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# NavVis

## NEXT GENERATION MOBILE MAPPING

Danny McGinn  
Assistant Sales Manager  
WIPCO Ltd.



# ABOUT NAVVIS

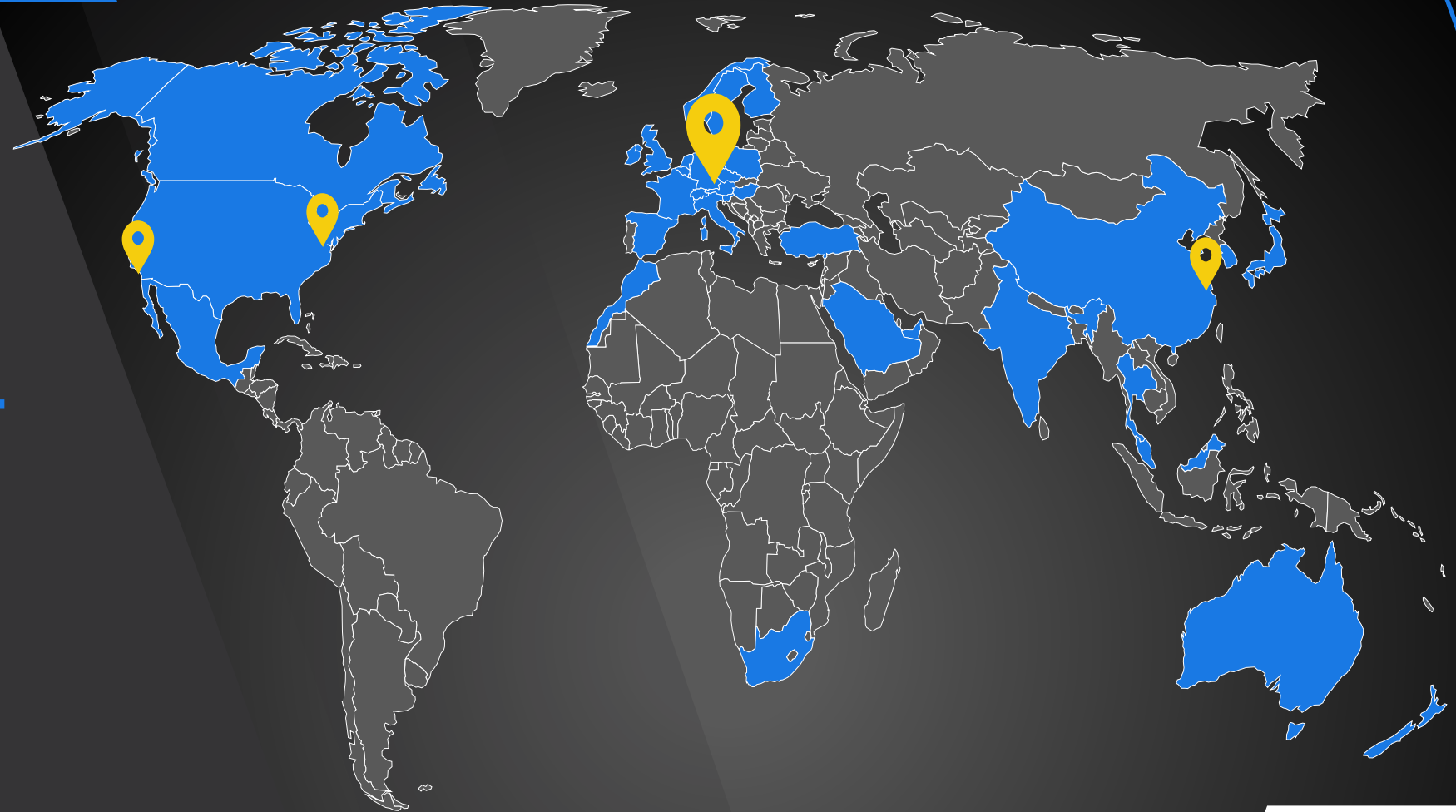
**300+**  
EMPLOYEES

**19**  
PATENTS

**40+**  
COUNTRIES

**500+**  
CUSTOMERS

**SOFTWARE**  
**COMPANY**



**NavVis**



# END-TO-END MOBILE MAPPING SOLUTION

A powerful hardware and software product suite

## NavVis VLX

Wearable mobile mapping



## NavVis IVION

Advanced cloud processing, visualization & collaboration



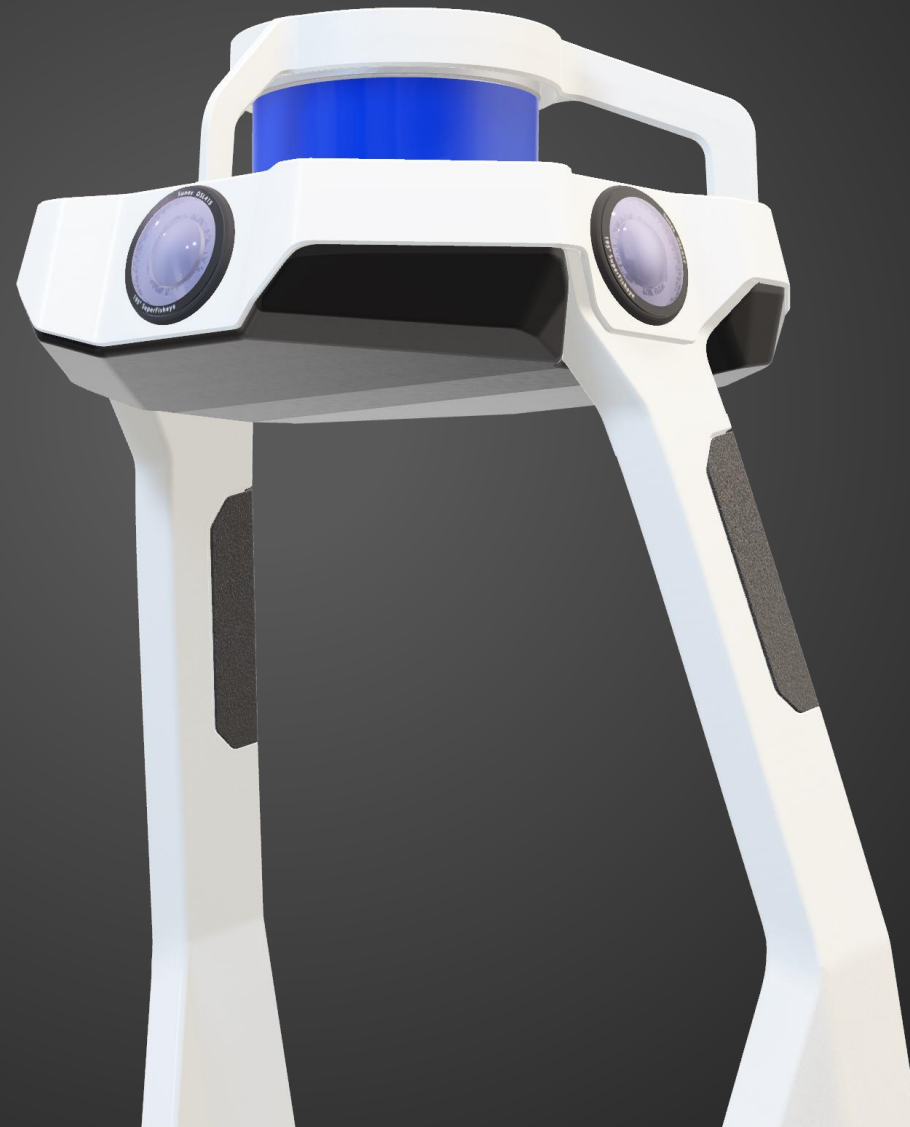
