PRESS RELEASE

An all-in-one solution for more than just vision applications

SIM4000 Sensor Integration Machine by SICK

Waldkirch/Stuttgart, November 2016 – The SIM4000 Sensor Integration Machine from SICK is a high-performance multi-camera and sensor processor that provides a one-box solution for multi-technology sensor integration which extends far beyond vision applications. As part of the SICK AppSpace eco-system, it not only opens new doors for customized application solutions, but also enables advanced object transformation for quality control, process analysis, and predictive maintenance for vertical integration in Industry 4.0.

When it comes to sophisticated image processing algorithms – involving the fusion of 2D or 3D sources to form a scatter plot, for example – a powerful, hardware-accelerated multi-core processor ensures image pre-processing and I/O handling in real time. The integrated HALCON image processing library and the open SICK AppSpace software platform make it possible to flexibly develop customer-specific solutions for ambitious 2D and 3D vision applications.

SIM4000 – flexible, intelligent, communicative

The programmable SIM4000 Sensor Integration Machine offers system integrators and OEMs the freedom and opportunity to develop applications to fit the customer's specific requirements. Alongside the conventional, relevant image processing tasks, data from SICK sensors and cameras can be merged into a point cloud, evaluated, archived, and transmitted. 8-gigabit Ethernet interfaces are available for 2D or 3D cameras, and in some cases feature a voltage supply over Ethernet (PoE). Additional SICK sensors can be integrated via IO-Link to include distance and height measurement, for example. Thanks to a fast multi-encoder interface, it is also possible to synchronize data via all of the connections. In addition, SIM4000 can be integrated into a SICK CAN sensor network. The HMI and data visualization features can be provided on any browser-enabled notebook, PC, or tablet.

SIM4000 can be used in all areas of factory and logistics automation for multi-sensor or camera-based inspection, for the measurement and identification of objects and devices, as well as for data acquisition and archiving for quality control, process analysis, and predictive maintenance. Thanks to the high-performance multi-core processor featuring hardware support, SIM4000 enables image preprocessing and handling of input and output signals in real time.

Image: SIM4000_IM0064364.jpg
The SIM4000 Sensor Integration Machine from SICK is a one-box solution for complex vision applications.

SICK is one of the world’s leading producers of sensors and sensor solutions for industrial applications. Founded in 1946 by Dr.-Ing. e. h. Erwin Sick, the company with headquarters in Waldkirch im Breisgau near Freiburg ranks among the technological market leaders. With more than 50 subsidiaries and equity investments as well as numerous agencies, SICK maintains a presence around the globe. In the fiscal year 2015, SICK had more than 7,400 employees worldwide and achieved Group sales of just under EUR 1.3 billion.
Additional information about SICK is available on the Internet at http://www.sick.com or by phone on +49 (0) 7681 202-4183.