

# KUKA



**KMR iiwa**

Always on the spot - safely.





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### Optimizes your production significantly.

The KMR iiwa is a combination of the sensitive LBR iiwa lightweight robot and a mobile, flexible platform. As the name and the individual components already suggest, the KMR iiwa stands out with its high degree of mobility and flexibility.

Manufacturing processes are changing constantly. This is why mobile robot systems must be very adaptable. Maximum mobility and autonomous working methods optimize your production significantly.



**Combinable.** Design your individual turnkey system solution. The modular KMR iiwa system offers numerous combinations of robot technology, mobile platforms and industrial components.

**Sensitive.** Seven special joint torque sensors on each axis of the LBR iiwa lightweight robot make it highly sensitive to its environment. It navigates safely and without protective fencing – external contact will cause it to stop immediately.

**Autonomous.** Thanks to the laser scanners, the mobile platform too can navigate fully autonomously. It monitors its environment. And it reacts immediately if a person or object is in the way.

**Agile.** Specially developed Mecanum wheels allow the mobile platform to move omnidirectionally and execute 360° rotations. A wheel consists of several rollers that are each aligned at an angle of 45° relative to the axle. This top-notch maneuverability shortens throughput times and reduces idle times in the manufacturing process.

**Precise.** The KMR iiwa achieves a positioning accuracy of up to ±0.1 millimeters, even in the tightest spaces.

**Intelligent.** With KUKA.Navigation-Solution, the KMR iiwa can reliably move around obstacles and look for a new route.

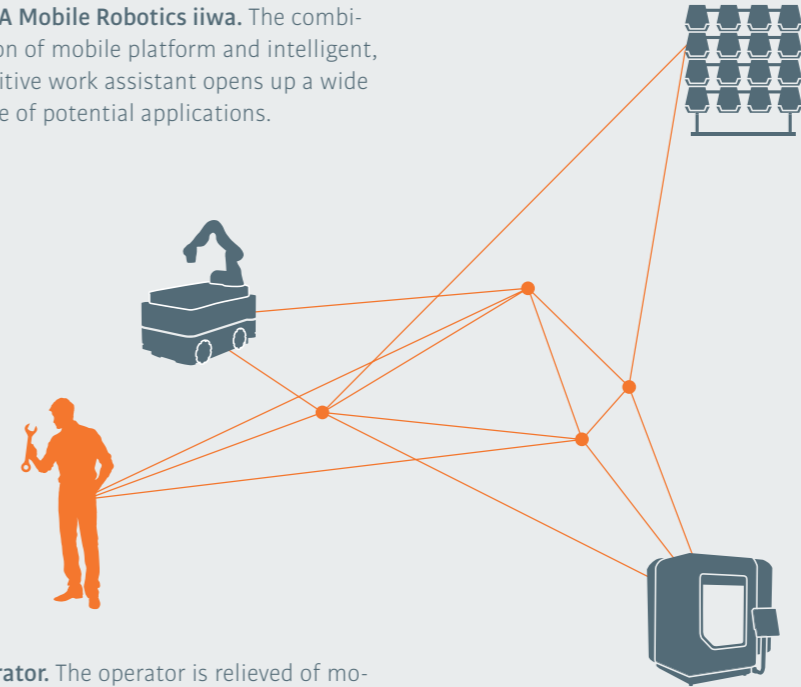
**Independent.** The vehicle and robot are supplied directly with power from Li-ion batteries.

**User-friendly.** KUKA Sunrise Cabinet and KUKA Sunrise.OS for vehicles and robots simplify the operation and use of the KMR iiwa.

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## Intelligent system.

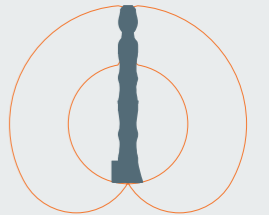
**KUKA Mobile Robotics iiwa.** The combination of mobile platform and intelligent, sensitive work assistant opens up a wide range of potential applications.



**High-bay racking.** Thanks to its innovative navigation system, the KMR iiwa operates autonomously and is able, for example, to set down machined workpieces or independently fetch required components.

**Machine tool.** The KMR iiwa takes over the tending of machine tools and relieves the human operator of strenuous and tiring tasks.

**Operator.** The operator is relieved of monotonous, non-ergonomic tasks and can concentrate on important processing steps.



LBR iiwa	LBR iiwa 14 R820	LBR iiwa 7 R800
Rated payload	14 kg	7 kg
Number of axes	7	7
Reach	820 mm	800 mm
Wrist variant	In-line wrist	In-line wrist
Mounting flange on axis 7	DIN ISO 9409-1-A50	DIN ISO 9409-1-A50
Pose repeatability	±0.15 mm	±0.1 mm
Axis-specific torque accuracy	±2 %	±2 %
Weight	29.9 kg	23.9 kg
Protection rating	IP 54	IP 54
Variants	CR	CR
Installation position	Floor, ceiling, wall	Floor, ceiling, wall

Mobile platforms	
Dimensions (H x W x B)	700 x 1,080 x 630 mm (with scanners and protected areas)
Weight	390 mm
Maximum payload	170 kg / 200 kg without LBR iiwa
Velocity in longitudinal direction	max. 3.6 km/h
Velocity in lateral direction	max. 2.0 km/h
Wheel diameter	250 mm
Cleanroom class	ISO 5