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wipco  
3D Scan & Solutions

Wearable device powered by precision SLAM technology:



Four 20-megapixel  
cameras arranged for  
complete 360° capture







# LIVE FEEDBACK

Monitor real-time progress and quality while mapping with the built-in interface.



Always in view



High resolution OLED display



Dataset management



Real-time quality map



Covers multi-story scans

NavVis



# SMART PACKAGE

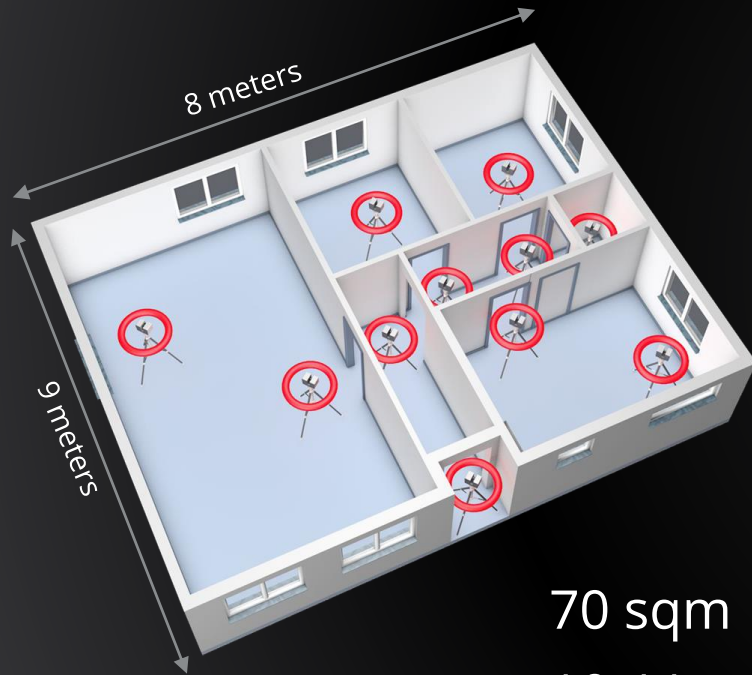
NavVis VLX folds to fit into one case for easy transport. When you're ready, simply unfold and start scanning.



