



Sensitive cobotics\_LBR iisy



# Shaping future production landscapes \_lt's iisy.



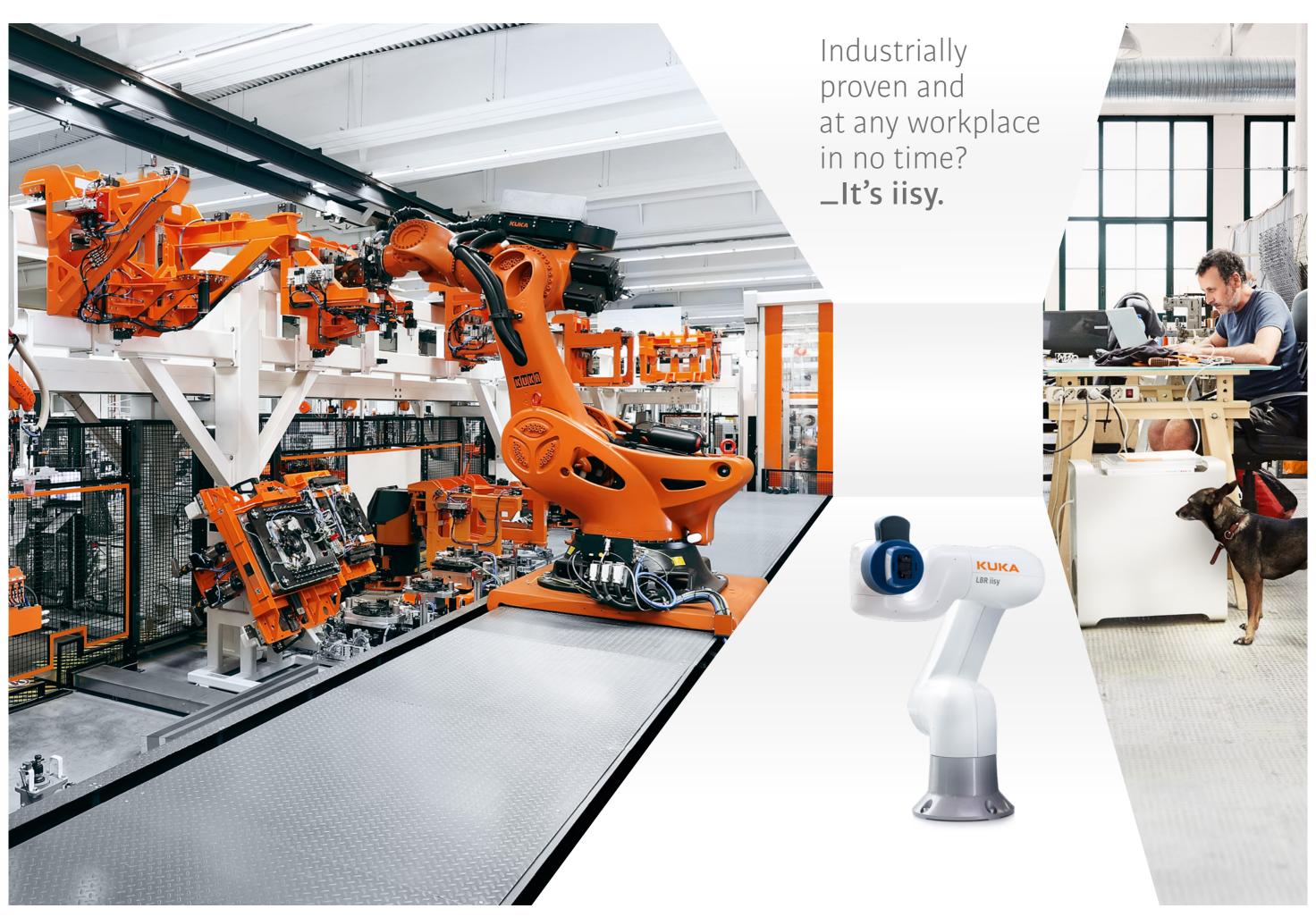
# LBR iisy

Blazing the trail to future production landscapes

Designing automation to be even more intuitive and introducing it into new areas – that is our passion. Already in 2004, we set a milestone in the history of robotics with the world's first cobot. As a pioneer and driver of innovative automation solutions, we do not define our standards by what already exists, but rather by the needs of the future. To this end, we have merged additional strands and interwoven them to form novel production landscapes in which humans, technology and data streams are networked.

The result of this synergy is incredibly effective and impressive both in industrial series production and in environments with dynamic, unstructured workplaces previously closed to automation.

