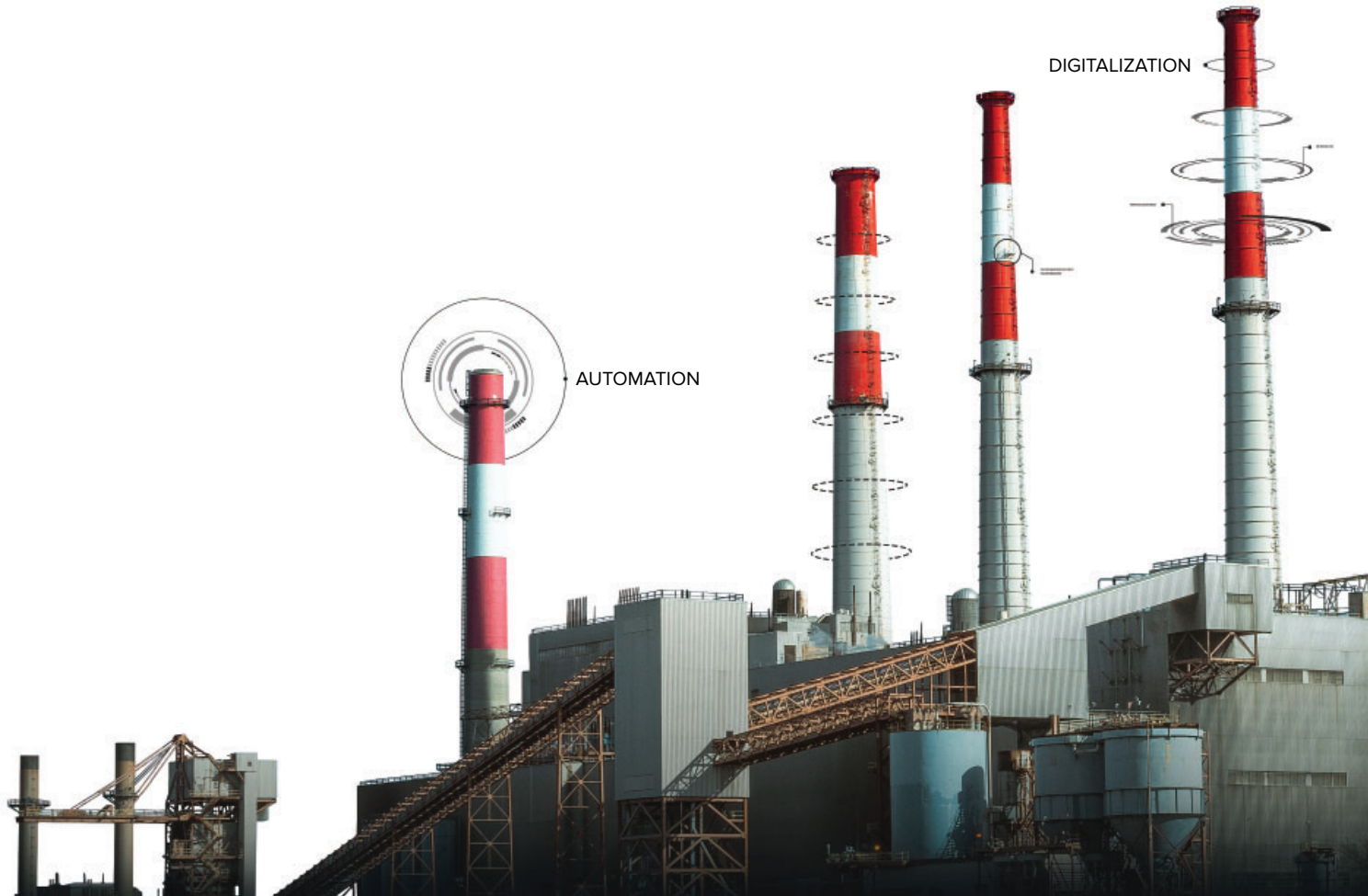
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## INDUSTRY 4.0

# GET READY FOR A NEW ERA OF INTERNAL INSPECTION AND MAPPING

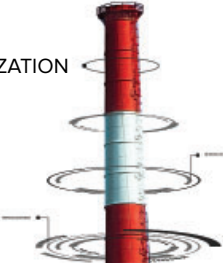
Drone-based inspection is not a technology of the future, it is a necessity for today's digital fast-paced world. With the 4th industrial revolution in motion, organizations are looking to deliver digital transformation of their industrial processes, while cutting costs and bettering workers' environments. Elios 3 helps industrials effortlessly achieve these goals by bringing their inspections and mappings to the next level.