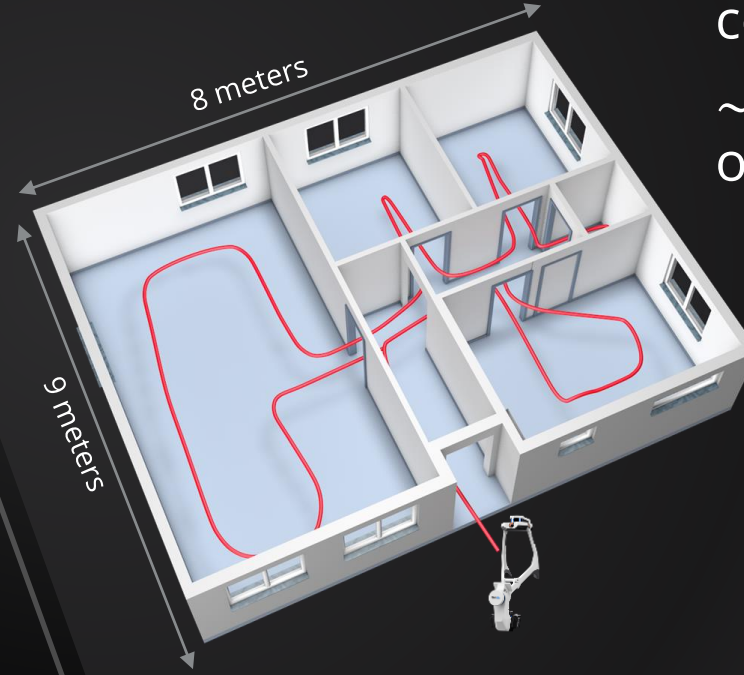


# UNPRECEDENTED SLAM DATA QUALITY

Scan more comprehensively while saving time



70 sqm  
10-11 scan positions,  
some blind spots  
~ 30 min



70 sqm  
Continuous trajectory,  
complete coverage  
~ 5 min (>10x faster  
on larger spaces)