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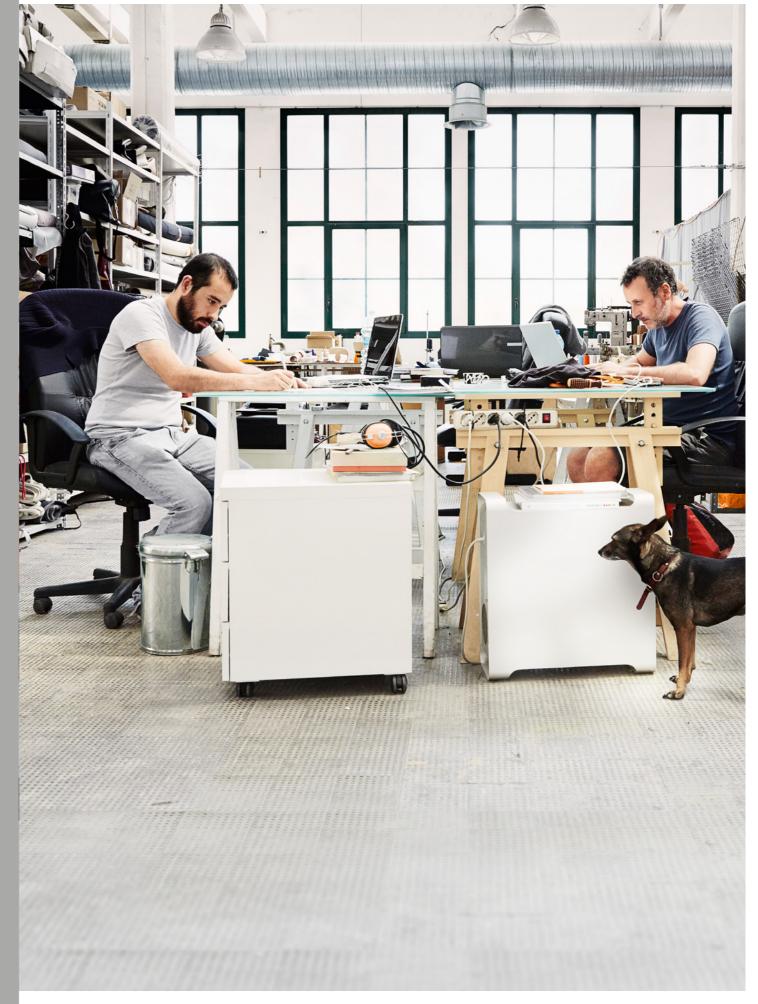


Shaping future production landscapes\_It's iisy.



Ready for immediate use in any environment – from engineered production lines to unstructured workplaces \_\_It's iisy.

- \_Loading or unloadin
- \_Packaging
- \_Testin
- \_Assemb
- \_Handling activitie
- \_Pick-and-place



Shaping future production landscapes

# The LBR iisy masters diverse worlds of production.

Thanks to its industry-proven technology, it can be integrated into predefined production processes in no time at all. In equal measure, the new lightweight robot also excels ad hoc in open, unstructured work environments with unpredictable and volatile conditions from one job to the next.



### Proven industrial suitability

The future-oriented technology of the LBR iisy is based on KUKA's full expertise – in particular, on the LBR iiwa and the KR 3 AGILUS.

The cobot supports all major industry-standard functions such as OPC UA, field bus protocols, digital and analog I/Os, safety and much more. As a result, the LBR iisy can be immediately integrated into any existing industrial environment.

## Ready for use at a moment's notice

The LBR iisy is ready for immediate use and can be quickly and easily reprogrammed for new tasks.

Another advantage: even in the event of unplanned interruptions, it remembers every motion or activity executed and can resume working without the need to be retaught.



