QBASE 3D



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Mission Planning. Flight Monitoring. Data Post-processing.

QBase 3D is the most convenient platform to plan aerial survey missions with Quantum-Systems UAS. It automatically generates efficient flight paths after the observation areas and the mission parameters have been defined with just a few clicks. This allows the operator to be up and flying within no-time, saving valuable resources. For advanced missions, the pilot is in complete control over the photogrammetric aerial survey mission and can adjust all relevant parameters to generate professional and optimum results.

During flight mode, QBase 3D provides accurate information on aircraft and mission status to ensure flight safety and mission success.

After mission completion, QBase 3D enables processing of the captured images, precision enhancement with the built-in PPK solution and export of all metadata to file formats suitable for a variety of platforms for further post-processing.

BENEFITS

More safety through 3D planning. The integrated 3D view is an efficient tool to plan precisely and to keep the overview during flight.

Various applications supported. The combination of Quantum-System UAS with QBase 3D helps surveyors, farmers, scientists, quarrymen, civil engineers, and geologists to focus on their professional application.

Easy to stay up to date. QBase 3D automatically notifies you when a new software release is available. The update can be done simply by the click of a button.

Simple and fast operation. All mission relevant steps from planning to flying can be carried out intuitively.

PPK Data Processing. Easily export your PPK processed data with direct compatibility of Pix4D, AgiSoft, Propeller and Trimble Business Center for further post-processing.









FEATURES

- Corridor planning
- Live-air-traffic
- Resume mission
- Flight simulation
- Mission safety evaluation
- Flight data monitoring
- Battery monitoring
- ESRI map data
- Offline mode



WORKFLOW

Mission Preparation. Select a payload and the presets for data accuracy and define a mission area with just a few clicks. QBase 3D calculates the mission including the necessary flight legs. The final mission check ensures all parameters are correct. It's that easy.

UAS Take-off. Follow the UAS setup procedure. After connecting the battery and booting the UAS, the mission can be transferred wirelessly to the autopilot. During the preflight check, the autopilot will verify and approve the mission. The VTOL capability requires no additional equipment or interaction, just launch the system by the push of a button.

Flight & Landing. There is no pilot interaction necessary while airborne. If circumstances require you to alter the flight path, e.g. an evasive maneuver, you can take over manually using the RC or ground station. The UAS will resume the mission afterwards. QBase 3D always shows the UAS telemetry data, like speed, position, state of battery charge, and pictures taken to ensure mission success.

Data Processing with QBase 3D. The flylogs are downloaded to a PC that is connected to the UAS after landing. With the help of this data it is possible to geotag the imagery files on the SD-Card. The geotagged photos are the basic framework for every data analysis with 3rd party programs. Alternatively, QBase 3D supports export of all relevant data to various post-processing applications in their native format.