AUTOMATION



DIGITALIZATION



Elios 3 in a salt mine  
Germany



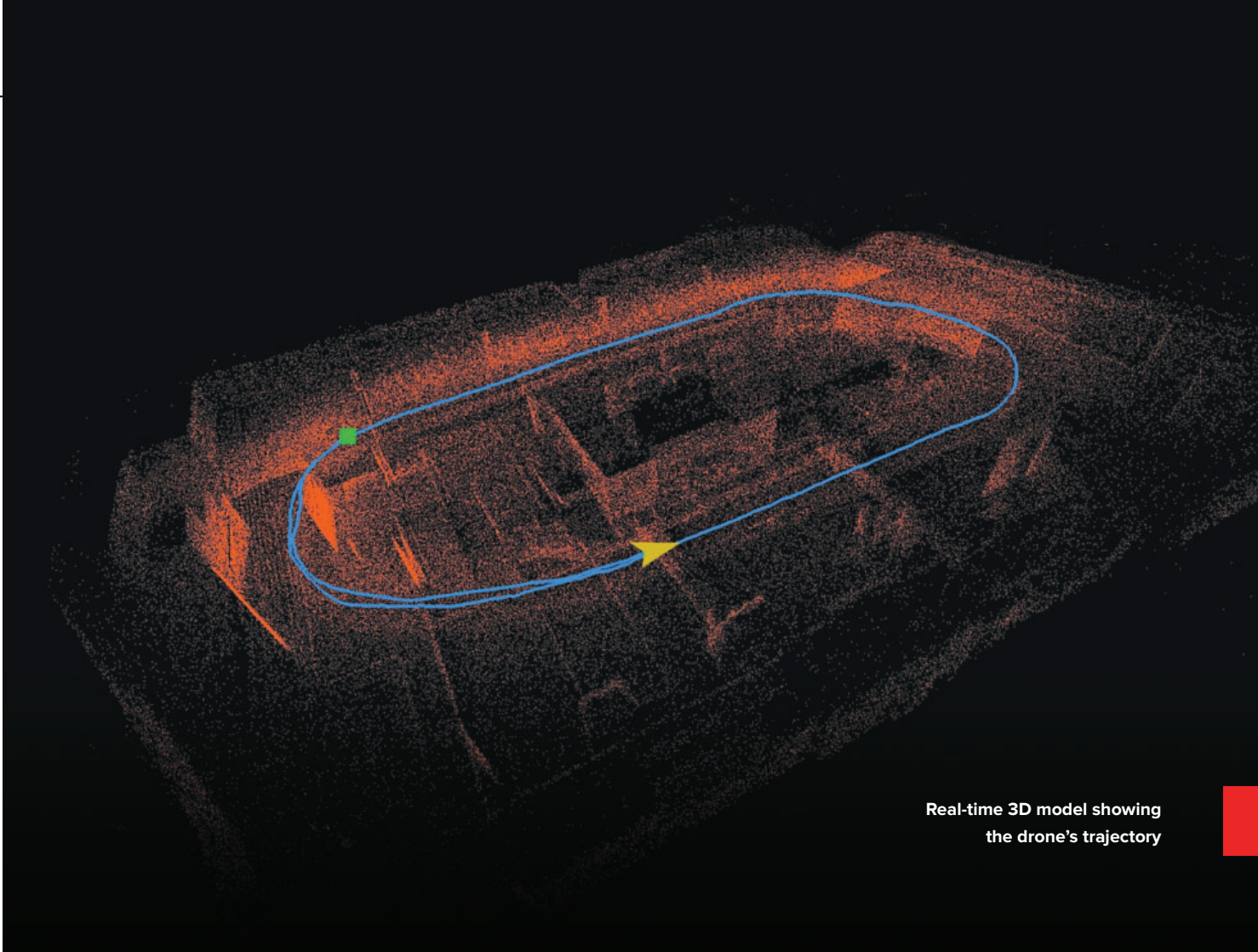
## **MUCH MORE THAN A FLYING CAMERA, ELIOS 3 IS A POWERFUL DATA-HARVESTING TOOL**

Relying on the power of computer vision and LiDAR mapping, Elios 3 is a versatile indoor drone opening doors to a world where performing systematic inspections does not require months of training, reporting is done intuitively on a 3D model of your asset, and situational awareness is built into the piloting app.

