

KAPPA on Tour - Control 2005

Almost more than any other trade fair, the CONTROL has made itself a name for being a reputable venue and get-together for experts in the field of measurement and testing technology and quality assurance.

As in the years before, KAPPA will have a stall at this years CONTROL

Control



Sinsheim / Germany
April 26 - 29, 2005
Hall 6, Booth 6604

and present optical solutions for analysis, measurement, inspection and controlling applications.

We are especially proud to present the new DX 4 and DX 40, the first models of our new digital camera generation with Camera Link. In combination with our new XERO-Janus software we will be showing a fully automated digital measuring system that consists of fast, high-resolution and low-noise hardware and ready-to-use software that offers extensive standardised measurement routines and does not require any customised preprogramming.

Intrigued? Then come and visit us at the CONTROL. You can order your free ticket via our code number reader service or directly from Katrin Vogel, Tel: 0049 5508 974230, e-mail: k.vogel@kappa.de

Code no.: 59

New Digital Camera from KAPPA:

DX 4/40 - Small, Fast and Low-Noise

The DX 4/40 ("DX 4" b/w; "DX 40" color) is the first in the new generation of KAPPA digital cameras.

All models of this new generation are based on sophisticated camera electronics that enable variation of functions, interfaces and sensors, for example sensors from VGA to mega pixel resolution. With its 2/3" sensor, the DX 4/40 offers 1384x1032 pixels, 15 images per second, standard Camera Link interface, low-noise 61 dB and 12 bit digital signal processing. The color version also features new, integrated real-time color processing that provides crisp images with true color rendition (optional). Basic functions include external trigger, binning (2, 4 and 8fold) and restart/reset. In combination with the ready-to-use KAPPA Image Base software (KIB), the cameras can be used for measurement engi-

neering, process automation and scientific diagnostics. An easy-to-use SDK offers an extensive library of functions for user-specific programming.

The cameras of the DX 4/40 family are also available with rugged design and as camera on-board for OEMs and integrators. Another model of the new generation of digital cameras is the DX 100 with 1000x1000 pixels and 30 fps.

Code no.: 60



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Automated 2D Measurement Routines

■ New KAPPA Software Xero-Janus

The new software provides a new, even more efficient range of automatic image processing tools and offers standardized measurement procedures for various object surfaces.

Among other things, KAPPA Xero-Janus features counting, measurement and analysis functions as well as bar code reading (1D; 2D) and optical character recognition. It also provides automated processing routines for calibration, background correction and optical distortion compensation.

Without having to do any programming and even with more complex objects,

users of Xero-Janus will benefit from accurate measurement results that can be journalized and statistically processed.

With all these functions, Xero-Janus bridges the gap between customized pre-programmed solutions and the interactive KIB Metro.

Find out for yourself and come to visit us at the CONTROL (Hall 6, Booth 6604).



For further information, please use our reader service:

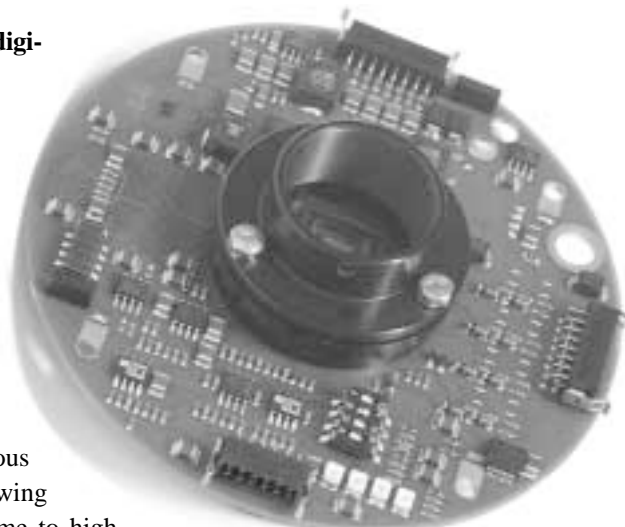
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Digital X-Ray Camera DX 4-XR

■ X-Ray Imaging with High Speed

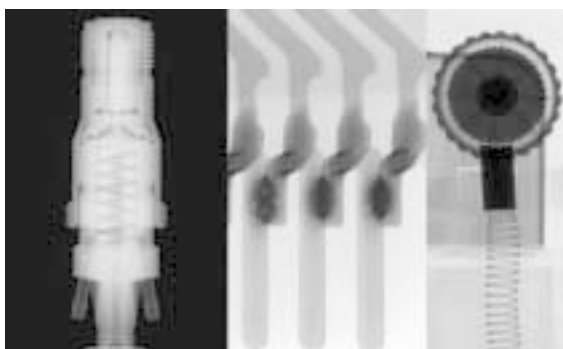
KAPPA presents its new digital X-ray camera with Camera Link interface. Additionally to its current product line that consists of the analogue Video-XR(S) and the digital mega pixel HiRes-XR(S), KAPPA now offers a new digital DX4-XR.

