
Press release

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ANDANTA-NEWS:

InGaAs-Linear Sensor with 2048 Pixels and 12.5 μm Pixel Size

A brand new InGaAs linear sensor with 2048 x 1 pixels and a pixel size of 12.5 μm^2 is now available from ANDANTA. The sensor will be launched at VISION 2024.

The line scan sensor is usable in the standard InGaAs spectral range of 0.9 - 1.7 μm . The pixel availability is > 99% and the quantum efficiency > 70 % at 1550 nm. 16 different gain settings are possible.

With its 8 outputs, the sensor achieves a readout rate (line rate) of approx. 60 kHz nominal at a pixel rate of 22 MHz (data rate 11 MHz).

The sensor has a Kovar metal DIP housing with 28 connections and an integrated 1-stage thermoelectric cooler, which enables a chip operating temperature of -20 grd C inside the sensor housing.

The LDA2048 supports the SPI protocol for setting the command register. Sensor-gain, - power consumption control and the sequence of pixel output are also adjustable. The product also has a backup circuit function that can replace any of the 8 outputs.

Main applications include near infrared machine vision, web inspection, optical coherence tomography (OCT), NIR scanning, semiconductor inspection and process monitoring.

Very similar linear sensors are also available from ANDANTA with a pixel resolution of 1024 x 1 and 512 x 1. The pixel geometry can be square (for machine vision) or rectangular (for spectroscopy).

The data sheets of the new InGaAs 2048 x 1 linear sensors, as well as our other products, can be found on the ANDANTA website at:

<https://andanta.de/ingaas-detektoren/>

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