**UP TO 20 TIMES FASTER THAN A TERRESTRIAL LASER SCANNER**



PLAY VIDEO

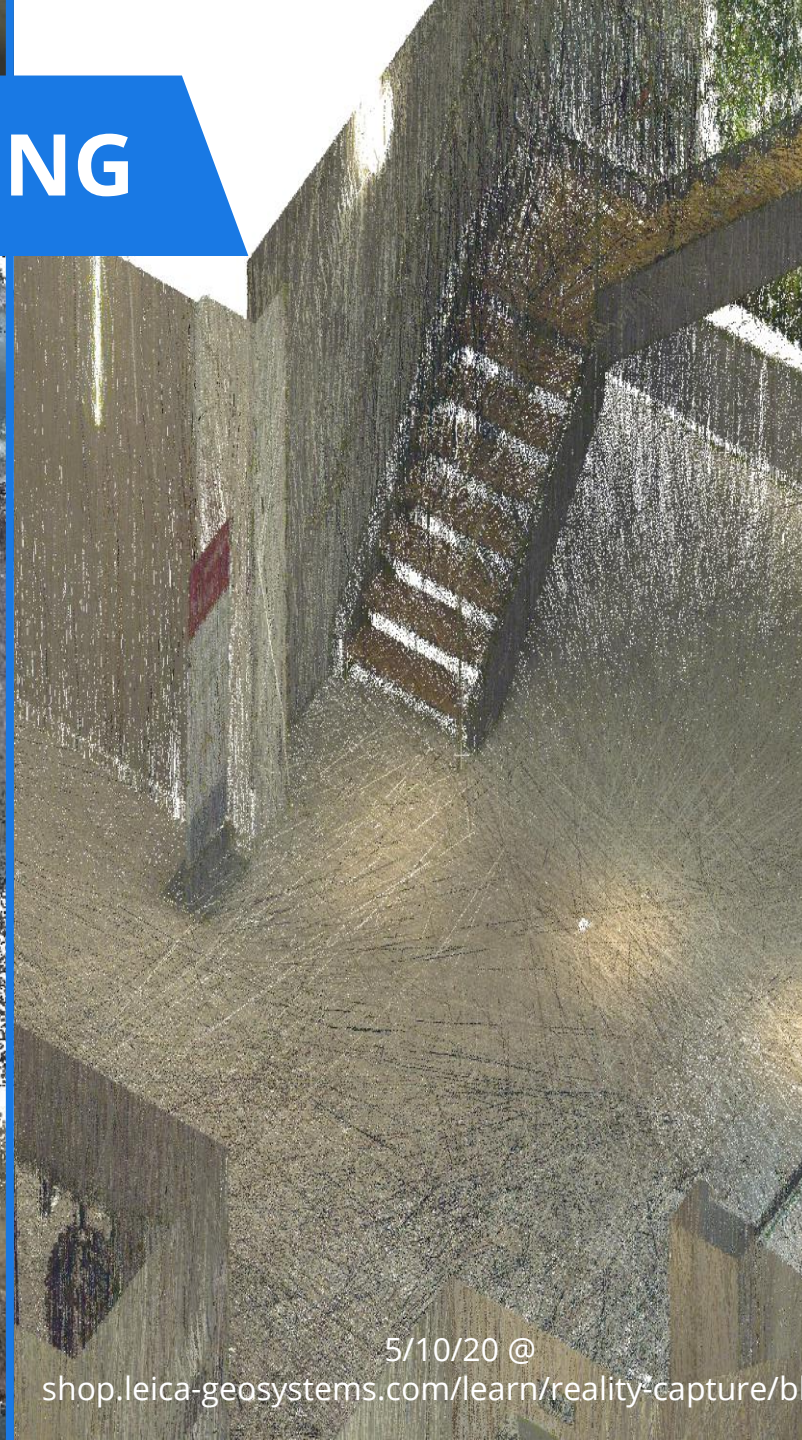