This camera is special in that it offers various resolution modes, allowing refresh rates from real time to high speed. Starting at 50 fps at a resolution of 752x582 pixels, the frame rate goes up to 200 at a resolution of 752x88. The well-known round single-board layout has become even smaller with only 31mm in height and 100mm in diameter. Despite this, the DX4-XR still offers all its proven real time signal processing functions to visualize smallest details



and poor contrast structures. The range of functions comprises low noise, maximum sensitivity, extensive gain control, excellent contrast reproduction, zero pixel error, circular blanking, shading correction, freely adjustable gamma correction, frame on demand mode and many more.

Suitable for most X-ray image intensifiers, it can be used with continuous and pulsed X-ray sources. It also offers adjustment of the power output of the X-ray source. The camera's parameters can be set via various interfaces (Camera Link, RS 232, digital I/Os).



Updated X-Ray Cameras

■ Extended Image Processing Functions

The next generation of the Video- and HiRes-XR(S) X-Ray cameras features extended image processing functions. This brings along advantages especially for medical X-ray diagnostics and non destructive testing applications. Highlight is the special gamma correction that allows to compensate for the non-linearity of the X-ray image amplifier. Digital edge enhancement and the inverting function "negative image" provide more contrast. Please use code no. below to request further information through our code number reader service.

Code no.: 62

Code no.: 63

KAPPA Avionics Division still Flying High

■ EADS Casa: Cameras Aid Air-to-Air Refuelling

EADS is a global leader in aerospace, defence and related services. Its Military Transport Aircraft division develops and distributes cargo planes. In the course of the conversion of the Airbus platforms into tanker planes for air-to-air refuelling, this division is also responsible for the upgrading of the avionics. The cameras that are installed on the planes to visualise the in-flight refuelling process are made by KAPPA. Three different systems, comprising a total number of six cameras, provide the operator of the boom system with an exact 3D-image, a panoramic image and a frontal image that enable him to position the boom precisely.

Despite being subjected to enormous strains such as shock, vibration and temperatures of down to -55°C under in-flight conditions, the cameras must guaranty the planes safety, which they



do by maintaining highest precision (e.g. a maximum aberration of ± 5 pixels in the 3D camera system) and

continuity according to demanding standards like RTCA-DO-160D and Airbus's AB0100.

Successful Project Management

■ How to Organize Creativity

More and more, KAPPA's business activities are moving towards big projects with well-known companies. Now, after several successful years, implementing configuration management procedures has become a routine. Complex projects are conducted in a competent and well-organized manner.

Katrin Vogel, KAPPA Marketing, spoke to KAPPA's Quality Manager Stefan Ilse about the concept of Configuration Management.

Katrin Vogel: "For several years now, configuration management has been the recipe for success with which KAPPA has realized solutions for its customers. This is certainly no secret but what exactly does that mean?"

Stefan Ilse: "Configuration Management is part of the project and product management and as such has to make sure that the essential characteristics of a product remain transparent and traceable throughout the development and production phases ... well, actually throughout the product life cycle. This includes mainly three things: Firstly, the technical and administrative supervision of the development, production

and test procedures. Secondly, the execution of configuration modifications in controlled and documented procedures. And thirdly, the introduction of organizational structures that guarantee the archiving of product specific documents for many years."

Katrin Vogel: "This sounds as if creativity and flexibility have to give way to red tape. Doesn't this clash with



Quality Manager Dipl.-Ing. Stefan Ilse
"What is really important is to adapt the procedures to the different projects and customer requirements."

KAPPA's philosophy "Innovation Through Freedom"?"

Stefan Ilse: "Documentation of the different steps in the development and revising phases has always played an important role in the development work. Using configuration management procedures, the isolated applications become a product specific documentation network, which not seldom even spans several products. This applies to individual solutions as well as off-the-shelf products and does not necessarily mean an increase in red tape. Nor does it imply a restriction of innovation and creativity. What is really important is to adapt the procedures to the different projects and customer requirements or, in other words, to make them as complex as necessary but as lean as possible. With the avionics cameras for the new Airbus A 380, for instance, we conducted all the demanding procedures required by Airbus and were still able to come up with a highly innovative solution, which is quite an achievement for a medium-sized company like KAPPA"

Katrin Vogel: "Thank you."



Cameras and more ...

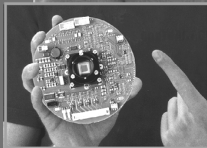
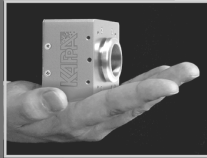
New Image and Product Brochure

In our new brochure, we are going to tell you about the changes that have taken place at KAPPA, for instance the introduction of the new divisions Avionics and Security.

We will also introduce to you the new cameras in our product line. These new camera models come in numerous variations, offering application solutions for virtually all of our divisions, be it Industry, Medicine, Security & Forensics or Defense & Avionics.

We are sure you will find a solution that suits your needs. Order your free copy of KAPPA "Cameras and more..." through our reader service.

Code no.: 64



realize visions.

Competition!

Rack your brains.
What is the name of
KAPPA's division
that serves the special requirements
of the aviation industry?



Among all entries
we'll raffle three

B-Speech Vitac Bluetooth Headset.

A mobile phone headset with
an exchangeable
alkaline micro cell
battery for up to
700 h of standby
time.



Closing date is
July 4, 2005.

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The solution is:

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