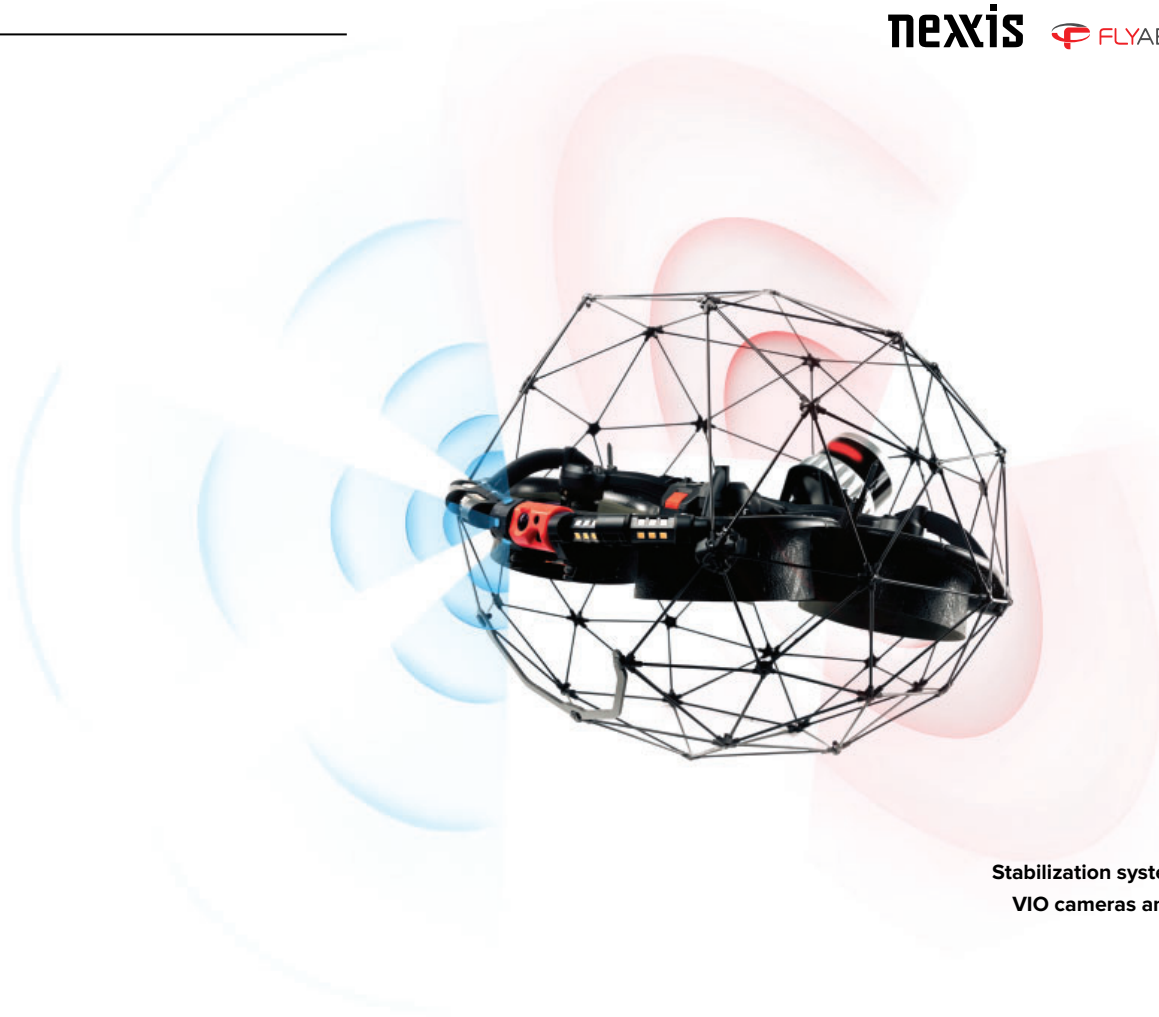


Elios 3 top view





Real-time 3D model showing  
the drone's trajectory



**Stabilization system using  
VIO cameras and LIDAR**



## 3D Live Map

### Flawless locational awareness.

The embedded LiDAR constantly scans the surroundings to build a high-density point cloud map. This map is displayed instantly in the Cockpit App, empowering pilots with exceptional locational awareness. A real-time 3D view of the drone's trajectory and environment provides crucial data:

### Always know where you are.

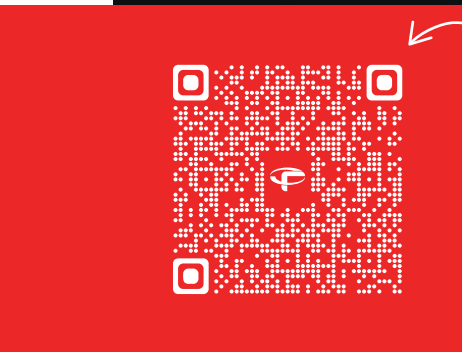


The drone's position is located precisely so the pilot can easily decide on the optimal route to safely return home.