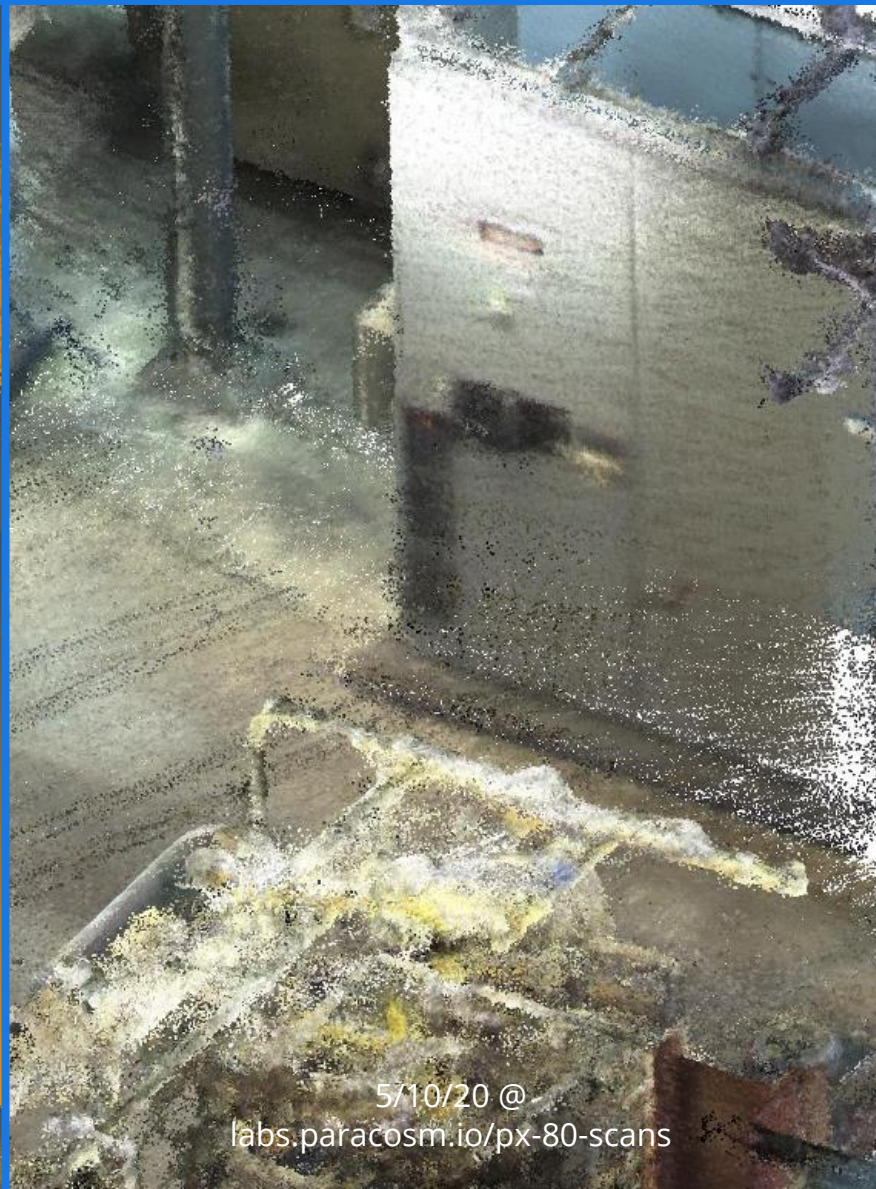
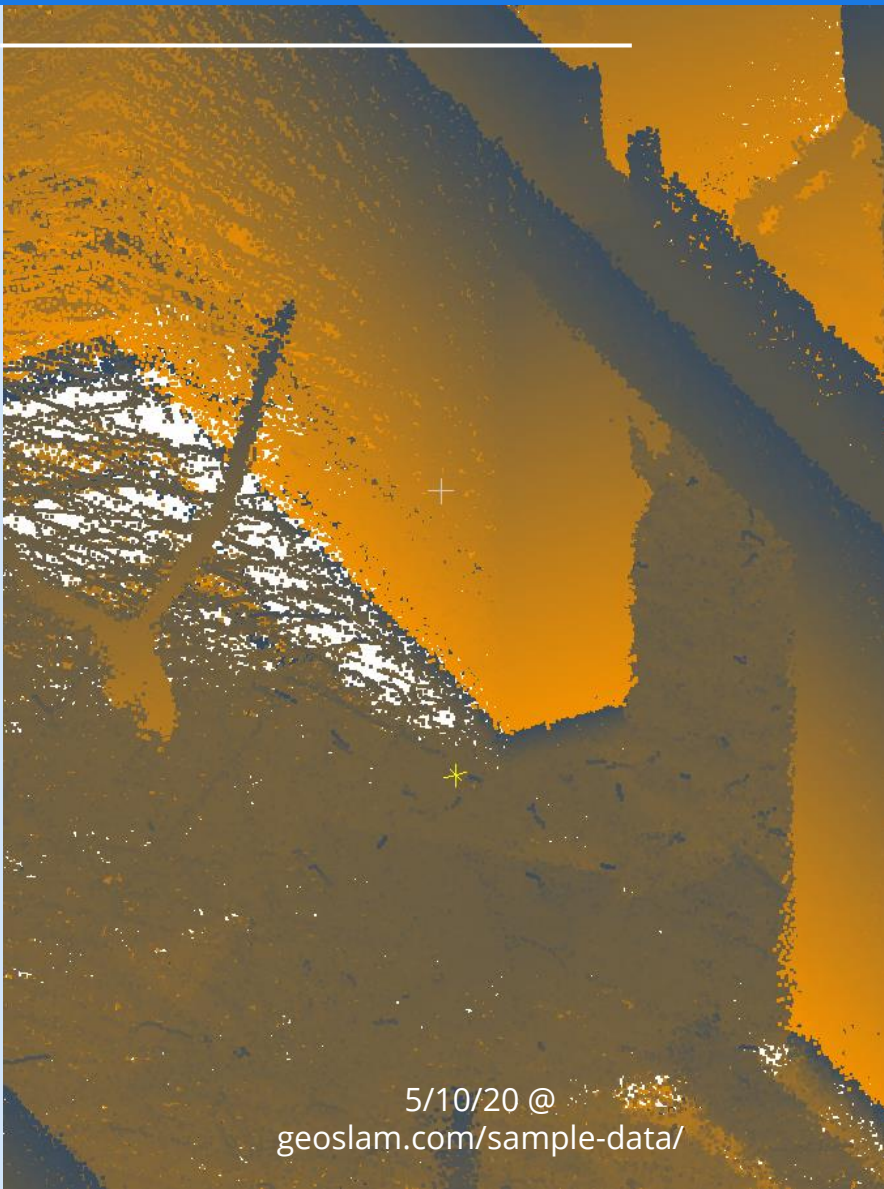
**NavVis VLX**

