**The TriSpectorP1000 programmable 3D camera: Full flexibility for the detection and 2D & 3D inspections of moving objects**

# The SICK AppSpace development environment enables customized solutions

Waldkirch, November 2018 – SICK is presenting its compact TriSpectorP1000 programmable 3D camera. Its single-housing design accommodates both the laser source and camera optics, creating geometrically stable and unambiguous measurement situations in every application. The highlight of this camera, however, is its programmability within the SICK AppSpace development environment – the joint programming platform for various sensor technologies from SICK. This enables developers and integrators to develop customized applications and user interfaces for their 3D image processing solutions with the TriSpectorP1000 to meet customer-specific requirements efficiently.

During detection as well as 2D, 3D and profile inspections the TriSpectorP1000 provides real shape data whatever the object colors, contrasts and surface properties – and regardless of background effects or illumination and ambient light situations. Image processing and analysis are also fully integrated in the TriSpectorP1000 – the factory-calibrated 3D data comes in mm-values and can be directly further processed. Among other things, the 3D camera is used as an inline inspection system for measuring volumes and dimensions, for visually guiding pick-and-place robots, for checking height and completeness, for examining contours and verifying profiles, as well as for counting and positioning objects – and wherever the efficient examination of 3D object geometries is required. Imprinted or engraved OCR characters can also be detected and evaluated.

**Industry-oriented and integration-friendly design**

In device technology terms, the 3D camera is consistently designed for industrial stand-alone use: It has a space-saving and mechanically robust anodized aluminum housing with an enclosure rating of IP 67, and is available with a strong glass or food graded plastic front screen. The three variants for different working ranges (56 mm...116 mm, 141 mm...514 mm, and 321 mm...1.121 mm) ensure optimum implementation of the task as well as sensor integration in the machine environment in every application. Result output can take place via digital outputs and the Gigabit Ethernet interface.

**Programming with SICK AppSpace – total flexibility for customized solutions**

The SICK AppSpace, which can also be used for the TrispectorP1000 programmable 3D camera, is a joint programming platform for various sensor technologies from SICK that is gaining in popularity among developers and system integrators. This is because many end-customers want solutions that are specifically tailored to their particular tasks and operating conditions, including an individual user interface. The structure and operation of configurable products, however, becomes increasingly complicated with every new function offered. In many cases, however, it is only a matter of adapting the final few percent of the functionality of an image processing solution to the user’s requirements. Integrators, OEMs and image processing specialists in the company can carry out this individualization with technical efficiency and cost-effectively if they have the opportunity – building upon the existing basic functions, tools and libraries – to individually program their applications and can design the user interface to precisely meet the operator’s needs. SICK implements this philosophy with its portfolio of programmable cameras: The functionality of the SICK AppSpace development environment offers freedom for one’s own ideas – and thus total flexibility for customized solutions. In addition, image processing programmed in the package from HALCON can be directly integrated into TriSpectorP1000, which includes a run-time license for this.

**Even complex 3D inspections are straightforward to implement**

Whether high part-to-part variation, demanding object properties, rapid processes, unfavorable operating conditions, or maximum measurement accuracy demands – the programmable TriSpectorP1000 is the ideal solution for implementing even complex 3D inspection requirements straightforwardly and individually.

  
***TriSpectorP1000:***

*OEMs and integrators can develop individual applications and user interfaces for image processing solutions efficiently and cost-effectively with the TriSpectorP1000 programmable 3D camera from SICK.*

SICK is one of the world’s leading producers of sensors and sensor solutions for industrial applications. The company, founded in 1946 by Dr. Erwin Sick and based in Waldkirch-im-Breisgau near Freiburg, is a technology and market leader with a global presence – with more than 50 subsidiaries and associated companies, as well as numerous sales offices. SICK achieved Group sales of about EUR 1.5 bn. in the 2017 fiscal year with almost 9,000 employees worldwide.  
  
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