### Assess inspection coverage.

Cumulative mapping data shows the completeness of the map so you can instantly assess your inspection coverage.



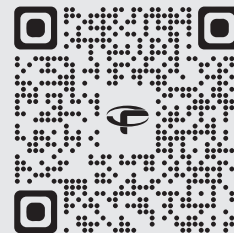
Scan to watch  
the demo



3D live map feature on cockpit



## 3D Reporting



Learn more about  
Inspector 4.0

### **Understand where to focus your maintenance efforts.**

From data capture to decision making, Inspector 4.0 and Elios 3 work hand in hand to provide operational continuity, boosting your efficiency through every step of the inspection process.

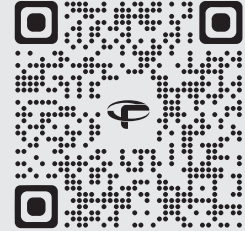
Thanks to Elios 3's LiDAR, reporting is done intuitively on a 3D model of your asset. Points of interest captured in flight are readily available in a high density point cloud offering a faster, more accurate, and more reliable data localisation system.



Inspector 4.0 running  
on a Windows PC



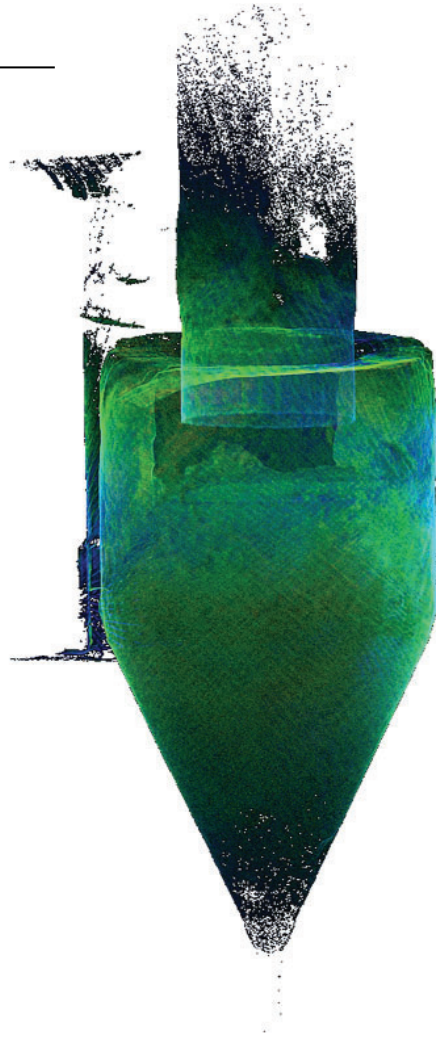
## 3D Surveying Solution



Learn more about  
3D Surveying

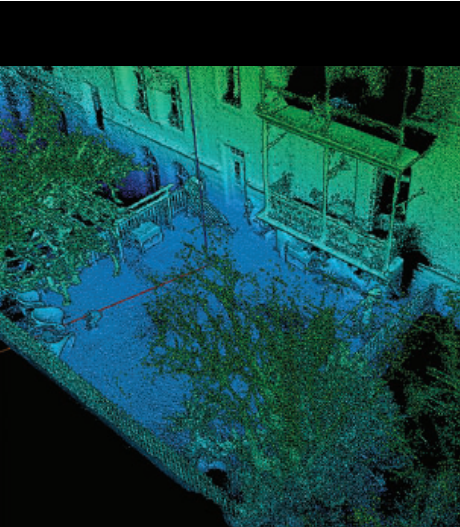
### **Survey-Grade Point Clouds.**

Thanks to an integration with GeoSLAM software suite, Elios 3's LiDAR data can be processed to build survey-grade 3D models of your asset enabling surveyors to map the truly inaccessible.

