



Jena Airborne Scanner JAS 150s

High resolution images. Achieving a maximum resolution of 15 cm [6 inches] at 3000 m [9842 feet] flight altitude and real 5 cm [2 inches] ground pixel resolution at reasonable airspeeds and a flight altitude of 1000 m [3280 feet].

Open system. The JAS 150s is compatible to all peripherals on the market and can easily be integrated into existing environments.

No blind Spots. The quintuple stereo capability considerably reduces blind spots and allows the production of very dense elevation models.

Best geo-location accuracy. The JAS 150s delivers orthophotos with a geo-location accuracy of up to a few centimeters.



For Remote Sensing and Photogrammetry

Out of space for our world

With promising cutting-edge technologies, Jena-Optronik GmbH operates as one of the international leading providers for opto-electronic instruments and systems for aerospace and security applications.

Jena-Optronik's main goal is a lasting benefit to our customers.

Jena-Optronik GmbH

The Company is a true pioneer in the field of multi-spectral cameras for space applications. In accordance, following its competence, the Jenoptik subsidiary consequently develops instruments for Earth observation and the scientific research of the universe.

More and more, the main emphasis is on the application of opto-electronic technologies for Remote Sensing.



Instrument development

As a company with strong historical roots that grew from the development of the time-honoured film-based spaceborne multi-spectral camera MKF 6 and the airborne four-band device MSK 4, Jena-Optronik now returns to the market launching the advanced and highly reliable Jena Airborne Scanner JAS 150s and the Jena Spaceborne Scanner JSS 56 for RapidEye.

With JSS 56 as payload, the German company **RapidEye AG**, a geospatial management information provider, will launch a constellation of five satellites to have access to any point on earth every day.

...and for next generations.

The Jena Airborne Scanner JAS 150s together with its photogrammetric processing software JenaStereo provides data with high spatial resolution, very high positional accuracy and radiometric resolution.

Jena-Optronik has a profound understanding of your needs.

Reliability

based on hundreds of failure free spaceborne and airborne instruments and sensors delivered to international customers and space agencies. Due to this experience the JAS is among the most reliable instrument on the market.

Value

of JAS images in terms of highest resolution and high precision of geo-location accuracy. From 1000 m [3300 feet] the JAS acquires square pixels of 5 cm [2 inches] with a geo-location accuracy up to 3 cm [1.2 inches] in all four multi-spectral bands and all stereo panchromatic channels.

Safety

the Jena Airborne Scanner device is compliant to DO160b, CE, RoHS. The customer can certify the device for their airplanes and use it in every country.

Quality

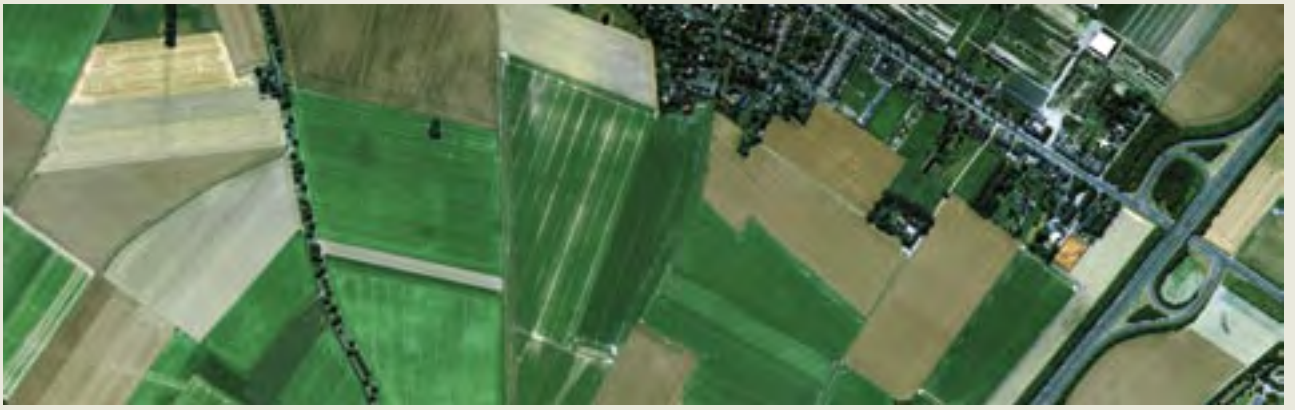
because of lower maintenance cost, highly dependable and a fast responding service department.

Jena-Optronik has been awarded as "Supplier of the Year 2006" in the avionics category by Boeing because of its outstanding quality, on-time delivery, post-delivery support and cost for performance.

Ask us for our long-term leasing conditions.



Designed in two parts, the rack can easily be handled and installed on the plane. The parts can either be mounted on top of each other or side-by-side. In the standard configuration the ruggedized hard disks can be swapped during flight leading to an unlimited amount of data storage. Optionally, a RAID 3 solution is available, but is not hot swappable.



Jena Airborne Scanner Performance

System Specification				
Focal length	150 mm			
Number of CCD lines	9			
Number of pixels per CCD line	12000			
Pixel size	6.5 µm			
Radiometric resolution	12 bit [without noise]			
Minimum exposure time	1.25 ms			
Nadir	± 0°			
1. Stereo angle forward/backward	± 12°			
2. Stereo angle forward/backward	± 20.5°			
Multispectral bands	RGB, NIR and PAN			
Resolution				
Ground sample distance at 3000 m [9842 feet]	15 cm [6 inches]			
Swath width at 3000 m [9842 feet]	1.6 km			
Geometric accuracy	< 1 Pixel			
Peripheral devices				
Storage capacity of mass memory	1...5 TB solid state			
Redundancy	hot swappable			
Data rate	~ 180 MB/s [all channels in full resolution can be recorded]			
Inertial Navigation System	IGI AEROcontrol® or Applanix POS AV 510® or Leica IPAS 10®			
Mass & Dimensions	Mass [kg]	width [mm]	height [mm]	depth [mm]
JAS 150	65	570	495	460
Data storage unit/Operation unit	55	580	500	740
Operation Unit	45	580	320	740
Operating conditions				
Overall typical power consumption	< 900 W at 28 V DC			
Temperature range	-15...+55°C			
Humidity	max. 95%			
Air pressure	0.2...1.2 hPa			



Jena-Optronik GmbH
 Prüssingstraße 41 | 07745 Jena | Germany
 Phone +49 3641 200-110 | Fax +49 3641 200-222
 E-mail: info@jena-optronik.de | www.jena-optronik.de

Jena-Optronik is an EN/AS 9100 certified company.

