

- ◆ Centimeter accurate PPK/RTK
- ◆ All-weather platform
- ◆ > 30min autonomy

# Airobot Z-Mapper

Industrial drone mapping solution

Centimeter accurate georeferenced data

Integrated User Interface

## Industrial flying robot for mapping applications

The Airobot Z-Mapper™ is an end-to-end mapping solution for industrial applications. Based on the Acecore Zoe, a professional all-weather-drone with an autonomy of more than 30 minutes, the Z-Mapper offers a robust and reliable solution for accurate and high quality data collection.

## Centimeter Accurate PPK/RTK

The integrated PPK/RTK GNSS receiver ensures collection of accurately georeferenced mapping data. It can track all satellites in view from GPS, GLONASS, GALILEO and BEIDOU. It also offers advanced interference and jammer mitigation technology as well as state-of-the-art ionosphere estimation algorithms.

## 20 Megapixel Camera

The Z-Mapper integrates the Sony UMC-R10C 20.1MP camera, used throughout the industry. This camera is ideal for collecting high quality images to create maps or 3D models, also in low-light conditions, thanks to the large APS-C image sensor. .

## Integrated User Interface

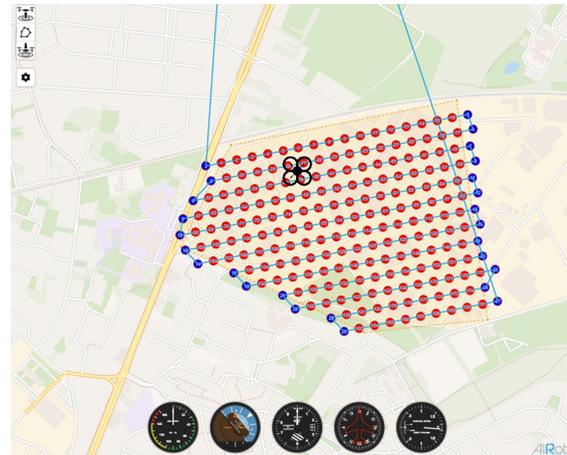
An easy-to-use interface is available on any mobile device, without having to install special application firmware.

## Robust Digital Data Link

The encrypted digital data link offers a robust and reliable connection to the drone, even at larger distances.

## Post-Processing and storage in the cloud

Together with the Airobot Collect software the Z-Mapper offers an easy-to-use end-to-end mapping solution for professional users



## Technical Details

### All-Weather Platform

Flight Time	> 30min
Wind sustainability	18m/sec (35 knots)
Dimensions	70 x 70 x 49.5 cm
IP Rating	IP43

### GNSS Technology

RTK/PPK Accuracy	1cm + 1 ppm
GPS/GLONASS	included
GALILEO & BEIDOU	optional
Signals	L1, L2, E1, E5b, B1,B2

### Camera

Image Device:	APS-C size (23,2 x 15,4mm),
Sensor	Exmor APS HD CMOS
Total Number of pixels	20.1MP
File format:	JPEG, RAW
Lens	35mm, F1.8

### Link

Frequency	2.4GHz
Speed	>20Mbps
Power Output	Up to 1W
Encryption	128-bit AES

Operating temperature	-10°-45°C
Take-Off Weight	7kg



## Turning drones into flying robots

### Airobot, your drone innovation partner

Airobot turns drones into flying robots to inspect difficult-to-reach areas or obtain a bird's-eye view while meeting the professional user's needs for safety and quality, and increasing the overall ROI. We create the necessary technology and integrate state-of-the-art collision avoidance, navigation and positioning technology to turn drones into flying robots.

When creating flying robots for close range inspections, we add active or passive collision avoidance and accurate georeferencing to any drone. The drone can then be used to produce calibrated images in which details can be measured with mm-level accuracy. For a flying mapping robot, we add accurate RTK GNSS technology to the drone to create centimetre-accurate maps and terrain models that do not require ground control points.

We supply major drone manufacturers with either individual components or performance packages for use in building their own flying robot specifically adapted to their inspection and/or mapping requirements. Airobot also assists companies to successfully integrate drones into their operations and supports them in this. We analyse our customers' needs, define the best solution, select the most suitable hardware, combine it with our technology and coach the team during implementation.

In short, we are the technology innovation partner for many drone operators: we supply them with advanced technology to enable them to better provide services to their customers..



### Who is behind Airobot?

Airobot is a young, dynamic technology company based in Hasselt, Belgium. We started in 2015 with the ambition of providing technology to drone operators and manufacturers to make operations with unmanned aircraft faster, safer and more reliable. The company is managed by Kristof Beenders (technology & innovation) and Jan Leyssens (sales and business development), who both have many years of experience with unmanned systems, and professional electronics and software development.

We don't believe in "one-size-fits all" solutions. Every business and application is different, so the technology should be adapted to the needs of our customers rather than the reverse. Our approach focusses on listening to the needs of our customers, and nothing is more important to us than delivering an Airobot that does the work required. For this, we use the best components available on the market and add our own technology and magic. We work closely with our customers, both in the office and in the field, until they are happy with the performance of our products

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