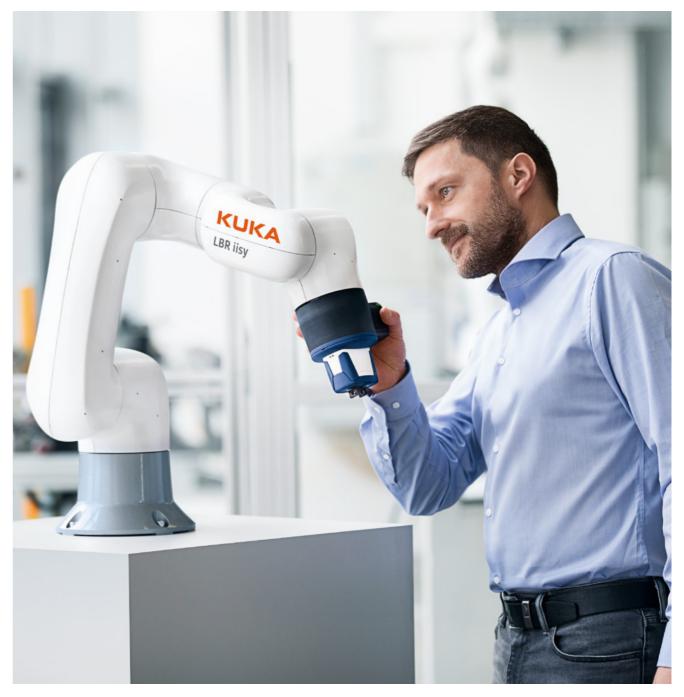
### Access to the KUKA ecosystem

The LBR iisy is fully embedded into the KUKA Industrie 4.0 ecosystem. Software apps enabling the LBR iisy's field of activity to be expanded will be globally available for download. The cloud solution KUKA Connect allows the cobot's data to be accessed and analyzed at any time.

### At home in any work environment

The LBR iisy is not only easy to operate, but also highly versatile. Whether for loading or unloading machines, packaging, precise testing, reliable assembly, handling or difficult research tasks – its payload of 3 kg and reach of 600 mm are perfectly suited to the challenges of confined workspaces.

The LBR iisy is extremely flexible and performs any task convincingly.



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Operator control concepts for every skill level – from Java programming to easy teaching of the cobot by manual guidance \_\_It's iisy.

- \_ Intuitiv
- \_ User-friend
- \_With various operator levels



Shaping future production landscapes.

# The LBR iisy can be immediately operated by anyone –

from an automation expert to a cobotics newcomer. Featuring various operator levels, the user-friendly system adapts highly flexibly to the corresponding level of user knowledge. As a result, the LBR iisy is equally at home in complex areas of automation as in unstructured environments where it interacts with semi-skilled personnel who have received only a minimum of training.



# Self-adjusting cobot makes for maximum flexibility

The LBR iisy can be programmed to adapt automatically to new work stations.

In search run mode, it locates relevant screw positions, for example, carries out fine adjustment of components and tightens screws autonomously. Even in the vicinity of existing machines, the cobot works independently and reliably in the exact position in relation to the workpiece. Workplaces do not have to be modified since the LBR iisy adapts flexibly to its surrounding conditions.

# Easy access through various operator levels

- 1. A powerful programming environment allows experts to implement even the most complex of applications.
- 2. The newly developed graphical user interface makes for fast and intuitive parameterization of work sequences without specific programming knowledge being required.
- 3. The LBR iisy can be easily taught by simple manual guidance.



# Professional tools for enhanced effectiveness

With the KUKA Simulation Suite, simple or complex production sequences can be defined, tested and optimized directly on a desktop. The results are then simply transferred to the real production environment.

The cloud-based KUKA Connect platform enables the monitoring and optimization of applications by delivering useful key performance indicators and process data.

