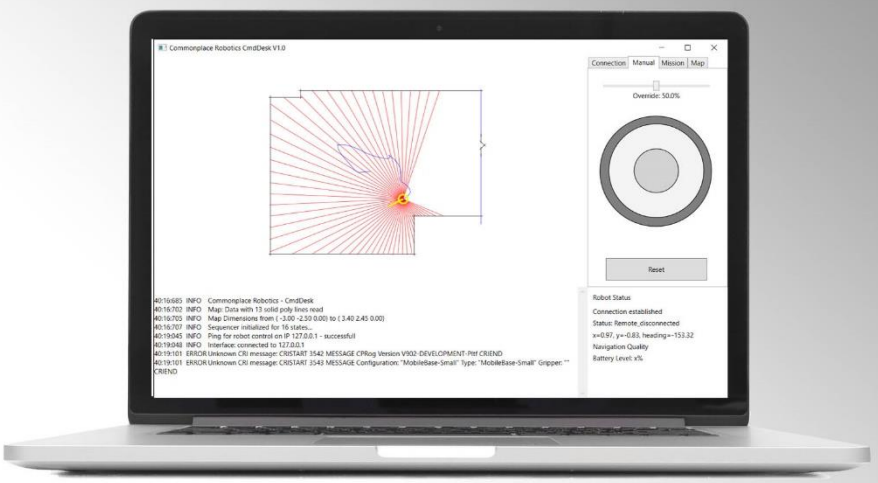
commonplace robotics GmbH



Add-On for robot control software CPRog

NavPak

Mobile Navigation

With NavPak, mobile robots know where they are and how to get to their destination. As an add-on for Commonplace Robotics robot control CPRog, NavPak enables localization, path planning and mission control of mobile robot platforms. Thus CPRog forms the integrated controller for your robot arm with a mobile platform!

Fields of application

- ➔ Mobile service robots
- ➔ Industrial service robots
- ➔ Warehouse logistics / AGV Automated guided vehicle systems
- ➔ Education research and development

Technology

NavPak is based on state-of-the-art algorithms of probabilistic robotics. By sensor fusion of the wheel encoders, lidar data and other sources a reliable and continuously available position is calculated.
The movements to the intermediate and target points can be executed in different types, e.g. as linear movement or in curved spline form.

Funktionen

- ➔ Localization on the basis of lidar data with an accuracy of approx. +/- 5 cm
- ➔ Creation of missions / routes with intermediate and destination points
- ➔ Control of an assembled robot arm
- ➔ Fine positioning with the help of targets
- ➔ Reduction of speed for crossing persons
- ➔ App for remote control and monitoring
- ➔ We will gladly implement further functions for you!

The specified accuracies depend on the platform used and environmental conditions, e.g. the substrate.

Compatible platforms and sensors

NavPak supports various platform kinematics:

- Omnidirectional platforms with Mecanum wheels
- Platforms with differential drive

The following lidar sensors are supported:

- SICK: S300 Pro and versions
- SLAMtec: A2M8 and versions
- Hokuyo: URG-04 and versions

System requirements

- Running CPRog robot control software on a Windows or Linux system
- Control PC with intel Core-i5 or comparable, min. 8 GB RAM, 1 GB SSD memory, USB port

→→→ www.cpr-robots.com

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Productsheet Add-On NavPak
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