**TLS**





# STATE OF THE ART IN SLAM-BASED MAPPING





The background image shows the interior of a large tunnel under construction. The walls and ceiling are lined with red and yellow structural beams. The floor is concrete. A 3D point cloud is overlaid on the scene, showing the geometry of the tunnel and the floor. A blue banner is positioned across the middle of the image, containing the title text.

# SURVEY GRADE POINT CLOUDS



CAPTURED WITH NAVVIS VLX



CAPTURED WITH NAVVIS VLX



CAPTURED WITH NAVVIS VLX





# NavVis IVION

## PROCESSING, POINT CLOUDS AND DIGITAL TWIN

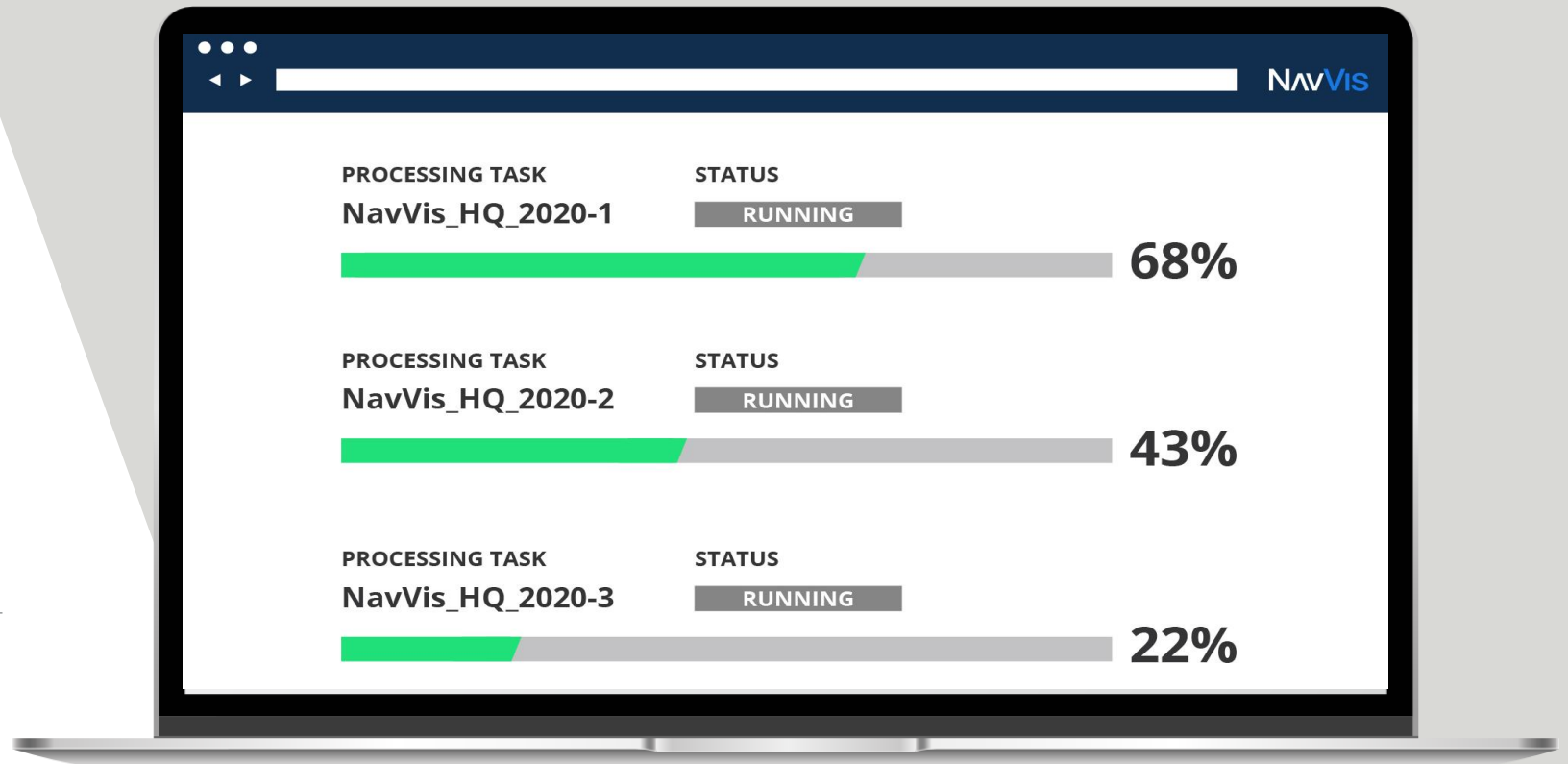


# CLOUD PROCESSING FOR IVION

Define 5 different settings and the rest is done **automatically**

**Process multiple datasets** in parallel

**Automatic alignment** when using control points



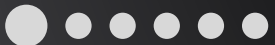


# NAVVIS IVION CORE – A CLOSER LOOK

An innovative new deliverable that extends the use of 3D scan data beyond BIM models and building plans to a wider range of stakeholders. Main features:

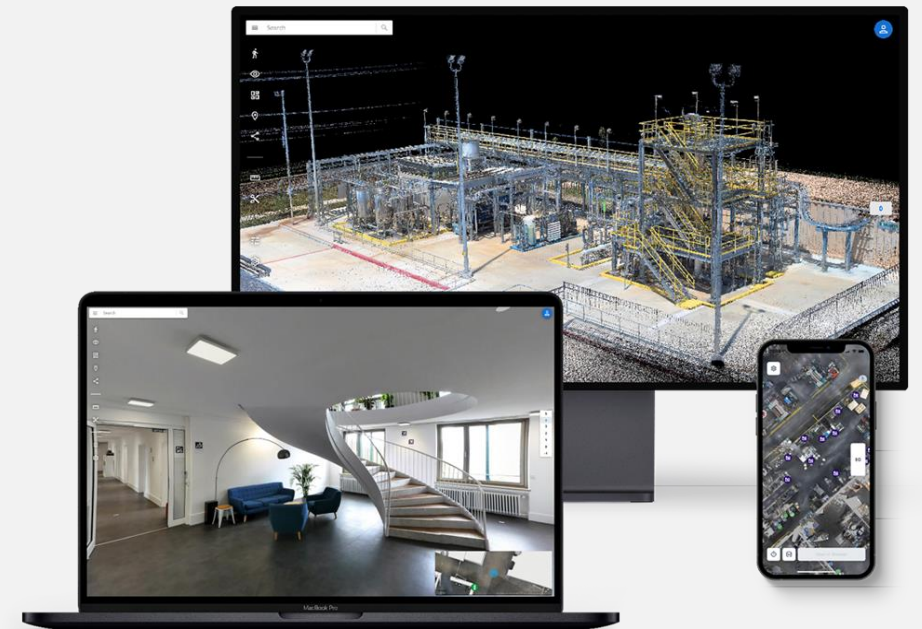


Stream photorealistic point clouds in a web browser – no installation or plugins required



