

New Large Format Digital Airborne Sensor from Jena-Optronix

Jena-Optronik GmbH (Germany) has announced the new Jena Airborne Scanner JAS 150, a second generation digital sensor with enhanced flexibility and reliability. Developed for photogrammetry, mapping and remote sensing of medium and large areas, the device represents a new generation of digital aerial cameras. Offering the highest resolution on the market - up to 5cm from 1,000m flight altitude - the JAS 150 satisfies high resolution imaging requirements.

As a company with strong historical roots, which grew from the development of the renowned and proven space-borne multi-spectral camera MKF-6 and the airborne four-band device MSK-4, the Jenoptik subsidiary now returns to this market launching the JAS 150. Based on developments in the area of multi-line CCD sensors - like the imager systems for the RapidEye Earth Observation system and know-how from other camera as well as spectrometer projects - this nine line push-broom scanner was designed.

The design of the JAS allows to replace stereo lines with multispectral bands to gain valuable data for remote sensing applications. A five or six multispectral band configuration acquires more information during one flight than any other available digital aerial camera, especially for environmental purposes. At the same time the remaining three stereo lines acquire data for a dense digital elevation model.

On only one necessary flight multi-spectral data and quintuple stereo data is acquired, resulting in pan-chromatic, colour, colour infrared pictures and a very dense digital elevation model. The near-orthogonal view allows an automated digital workflow up to the production of the orthophoto and the quintuple stereo lines avoid blind spots in flight direction. Very high photosensitivity allows flying under certain cloudy conditions, the radiometric resolution of 12bit surpasses every large format film camera. Fewer and no moving parts compared to film cameras and some other digital cameras of competitors result in high reliability and less service costs. Being the first step in a complete digital workflow, this device has lower cost of ownership compared to film cameras and other digital cameras of competitors.

<https://www.gim-international.com/content/article/new-large-format-digital-airborne-sensor-from-jena-optronix>
