

Programming and Control CPRog Robot Control Software

Controlling and programming robots made easy! The CPRog control software offers an attractive and intuitive 3D user interface that can be used to control various robot kinematics.

Fields of application

- ➔ Industrial manufacturing, low cost automation
- ➔ Control of service robots
- ➔ Education, Edutainment

Kinematics

CPRog can be adapted to the robot hardware by using the robot library and custom robot models. Available kinematics are:

- Articulated robot arm with 4-6 joints
- Gantry robot with 3 linear joints plus A-rotation
- Delta robots with linear or rotary joint plus A-Rotation
- Scara Robot

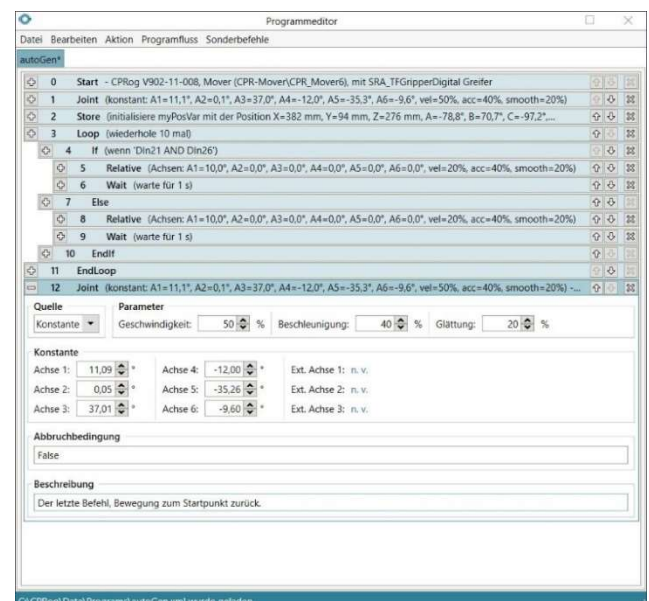
All kinematics can be supplemented with up to 3 additional joints and a gripper.

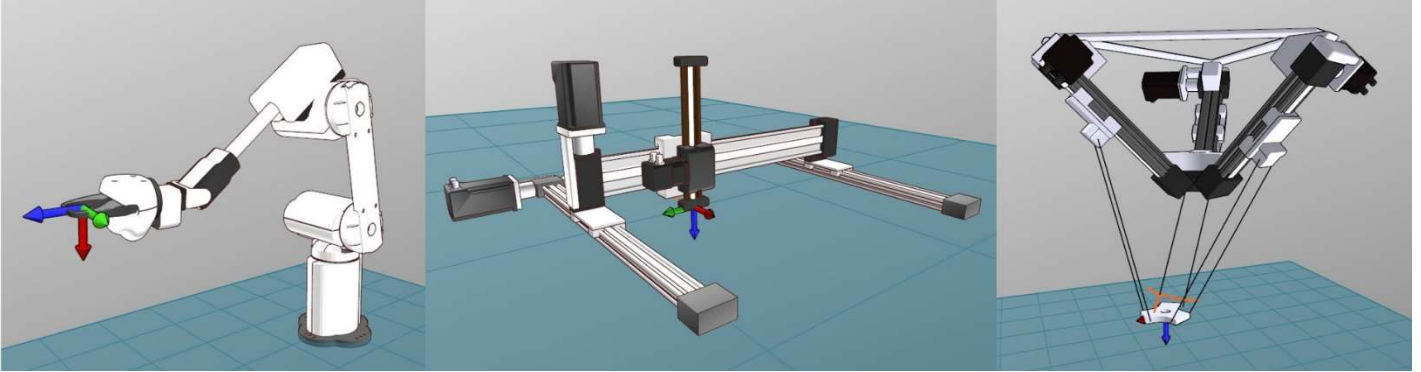
Programming

An easy to understand program editor allows teach-in programming:

- Motions are possible in joint and linear space with optional smoothing

- Based on digital inputs, loops and If-then-Else branches can be used.
- Variables and outputs can be linked with operations such as "and", "not" and "or".
- Target positions from cameras or databases can be transmitted via Ethernet interfaces.
- Subroutines allow you to structure the programs.





Mobile platforms

Mobile platforms with differential or mecanum drive can be integrated. Robot-platform combinations are controlled by a higher-level action planner connected via Ethernet.

Embedded control

As a compact and even more reliable alternative, a compact Linux-based controller is available. It can be mounted directly in the control cabinet. It is programmed via the graphical user interface of the CPRog software.

Further functions

Many further functionalities are available:

- Camera interface e.g. for ifm O2D
- Ethernet interface to control the robot and upload customer generated programs
- Further functions can be implemented customer-specific.

Versions and Hardware Interfaces

- Standard: For controlling the Commonplace Robotics motor controllers
- Professional: for controlling motor controller via CANopen interface
- Maker: for the control of motor controller by step/dir and Lynxmotion robots.

The Maker version is available free of charge for non-commercial applications.

System Requirements

- Windows 10, 64 bit
- Minimum performance: Intel Core i3 or similar
Recommended: Intel Core i5 or similar
- Depending on the hardware: Free USB port or Ethernet port
- .NET Framework 4.7.2 or higher
- OpenGL 3.0 or higher

→ → → www.cpr-robots.com