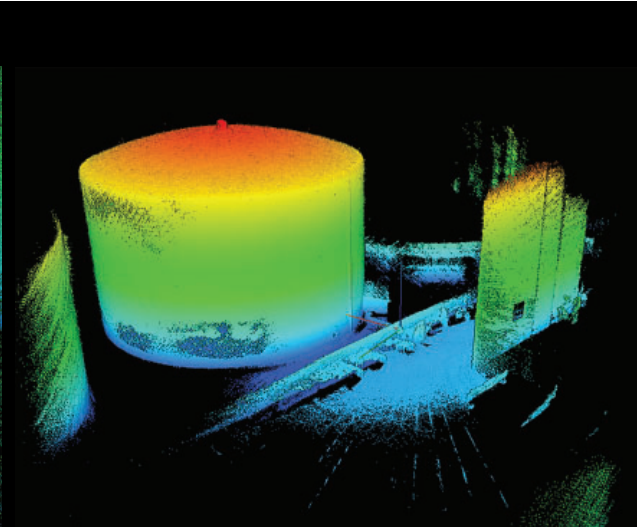


3D model of a cyclone in a cement plant  
created with GeoSLAM Connect

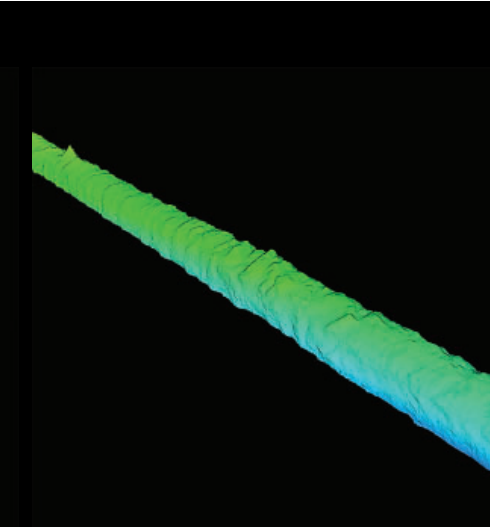




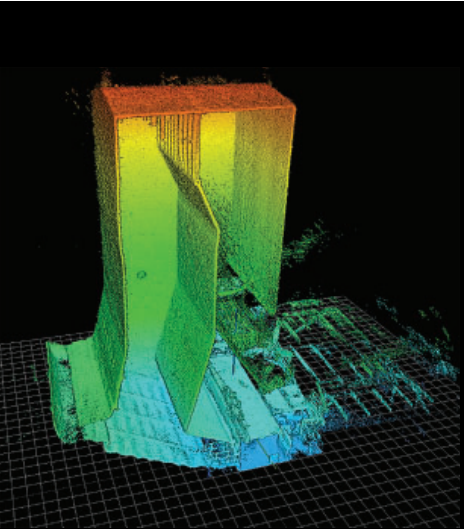
**Building facade**



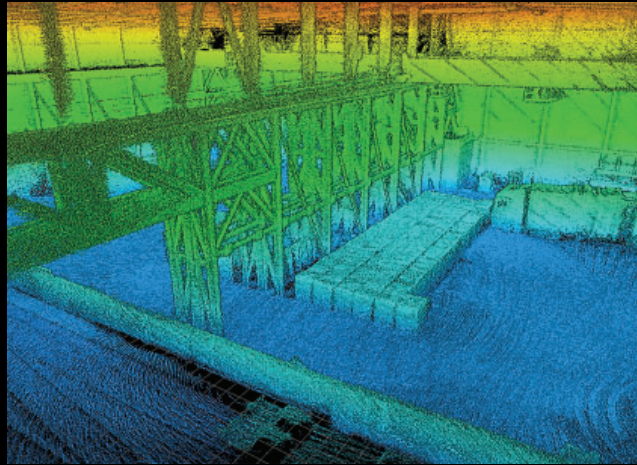
**Storage tank**



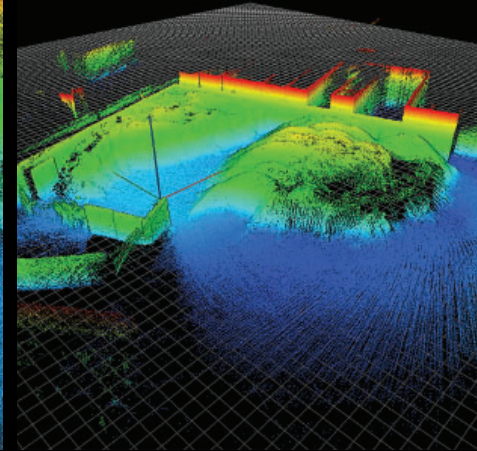
**Gallery in an underground mine**



Boiler

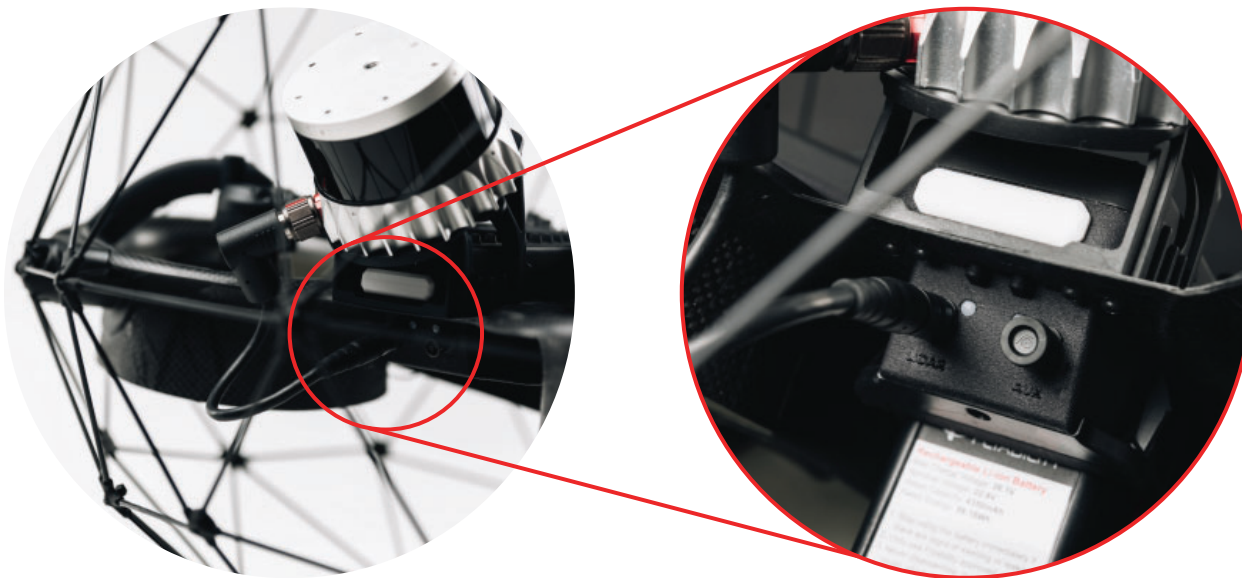


Warehouse

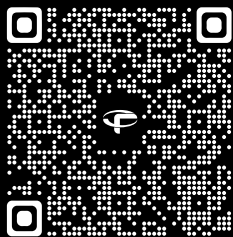


Indoor stockpile

