



With a comprehensive lineup of fully integrated systems, the team at Microdrones can help your business to work smarter, cut costs and complete construction projects more easily.

# Work smarter with Microdrones

For more than ten years, Microdrones has been engineering and perfecting unmanned aerial vehicles (UAV) and integrating their drones with the most advanced sensors, software and equipment. Microdrones has packaged these industry-leading commercial UAV systems into their impressive lineup of mdSolutions, allowing their customers to work smarter while cutting costs, saving time, and completing projects more easily.

Their mdLiDAR, mdMapper and mdTector packages provide the full solution – drone, sensors, software, workflow, training and support. All of these systems are integrated so that geomatics and construction professionals can start using them in the field and bring meaningful data back to the office for visualisation.

## One-stop-shop

Now Microdrones is expanding their impressive lineup of mdSolutions, making their distributors the one-stop-shop, for all of a company's UAV projects and needs. New additions to the lineup meet users where they need to be, with features and pricing that fit a broader range of clients.

Vivien Heriard-Dubreuil, President of Microdrones describes how Microdrones became one of the industry's leading innovators, "In the early days, our job was to engineer the most durable and resilient drones. Now, Geospatial pros demand a faster, more effective way to capture elevation data with extreme accuracy. We applied our R&D to an end-to-end drone based LiDAR mapping package. We knew the ability to penetrate vegetation and ground foliage makes LiDAR the most versatile tool for elevation

mapping. That's why we're developing an entire family of fully integrated aerial systems."

The mdLiDAR3000 is the most recent entry into the mdLiDAR series from Microdrones and it offers the complete package of a high-end UAV LiDAR and camera all integrated into one system. Housed on board the hefty md4-3000 aerial platform, is the RIEGL miniVUX-1 UAV LiDAR and a Sony RX1RII for recording color values of points. The camera and laser technology, integrated with the mdLiDAR3000, accommodates high end requirements for data collection in the areas of construction, mining, and engineering, as well as surveying and research. The result is a quick and accurate point cloud colorization using system-produced orthomosaics and a user-friendly, seamless workflow.



All components are precisely integrated to perform together. This allows for real-time monitoring since the flight control can run fully automatically. The system is also equipped with the Applanix APX-20 to deliver the best achievable positional accuracy. Recording data requires less overlap to achieve the required accuracy levels. The solution also includes mdLiDAR Processing Software, tailored specifically to the mdLiDAR product line for creating corrected and accurate 3D point clouds.

Not every organisation may need the most

## Each mdMapper system is designed to deliver custom aerial surveying and mapping

advanced mdLiDAR3000, which is why they will continue to offer the smaller laser-based solution in the mdLiDAR1000. This lighter model has one integrated laser scanner and is presented as an entry-level UAV LiDAR solution.

Dr. Mohamed Mostafa, Director of mdSolutions, is plotting the course. Under his direction, he explains that, "We have become the industry-leader providing VTOLs for mapping. We are the reference point and we have the best solutions today. With mdLiDAR, we are adding new tools for customers to expand their businesses but also to address new markets and new applications; like being able to map power lines and vegetation, and output detailed pointcloud models."

In addition to a new LiDAR system, Microdrones is adding two new systems to round out its mdMapper offering. The mdMapper series from Microdrones continues their flexible product lineup, ranging from the mdMapper1000DG to the entry level, aerial mapping package in the mdMapper200. Each mdMapper system is specifically designed and outfitted to deliver custom aerial surveying, mapping, and precision agriculture, tailored to the needs of the customer.

The top-line entry, mdMapper1000DG, uses direct georeferencing and customers are able to save time by using fewer or no ground control

“ We want our distributors to get a full suite of solutions to meet their customers where they are price wise and in terms of accuracy and technology ”

points for less sidelay and more productivity. Despite the incredible power and versatility of this flagship mapping product, not all customers may need the power of direct georeferencing just yet, but they still need highly accurate and precise data collection. That's where the mdMapper1000PPK comes in and provides high accuracy with just one to three ground control points. It's ideal for a survey crew looking to save time and complete projects more easily. Furthermore, down the road, if their business is ready to expand to DG, the mdMapper1000PPK is easily and affordably upgradeable via the DG READY firmware update.

## Ground control points

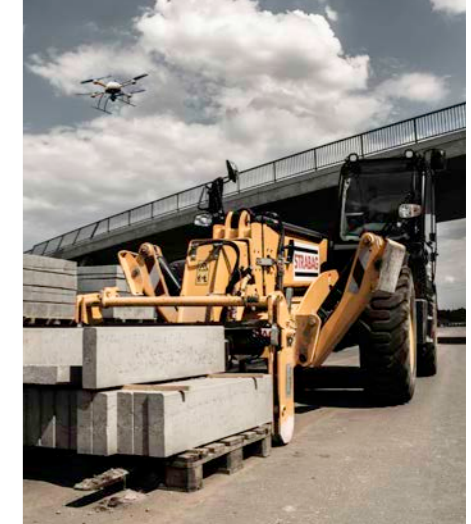
At an even lower price point comes the new mdMapper1000+. This system is ideal for those who do not need DG or PPK and are willing to install ground control points on site for their projects. For example, customers who frequently fly the same site repeatedly find this to be an adequate solution. Best of all the mdMapper1000+ is ready to expand with the user; it's both PPK and DG ready with a practical and affordable firmware upgrade.

Mike Hogan, Sales Director for Microdrones, has helped establish Microdrones as offering the full solution. He explains, "Microdrones turnkey systems empower professionals to plan a mission, fly the UAV, process georeferencing data, and fulfil their project. Now our job is to dig down and help our customers match the most acceptable solution to their needs. We want our distributors to get a full suite of solutions to meet their customers where they are price wise and in terms of accuracy and technology. Then the question is no longer should I chose a Microdrones system, but rather which Microdrones system is right for me."

■ To talk to an expert about how a fully integrated drones package could help your business visit [lp.microdrones.com/ic](http://lp.microdrones.com/ic)



**JOB SITE DURABILITY. PROFESSIONAL RESULTS.**



The mdMapper1000DG from Microdrones combines our robust, weather resistant UAV with a fully integrated photogrammetry direct georeferencing system. You can avoid installing ground control points (unless you want to install 1 or 2 to check your work for quality control). Collect your images and post-process them in a fraction of the time, following an end-to-end software workflow. Sound interesting?

Complete this easy online form to start a conversation with us: [lp.microdrones.com/ic](http://lp.microdrones.com/ic)



As the market leader, STRABAG uses Microdrones solutions throughout Europe for its projects.



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