
Press Release

30. June 2010

InGaAs-Image Sensors with extended spectral range up to 2,2 μ m and reduced dark current

New at image sensor specialist ANDANTA are Indium-Gallium-Arsenide (InGaAs)-image sensors with extended near infrared spectral response from 1,2 to 2,2 μ m (up to now 900nm to 1,7 μ m) wavelength and considerably reduced dark current compared to earlier versions.

The spectral response shift is accomplished by means of a changed stoichiometric composition of the InGaAs-epitaxial layer on InP-substrate. By choosing a suitable layer composition and further improving the layer-quality and reproducibility, the detection sensitivity and homogeneity of the wanted signal over the pixels could be substantially increased for the resolutions of 320x256 and 640x512 pixels (1k x 1k in development).

The feedback of the first customers is quite promising, especially concerning a very good spectral response as well as a stable and reliable operation.

For helping the camera manufacturer integrating the sensors into the camera electronics, all ANDANTA InGaAs-sensors use an integrated CMOS read out electronics with multiple user-friendly functions for easy adaption to the application task.

For a reliable infrared operation, all extended devices are delivered in a 28pin DIL-Kovar-package with single-stage thermoelectric cooling.

Application areas of the „extended“ InGaAs image sensors include extended Near Infrared Spectroscopy, industrial inspection and sorting, spectral sensors, recycling-applications, temperature measurement, laser beam diagnostics, LIDAR, safety engineering and much more...

For further information please consult the ANDANTA website under www.andanta.de .

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