

## Rexroth ROKIT Locator

### Your Easy-to-Use Laser Localization Software



The ROKIT Locator by Bosch Rexroth is a software component that reliably determines the position and orientation of a wide range of vehicle types including forklifts, AGVs and AMRs in a variety of changing environments. This is made possible by a high-performance algorithm that automatically detects and maps the natural environment using a laser sensor on the vehicle. Bosch Rexroth thus provides a key technology and enables position-based services such as scan replacement and warehouse navigation for logistics operations with industrial trucks with maximum flexibility and efficiency.

#### Flexibility for all situations

Optimize the use of your entire forklift fleet and benefit from the easy integration of the ROKIT Locator into different vehicle types, industries, and application areas. Due to the modular approach, the software is hardware-independent and does not require any structural measures.

#### Make efficient use of your forklift fleet

Location tracking is the basis for more transparency in the warehouse. Thanks to fast setup and reliable operation, you are always aware of the position of your forklifts. Even after a vehicle restart, due to a shift change, for instance, the ROKIT Locator automatically finds the current position in no time. Additionally, the flexible adaptations to changing environments, such as in block warehouses, enable automatic map updates for your entire fleet.

#### ONE FOR ALL

- ▶ Suitable for a wide range of vehicle types, industries and application areas
- ▶ Available as software-only solution or as Rexroth ROKIT Locator.Box – ready to use on an extremely compact industrial computer
- ▶ Supports numerous brands and types of laser scanners and industrial computers
- ▶ Flexible laser positioning

#### BOOST YOUR LOGISTICS

- ▶ Express mapping
- ▶ No need for infrastructure adaptations or expert knowledge
- ▶ aXessor: inspiring graphical user interface for central access and efficient fleet administration
- ▶ Initial localization without prior knowledge
- ▶ No maintenance of infrastructure required
- ▶ Automatic map updates

## ROKIT Locator Features

#### Express mapping – guided live mapping

Maps the environment with just a few clicks without the need for infrastructure adaptations or expert knowledge.

#### Masking

Hides vehicle contours in sensor data.

#### Manual map alignment

Adjust the map with offsets and rotations.

#### Reference alignment

Align the ROKIT Locator map to an existing coordinate system.

#### Initial localization

Automatic localization after a change of position.

#### Robust and reliable localization

Functions smoothly in dynamic industrial environments regardless of vibrations and ramps.

#### Wheel odometry fusion

The positioning includes information of laser scans and estimated movements of the vehicle based on the wheel rotations.

#### Map update

Automatically detects changes in the environment, continuously updates the ROKIT Locator map, and shares it with the entire ROKIT Locator fleet.

#### Map expansion

Allows users to extend existing ROKIT Locator maps and replace map zones.

#### Dual laser

Supports up to two lasers.

#### Visual recording

Supports the commissioning of complex use cases through live mapping

#### Auto-calibration

Enables an easier and faster commissioning. With this function, the existing sensors can automatically be calibrated to each other.

#### Real-time diagnostic information

Diagnostic information is visualized in real-time for you. In addition, the feature Event Center notifications include the ROKIT Locator diagnostic messages.

#### Extended localization details

Within the live view of our GUI, you get a visual overview of extended localization data and information of the ROKIT Locator algorithm for a better understanding of the parameters.

#### WITH THE AXESSOR YOU HAVE EVERYTHING UNDER CONTROL

The graphical user interface aXessor makes real-time localization easy to use: one-click mapping, management and overview of the entire fleet, and gamification elements for optimized handling of complex use cases.



#### Have we sparked your interest?

Discover the ROKIT Locator at [www.boschrexroth.com/rokit-locator](http://www.boschrexroth.com/rokit-locator) or contact us at [robotics@boschrexroth.de](mailto:robotics@boschrexroth.de).