Examples of 3D models created with GeoSLAM Connect  
in various industrial environments



Zoom on the payload bay connectors



Scan to watch  
the demo

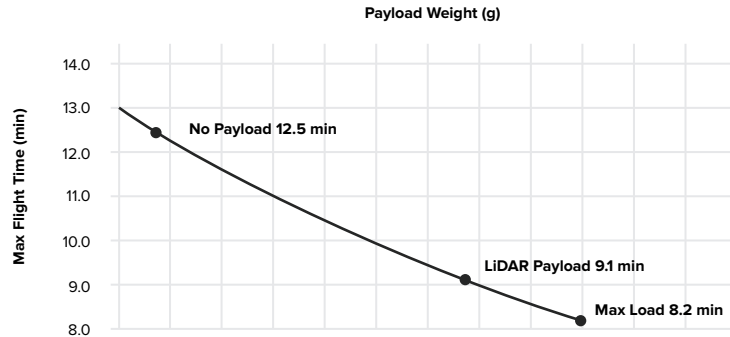


## Extended Air-Time

**Do it all in one go.**

The Elios 3 offers up to 12.5 minutes of flight time\* so you can go the extra mile in every single flight. With a new insert & lock mechanism battery manipulations are easier than ever.

\*Flight time without a payload mounted on the payload bay.





