

Multispectral Imaging for Precision Agriculture

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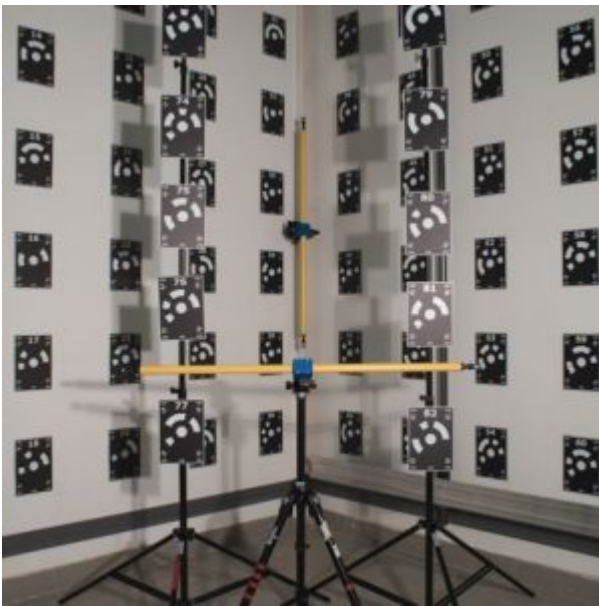
s and able to produce multispectral images for use in

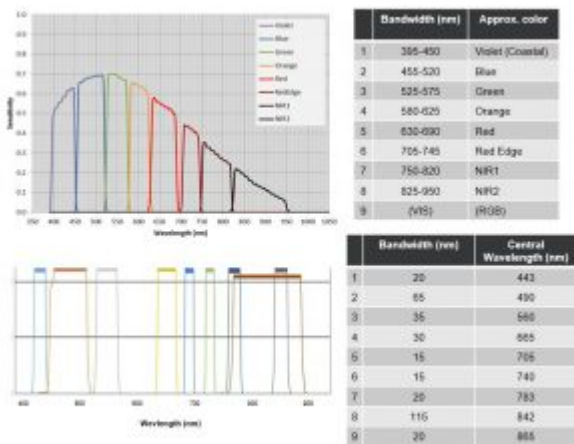
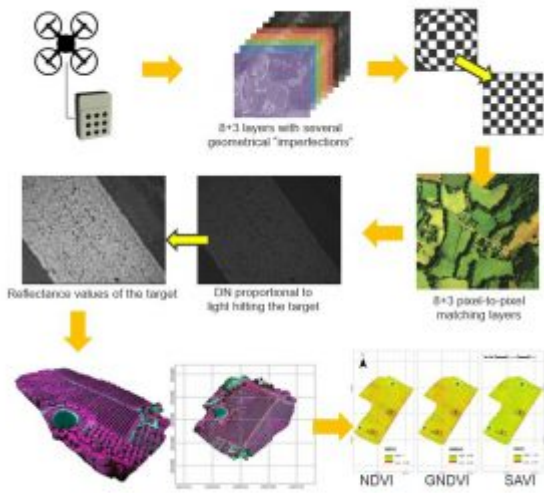
The next-generation device, which allows images to be

taken for specific electromagnetic spectrum bands, was developed thanks to a collaboration between researchers from Trento based **Fondazione Bruno Kessler**, [EOPTIS](#) and [SAL Engineering](#). Its applications range from the so-called precision agriculture to vegetation mapping, to the detection of pollutant spills.

“Fondazione Bruno Kessler,” **Fabio Remondino**, Head of the **3DOM FBK Research Unit** says, “provided support with camera architecture definition, with sensor and lens filter wavelength configuration, and above all, with the development of the dedicated software to manage and process the images obtained during flights. A camera of this kind allows to capture images in many spectrum bands, each of them characterized by a different capability to reflect ground incident radiation. In this way we can distinguish the different types of soil tops and, in particular, determine the state of development and health of the vegetation. At this time, the camera is available in two

versions with different filter sets that, together with the software, are already on the market. Before selling it, every camera comes into our labs where we perform a geometric calibration of the sensors and lenses to allow more accurate image processing. EOPTIS and SAL Engineering requested to collaborate with us thanks to our experience in imaging, 3D and drone surveys. The project is a primary collaboration between research and industry can translate into commercial and competitive results. ”





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