

# mobile camera robot MR8

## Introduction

The mobile camera robot MR8 combines a manipulator arm with an autonomously moveable base. Unrivaled camera trajectories become possible using the 6 degrees of freedom of the arm and its large workspace of about 1.8m radius. Camera positioning includes translation (X, Y, Z) and rotation (Yaw, Pitch, Roll). Target frames in space can be connected to obtain smooth trajectories running through all points without intermediate stop. To obtain exciting openings of broadcasting it is possible to synchronize motion of platform and arm. Despite its large amount of motion possibilities MR8 is easy to program. The mobile camera robot is integrated into the shot based cinneo control panel as any other device of the cinneo line. Teach in is done using the joystick pad.

## Virtual tracking data

Both arm and platform deliver virtual tracking to be fed into a virtual graphic system. The mobile base computes its own position absolutely in space without the need to modify the environment. It uses two safety approved SICK laserscanner S300 with 360° view around the platform to acquire environment data and compare it to an internal map.

## Mobile base

The platform features two motorized wheels in differential arrangement with high quality brushless motors and backlash free gearings and two castor wheels.

A SICK safety control evaluates emergency stop and scanner data. Four different safety areas can be defined by software and activated dynamically at runtime.

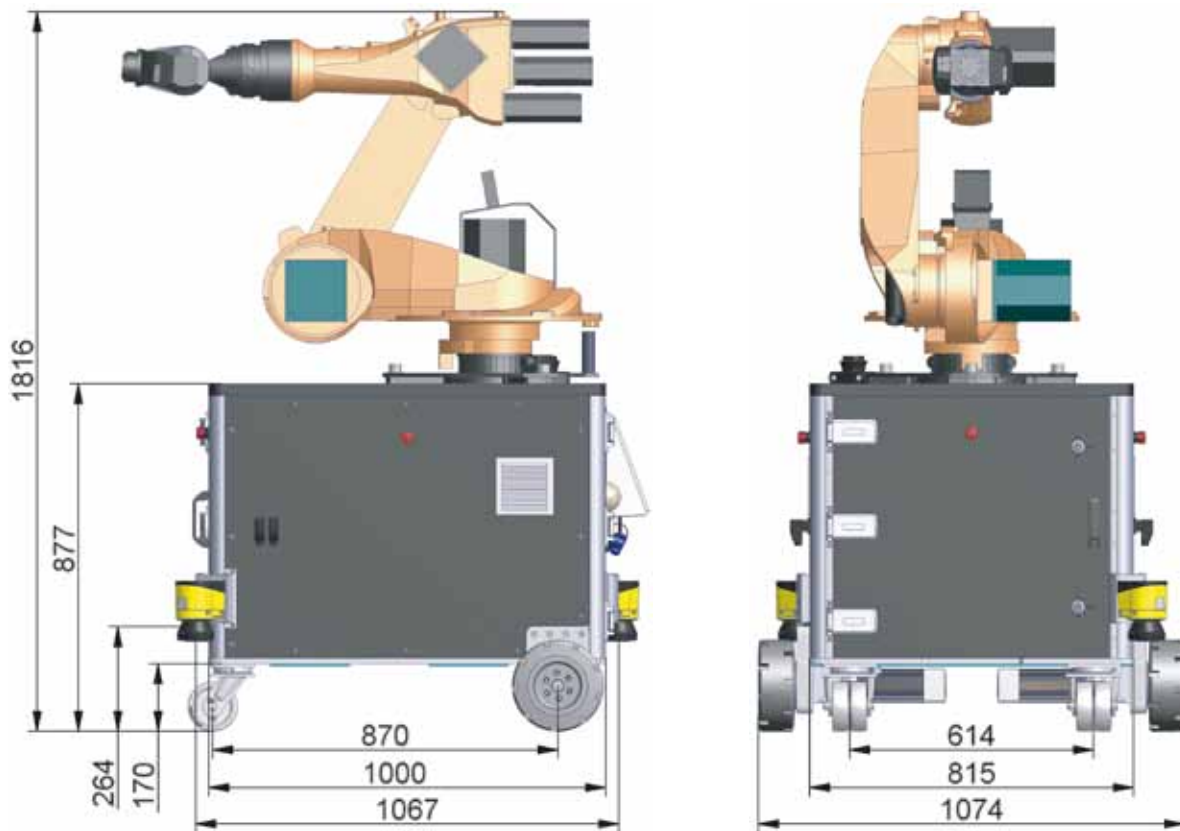
## Manipulator

The manipulator is a standard Kuka KR16KS with 16 kg payload. Only the motors were replaced by high torque smooth running servo drives and absolute encoders. Optional equipment for the arm are safety bumpers placed at joint 2 and at the wrist. For a product information sheet of the manipulator please refer to [www.kuka-robotics.com](http://www.kuka-robotics.com).

Platform and arm are controlled by Neobotix joystick pad and control panel software.. Please see product information sheets on Neobotix download page for details.



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## Technical Data

platform speed	translational < 1 m/s, rotational < 90°/s
weight	800 kg
manipulator payload	16 kg
manipulator speed	A1 < 120°/s A2 < 90°/s A3 < 120°/s A4, A5, A6 < 120°/s
safety system	SICK safety control Flexisoft 2 x SICK laserscanner multiple emergency stops bumper on arm
control software	cinneo control panel with joystick pad

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