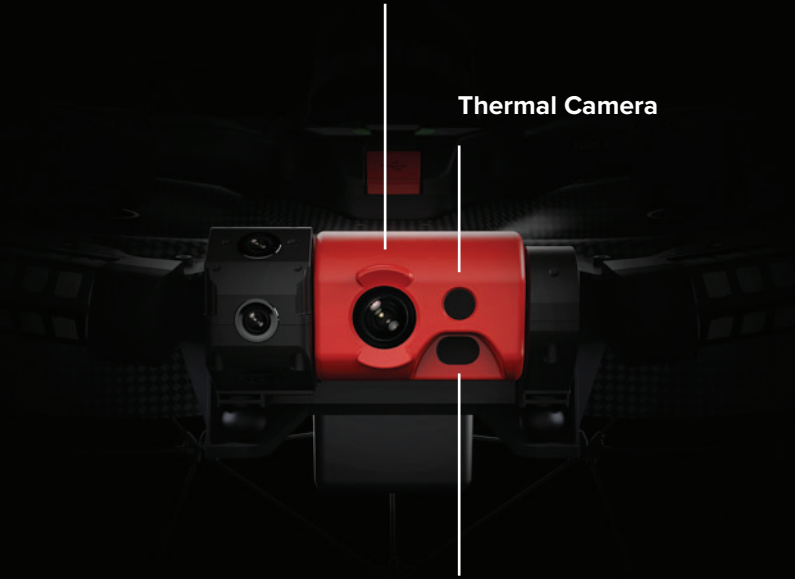
**New insert and lock mechanism to ease battery manipulations**

Supercharging data quality

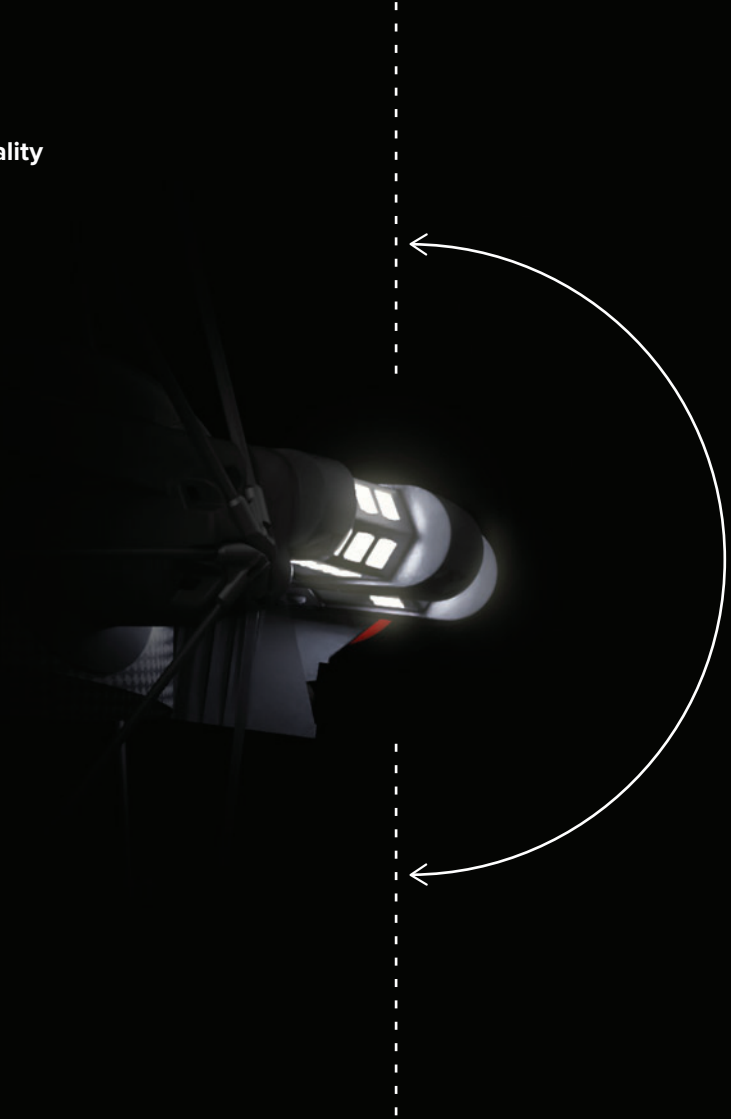
**4K Camera**  
0.18 mm/px GSD

**Thermal Camera**

**Distance Sensor**



**Supercharging data quality**



**Unobstructed  
180° FoV**



**Ingenious lighting system**



**Oblique Lighting**

Detect pitting, cracks,  
or build-ups

Ingenious lighting system



**Dust-Proof 16K Lumen Lighting**

Traverse dirty places without losing sight of your objective



JUST LIKE YOU,

**WE WANT VISUAL INSPECTIONS TO A SAFE, FAST AND  
ECONOMICAL ROUTINE**





# ABOUT FLYABILITY



Flyability is a Swiss company building solutions for the inspection and exploration of indoor, inaccessible, and confined spaces. By allowing drones to be used safely inside buildings, it enables industrial companies and inspection professionals to reduce downtime, inspection costs, and risks to workers. With hundreds of customers in over 50 countries in Power Generation, Oil & Gas, Chemicals, Maritime, Infrastructures & Utilities, and Public Safety, Flyability has pioneered and continues to lead the innovation in the commercial indoor drone space.

