Press enquiries to: Sharon Lindsay. **Tel:** 07928 809035

Email: sharon@sharonlindsaypr.co.uk

SICK Enables Easy Set-Up Contour-Based Navigation on Any Mobile Platform

With the release of the SICK LiDAR-LOC solution for mobile platforms, users can implement contour-based localisation on any automated guided vehicle, cart, forklift or service robot fitted with SICK 2D LiDAR sensors or safety scanners.

The SICK LiDAR-LOC (**L**ocalisation **O**n **C**ontour) system enables free navigation of automated transport, stacking and loading systems based on the pre-mapped contours of shop floors and warehouses without the need for reflectors or other physical markers.

Thanks to the SICK LiDAR-LOC, production teams can avoid changes to fixed infrastructure if they want to adapt the paths of AGVS, automated forklifts or shuttle systems. Systems using one or more SICK LiDAR sensors can be set up with minimal programming time, combining proven software with reliable and accurate scanning technology and with the option to integrate motion control and odometry. As a result, software development, installation, hardware and maintenance costs can all be dramatically reduced.

Available as a software-only option, and with the ability to be retrofitted easily to already-installed scanners, the SICK LiDAR-LOC puts an end to costly installation and maintenance of reflectors, special paints, tracks, magnetic strips or coloured tapes by learning and recognising the physical contours of a factory or warehouse interior.

“SICK’s Localisation on Contour algorithm has been available on our 360° NAV scanners since early in 2019,” says Neil Sandhu, SICK’s UK product manager for imaging, measurement and ranging. “Following its success, SICK decided to open up its precise localisation capabilities and easy-set-up advantages across their entire 2D LiDAR range.

“For example, many of our customers using SICK safety scanners on mobile platforms are asking us if they can access the raw data for navigation purposes, so they can save cost, space and wiring complexity, especially for smaller and low-to-the ground mobile platforms.

“This is therefore an important step for our customers towards achieving greater Industry 4.0 production flexibility and SICK is the first manufacturer to offer an entire hardware and software solution as part it’s indoor localisation portfolio.”

Enabled by LiDAR-LOC software running on a SICK Sensor Integration Machine, all of SICK’s LMS, TiM and NAV 2D LiDAR sensors, together with SICK safety scanners, such as the microScan3, can be used to support navigation, so the need to install additional sensors for localisation can be eliminated. Whether integrated into a new machine, or into an existing architecture, set-up is almost plug-and-play using SICK’s SOPASair software tool.

Setting up the SICK LiDAR-LOC system begins by simply ‘teaching’ the on-board SICK LiDAR scanner prominent contour features, such as walls, large static machinery, racking or bays, as the AGV is driven manually around its working environment.

Then, this data is used by SICK Service to create a precise reference map on behalf of the customer or machine builder, before being uploaded on the SICK SIM and easily commissioned on-site. Set up and operation is straightforward thanks to the modern web browser user interface, as well as integration with Robotic Operating Systems.

With complete visual coverage and a scanning angle of up to 360°, the SICK LiDAR-LOC has a working range of up to 250m with precise contour recognition, a positioning accuracy of ± 30mm and a localisation resolution of 1 mm at refresh rates of 30Hz, depending on the scanner used.

For more information please contact Andrea Hornby on 01727 831121 or email andrea.hornby@sick.co.uk.

www.sick.co.uk

Issued on behalf of: SICK (UK) LTD, Waldkirch House, 39 Hedley Road, St Albans, Hertfordshire, AL1 5BN.