

MAVINCI

SIRIUS Surveying UASs



MAVinci specialises in the development of unmanned aerial system (UAS) technology, designed specifically for automated mapping of construction sites, pipelines, disaster areas, mines and quarries. Based in St. Leon-Rot, Germany, MAVinci has a leading position on the civil UAS market, driven by innovation and the company's dedication to producing high-quality aerial

surveying solutions.

MAVinci SIRIUS pro in flight.

As one of the first civil surveying UAS manufacturers, MAVinci was founded in January 2009 in Darmstadt as a privately held company by the four shareholders Cornelius Claussen, Johanna Claussen, Marco Möller and Michael Niesen. MAVinci's main business is unmanned aerial system (UAS) technology, designed specifically for automated mapping of construction sites, pipelines, disaster areas, mines and quarries. The SIRIUS UAS was developed to market maturity within the company's first two years. In addition, MAVinci successfully completed a development and service project for the national aeronautics and space research centre (DLR) in the same period.

Innovative features

By 2012 MAVinci's distribution network covered five continents of the world and was further expanded in 2013 by a distribution agreement reached with Topcon Europe. The company moved into its new headquarters based in St. Leon-Rot in January 2014. "MAVinci's company history is characterised by the introduction of new and innovative key features into the UAV market," says Cornelius Claussen, one of the MAVinci shareholders and CEOs. "Besides the introduction of flight planning-related features, in 2013 we presented the first surveying UAS with a real-time kinematic (RTK) GPS receiver on the surveying market."

SIRIUS

The MAVinci SIRIUS pro is a fully integrated orthophoto UAS which delivers orthophotos and three-dimensional elevation models with an absolute accuracy of down to 1.6 cm without using ground control points (GCPs). The ground sampling distance (GSD) of the single images ranges from 1.5 to 20cm. Combining MAVinci's precision-timing technology with Topcon's subcentimetre-grade L1/L2 GPS/GLONASS RTK receivers, this robust system helps to realise projects faster and more effectively. The product range further comprises the SIRIUS basic and classic; both models offer survey-grade accuracy when using GCPs, and the SIRIUS basic is upgradable to SIRIUS pro via the internet.

MAVinci SIRIUS pro in Australia.

Surveying and Documentation

The SIRIUS UASs are mainly used for aerial surveying applications or documentation purposes. They have proved to be useful tools for tasks such as volume measurements in open mines, documentation of construction site progress or to deliver 3D models as the basis for construction project planning. Meanwhile in agriculture, for example, they can be used to document crop damage for insurance purposes.

Efficient operation

MAVinci's main target markets are the surveying, mining and construction sectors, with clients ranging from global construction and mining enterprises to surveying service providers. "We want to help our users to save time. Therefore operating our UAS is highly efficient. Its straightforward architecture minimises ground time between the flights. Every detail has been optimised for practical handling," says Marco Möller, another of MAVinci's shareholders and CEOs. The MAVinci autopilot has been developed in-house. The company's thorough insight into the technology enables it to integrate newly emerging technologies into its products, which contributes to MAVinci's innovative role in the field of surveying and mapping UASs.

Global distribution network

MAVinci has an extensive worldwide distribution network and is continually expanding its business around the globe. Distributors support customers in their local languages and professionally represent MAVinci in other countries. The recent extension of the distribution agreement with Topcon earlier this year has further increased the availability of the company's products on a global scale.

Future goals

Michael Niesen, another of the four MAVinci shareholders and CEOs, adds: “We promote our products and services supported by true facts that have been proven in real-life situations. Our customers trust in our integrity, because we are honest and take responsibility for what we say and do.” Looking to the future, the company intends to continue to rise to the challenges presented by its customers, viewing them as opportunities to demonstrate the true capabilities of MAVinci’s UAS technology. Hence, the company is committed to delivering high-quality products and service to customers by developing new features in response to their varied needs. The goals for the years ahead are continued company growth, expansion of the product distribution network and introduction of new market innovations.

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