Robot controller
KR C5

Maximum performance, connectivity and flexibility – with the trend-setting latest generation of robot controllers from KUKA, the pulse of automated production is rising rapidly. The KR C5 integrates seamlessly into existing infrastructures and immediately delivers added value through more efficient performance in all application areas.

Highlights of the KR C5

• Durable and future-proof hardware with modular cabinet system
• Ethernet and digital IO interfaces, supports various cloud systems
• Easy installation, low total cost of ownership
• Wide range of options and hardware expansion possibilities
• Future-proof control platform for software products and digital services
KR C5
…the heartbeat of future production

The production of the future is smart, and with the KR C5 it is moving to a completely new level. The latest platform for robot controllers from KUKA offers possibilities for saving space, delivering highly efficient performance and at the same time conserving resources. This means that it can be seamlessly integrated into heterogeneous automation landscapes, and almost all KR C4 applications are still supported. Reduced hardware and energy requirements offer greater application potential with maximum efficiency. And thanks to the interconnectivity of the open platform design, mere data becomes valuable information.

Designed for highest connectivity
Seamless integration into OT, IT and cloud environments: together with various cloud systems, the KR C5 turns data into valuable information.

Designed for maximum scalability
The central power supply, a scalable modular cabinet system for robot controllers, additional axis modules and peripheral installations, and plug-independent cable feed-through ensure flexible application possibilities.

New System Software KSS 8.7 – fully compatible with KSS 8.6
The new System Software KSS 8.7 is functionally identical to KSS 8.6 and features identical software applications and technologies.

Including accessories
- KUKA smartPAD
- Plug package

Controller options
- Empty installation space and device plate
- US1 / US2 peripheral power supply
- Multiple IO and communication options
- Front panel interfaces
- Multiple cabinet lock options
- Set of rollers
- Cable holder
- Fork slots
- Removable SSD card
- KUKA smartPAD cable reel

Supported robot series
- KR CYBERTECH nano
- KR CYBERTECH
- KR IONTEC
- KR QUANTEC
- KR FORTEC

Interface for input /output signals
| XG12 16 input /output signals 24 V |
| Extension module PROFibus Master / Slave |
| Extension module DeviceNet Master / Slave |
| PROFINet / PROFIsafe |
| EthernetIP / CIP Safety |
| Extension module EtherCAT Slave / FSoE |
| Integrated Ethernet switch |

Technical data
| Power supply | AC 380–480 V 50 Hz–60 Hz 3-phase (without transformer) |
| Axes | 6 robot axes up to 6 additional axes |
| CPU architecture | Intel X86 (main CPU) + ARM (auxiliary CPU) |
| Internal storage | 60 GB (SSD M.2) |
| Dimensions (H x W x D) | dualcab 720 x 720 x 600 mm, controller 207 x 392 x 500 mm |
| Weight approx. | dualcab 70 kg, triplecab 90 kg, controller 22 kg |
| Protection class | IP 54 |
| Ambient temperature during operation | 0 °C–45 °C |
| Safety | ISO 10218-1: Industrial robots, ISO 13849-1: Cat. 3 / Performance Level d |
| Certification | UL / CSA (planned for 10 / 2021) |