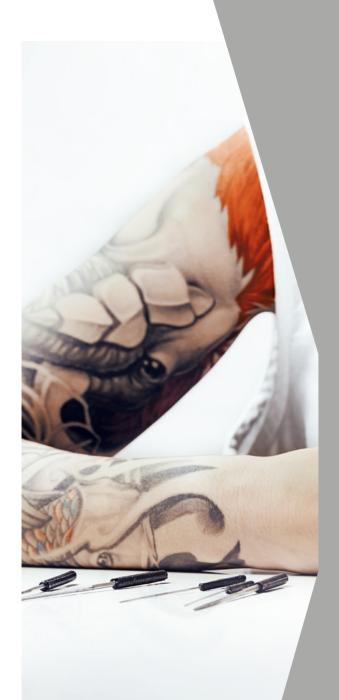




Quick programming of the LBR iisy via graphical user interface

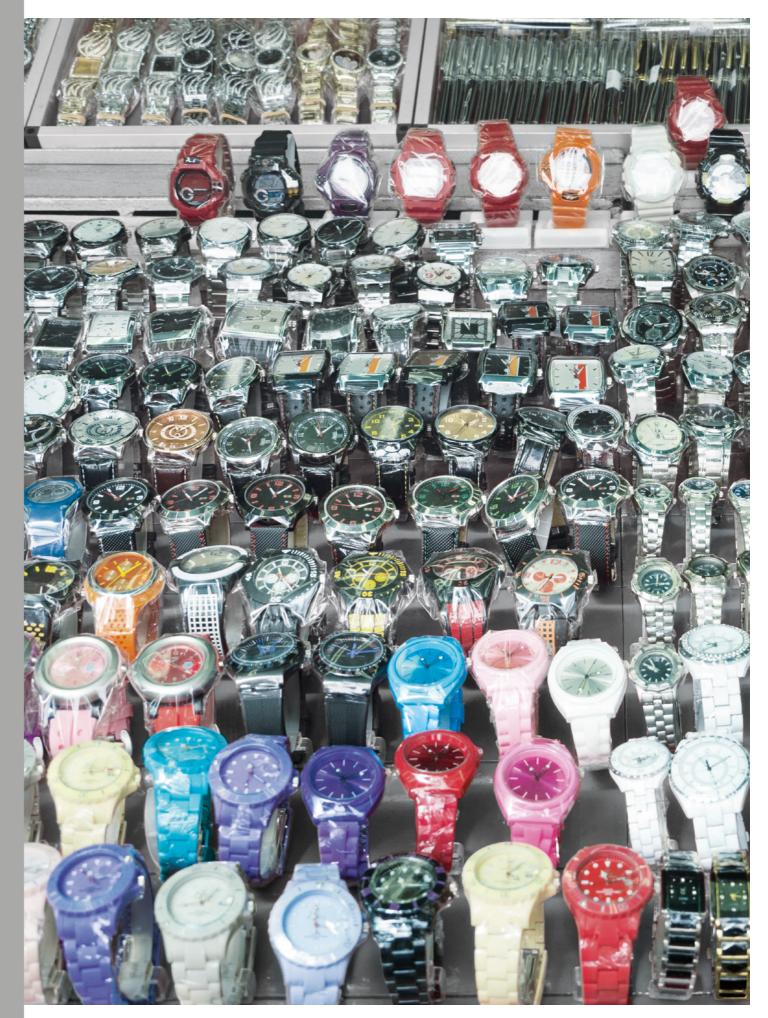
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Intelligently from a batch size of 1 all the way to mass production – quick transfer of knowledge to all workplaces of the same design \_\_It's iisy.

- \_Economically viable even for the smallest of batch size
- \_Once programmed, the LBR iisy can share its knowledge with an endless number of cobots
- Access to the complete KUKA ecosystem



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The LBR iisy is intelligent and extremely flexible. Thanks to its connectivity, it can adapt immediately to any manufacturing requirement. It produces the smallest of batches in no time at all and shares its knowledge with many other cobots. It interacts safely and sensitively with humans. Working on its own, it easily meets the performance requirements for high-speed applications.



### Supreme product quality

The LBR iisy fundamentally helps to enhance the work environment significantly. The smart, collaborative division of tasks between humans and cobots leads to increased precision and speed. This results in higher-grade, more flexible workplaces and improved product quality.



### Sensitive and fast

Despite its low procurement costs, the LBR iisy has high-grade joint torque sensors integrated in all six axes. They respond to the slightest of external forces and offer certified collision protection. When working on its own, the cobot delivers unique performance in the production environment.

It comes as ordered – equipped for universal or application-specific use "out of the box"

KUKA will offer preconfigured application modules and system components online in order to equip the LBR iisy for current needs in no time at all. As a result, the capabilities of the LBR iisy can be individually adapted to the respective process requirements at any time.

# Simply masterful – working alone or in a swarm

Since the LBR iisy can be taught extremely quickly, it fascinates users with its competitively low integration costs. Once it has been programmed, it can transfer its work processes to any number of LBR iisy cobots in no time at all.

Once taught, the LBR iisy can easily share its knowledge with other cobots.



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**KUKA** robot controller

# Gripper for HRC technology KUKA \_3D Perception

**KUKA Connect** 

**Graphical user interface** 

Fully equipped if desired – from gripper to 3D perception

All KUKA solutions are intelligent and modular – thus ensuring planning reliability. A big plus: the LBR iisy can be modified at any time. Regardless of the task to be mastered – whether it is an application from one of our community partners, a modern 3D perception system or a ready2\_use solution for immediate operation – the LBR iisy readily opens up new possibilities in automation.

Number of axes

Rated payload 3 kg

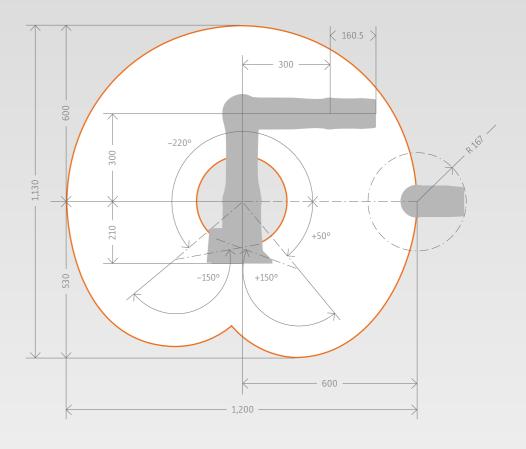
Max. reach 600 mm

Weight (excluding controller), approx. 18.8 kg

PLd/Cat3

Working envelope

Safety for HRC





Stay tuned: www.kuka.com/iisy

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