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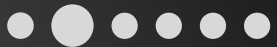
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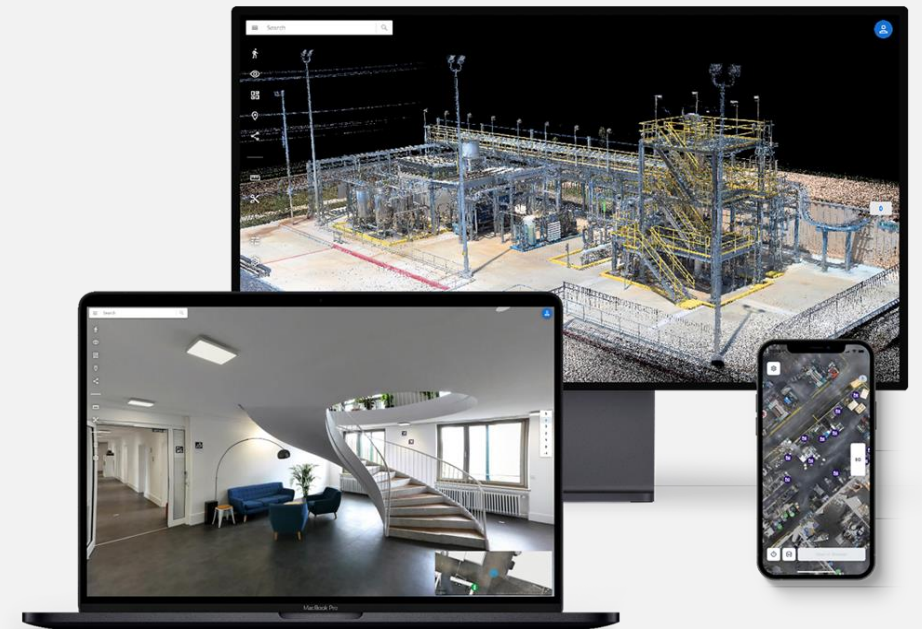


Realistic 360° walkthroughs to move around a digital building as if you were on-site



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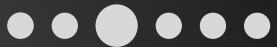
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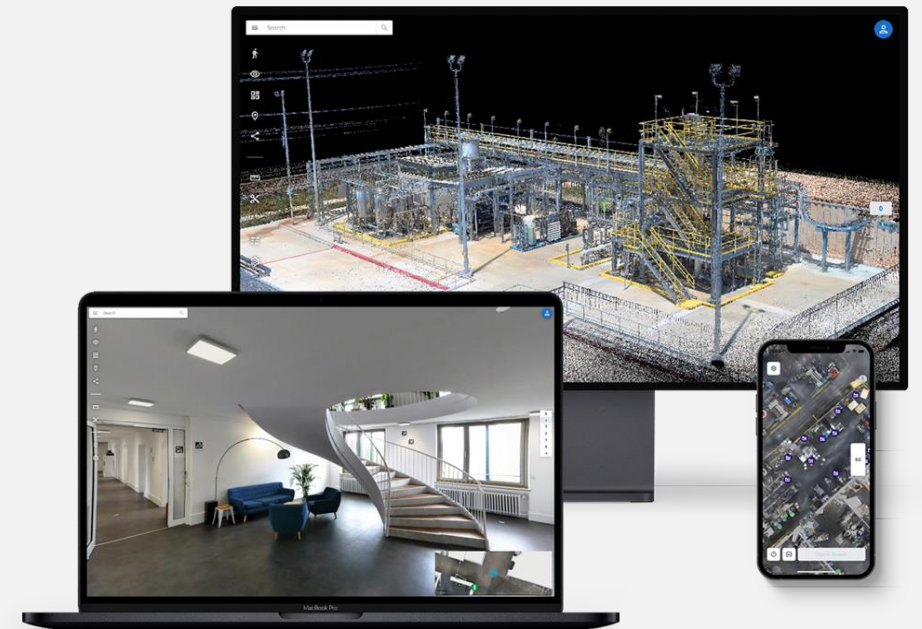


Add, search for and route to geo-tagged information, and take highly accurate virtual measurements



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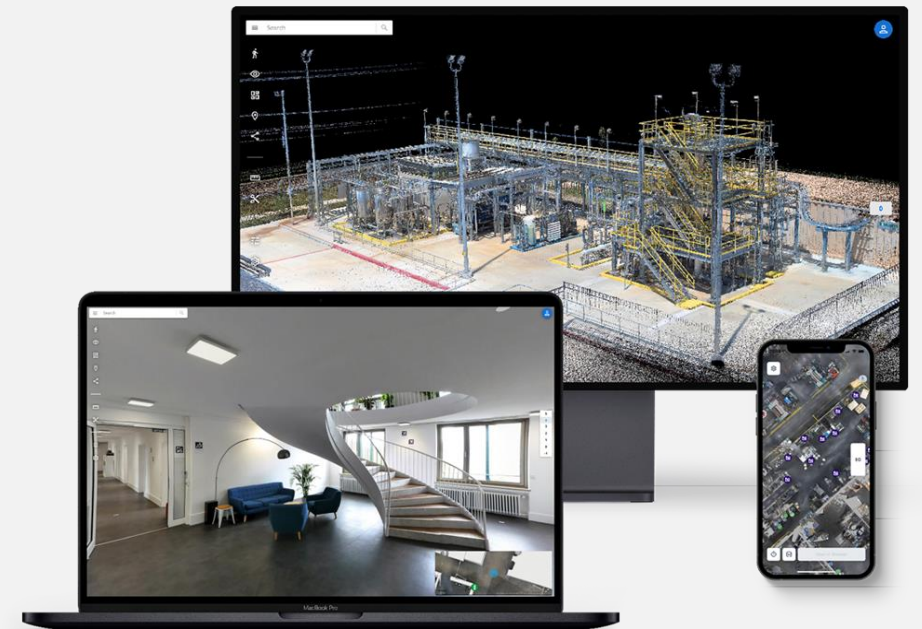


