

NEW PRODUCT – CASE STUDY



Problem – Challenge

Many professionals lack frequent site surveys in various domains such as land management, forestry, agriculture, construction and mining. Standard aerial and satellite imagery is expensive, takes time to be realised and suffer from cloud coverage.

Established at the end of 2009, SENSEFLY LLC is a Swiss company with its main focus on design, development and commercialisation of small autonomous unmanned aircraft for remote sensing, field surveying and mapping. SENSEFLY is a spinoff from the Ecole Polytechnique Fédérale de Lausanne (EPFL).

Solution

SENSEFLY's first product is an award-winning "miniature flying camera" weighing only half a kilogram that fits in a practical suitcase. This system empowers professionals on the field to create 2D and 3D maps within minutes when and where they need it. The all-included solution provided by SENSEFLY includes all necessary hardware and software components to quickly plan and realise flights as well as process the recorded high-resolution images into geo-referenced maps that professionals can directly use to monitor, locate and size areas of interest for their daily tasks.

SENSEFLY provides easy-to-use, turnkey solutions to professionals looking for up-to-date geo-referenced data. At the core of these systems is an intelligent miniature autopilot that has been initially designed at the Laboratory of Intelligent Systems, headed by Prof. Floreano, which is widely recognised for its innovations in the field of miniature, bio-inspired and collective aerial robotics. The autopilot relies on patented control strategies allowing for smart obstacle avoidance and oblique image acquisition.