## HEADQUARTERS

FLYABILITY SA  
Route du Lac 3  
1094 Paudex  
Switzerland

## OTHER OFFICES

**USA:**  
1001 Bannock St Suite 436  
Denver, CO 80204  
303-800-4611

**China:**  
200082 Shanghai, Yangpu District,  
Huoshan Road, No.398 EBA center  
T2, 3f, Room 121

## OTHER OFFICES

**Singapore:**  
36 Carpenter St,  
#02-01, Carpenter Haus,  
Singapore 059915

## CONTACT

+41 21 311 55 00  
info@flyability.com  
www.flyabilty.com

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## ABOUT NEXXIS

Nexxis is an innovative technology and service provider, offering end-to-end bespoke robotic or remote visual solutions for customers around the world.

With offices in Australia, the U.S. and Asia, Nexxis supplies an extensive range of leading-edge inspection, testing and measuring equipment for a variety of applications in the oil and gas, mining, renewables, space, shipbuilding, transportation, manufacturing, construction and defence sectors.

Nexxis also offers a world-leading engineering service specialising in tailored solutions to address industry challenges and offers research and development, rapid prototyping and manufacturing, education, training and support.

### ADDRESS

35 Peel Road  
O'Connor 6163  
Western Australia

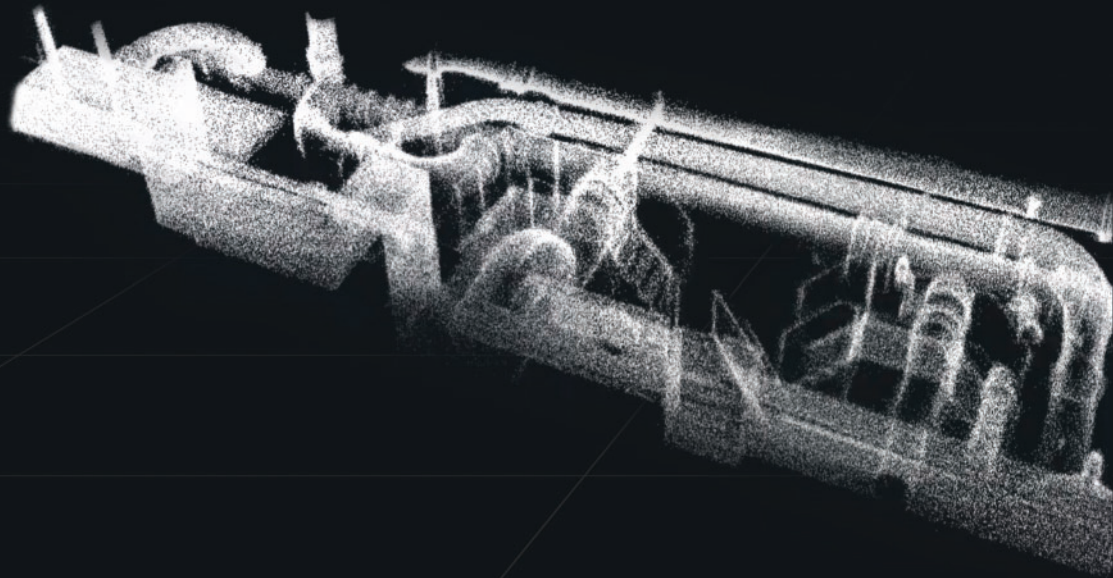
### CONTACT

+(08) 6245 6326  
[nexxis.com.au](http://nexxis.com.au)

# **THE ULTIMATE INDOOR DRONE FOR INSPECTION, MAPPING AND SURVEYING**

Quickly turn asset data into digital insights, with Elios 3 - the first mapping and inspection indoor drone, offering an unmatched combination of intelligence, versatility and stability.





**Web**

[flyability.com](http://flyability.com)