Select, crop, and download point clouds in various formats



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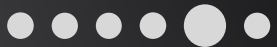


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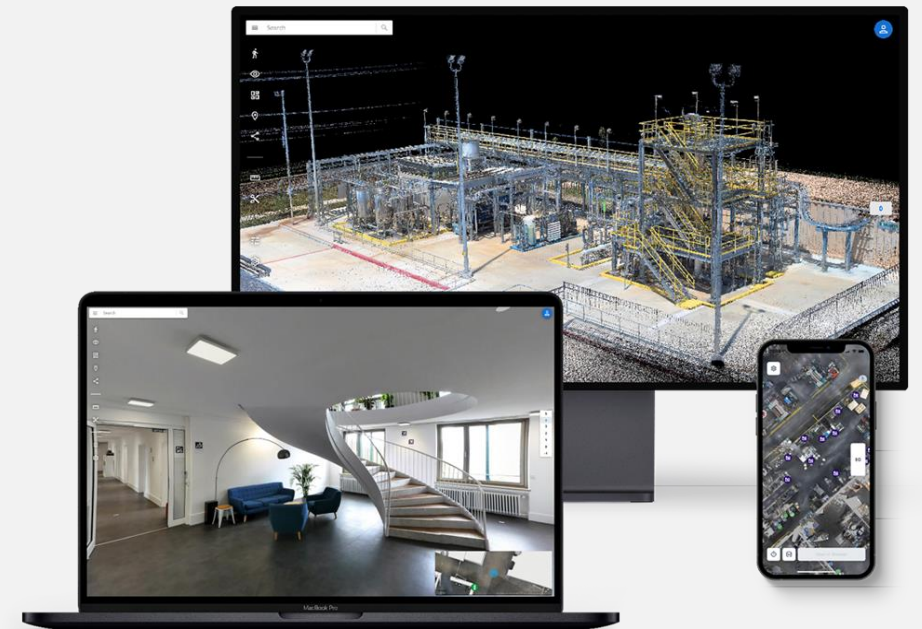


Import point clouds from third-party scanning devices



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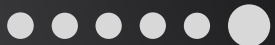


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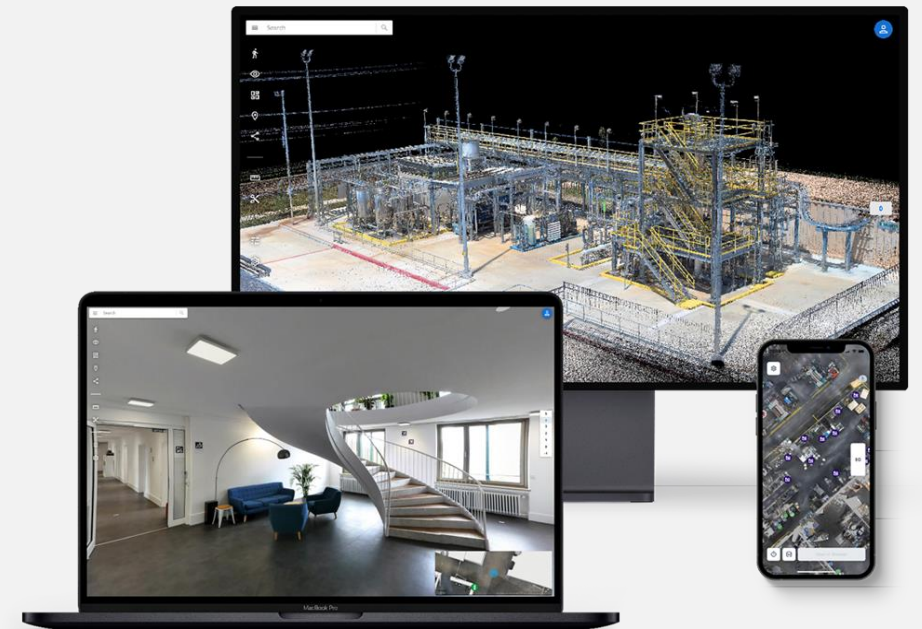


Auto-generate 360° panoramas, HD floorplans, and routing from .e57 point cloud files



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# Q&A



# Thank you

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