

Compact communication: RFH620 – the RFID system for intralogistics

Waldkirch, Innovation No. 15, 2009 – The compact housing of the read/write unit (thanks to its integrated antenna), high transmission rates in the 13.56 MHz frequency range, and openness for differing fieldbus environments and IT structures make SICK's new RFH620 RFID system the ideal identification solution for intralogistics. The system offers maximum process reliability and investment security – firstly because it can read and program all transponders that comply with the ISO/IEC-15693 standard; secondly because it meets European radio requirements in compliance with CE and has the FCC radio approval important for the USA.

High transmission rates thanks to high frequency technology (HF), ranges of up to 16 cm, as well as rapid signal and data processing that permits target object transport speeds of up to 3 m/s (addressed reading of UID and 3 user data blocks), make the RFH620 from SICK the ideal solution for tracking objects in internal and closed circulatory systems. Moreover, not only is parameterisation, integration, operation and maintenance particularly easy, but the look and feel of other AUTO ID solutions from SICK is familiar to integrators and users.

Easy integration cuts costs



The parameterisation, operation and communication functions of the RFH620 are implemented with the help of SOPAS-ET software. SOPAS-ET is an intuitive engineering tool for integrating auto-ID devices from SICK. It offers the same look & feel for bar code and RFID systems from SICK – from the diagnostic window that can be activated for parameterisation, through the event monitor for analysing inputs and outputs, to connection assistants for network applications. Regardless of a task's complexity or the particular user, differentiated access rights to system parameters can be set up in SOPAS-ET, e.g. for programming, commissioning, service and maintenance. On the one hand, this protects parameterised data and, on the other hand, it reduces the number of parameters to the absolute minimum required. Electrical connection of the RFH620 is also integration-friendly. A 15-pin cable with D Sub HD plug is available as standard, or – for Ethernet connection versions – a combination of M12 socket for the Ethernet interface and M12 plug for power supply, triggering, host and auxiliary interfaces, and CAN-Bus.

Optimum networkability

Another feature of the RFH620 is its openness for differing fieldbus and IT environments. On the communication side, the system is available as variants with CAN-Bus or with Ethernet interface. Fieldbus gateways that permit integration in Profibus DP and DeviceNet* networks are also available. A multiplexer function*, with which RFH620 devices can be operated in SICK CAN-SENSOR networks, will follow soon.

***Diagnostic tool allows cost savings through preventive maintenance**

Thanks to its networkability, the RFH620 read/write device offers the possibility of remote maintenance via the RDT400 Remote Diagnostic Tool from SICK. RFH620 components can be monitored and controlled both locally on the particular device as well as centrally from a control computer (or from anywhere in the world) with the help of the graphic visualisation. Whereby existing network infrastructures and standard technologies, such as Ethernet TCP/IP, Ethernet IP or web browsers, can be used. Among others, individually timed and long-term read results, performance statistics for the individually connected devices, and other parameters relevant for the particular system performance, can be visualised. With the help of the RDT400 it is thus possible to implement plant-specific solutions for preventive maintenance, effectively supporting the aim of maximum plant availability, whilst simultaneously reducing operating costs.

Investment security through technology-spanning integration potential

The RFH620 is the world's first RFID system that is entirely compatible with a bar code system – SICK's CLV6xx series – due to the same parameterisation and user interfaces, uniform electrical connection and identical fieldbus components. For integrators and users, the bar code scanner and RFH602 read/write device can now (apart from their particular differing performance features) in principle be treated as sensors in the field that, despite different technologies, offer completely identical integration. Information-related implementation of the auto ID solutions takes place in a single identical integration environment, regardless of whether a bar code label, a transponder or even a hybrid label is ultimately to be identified. This provides integrators with planning security because their concepts cannot become superfluous when a technology changes; this uniformity offers users a great deal of investment security because they can always ex

exploit the basic concept of the solution and adapt data detection on the object to the particular conditions – without having to make complex changes to IT processes.



For decades, SICK has been one of the world’s most innovative companies in the sensor sector. The latest technological knowledge and processes are implemented in innovative products and system solutions. They position SICK as a technology and market leader in the customer segments of factory, logistics and process automation.

More than 50 innovations in sensor and control solutions are planned for 2009. SICK will launch a new product each week as part of its “SICK Innovation Marathon 2009”. All innovations – from No. 1 to No. 52 – are more than just products: they solve tasks intelligently, efficiently and precisely. And create unbeatable customer advantages.

* Not available at market launch.