

Specification



Payload	3kg		5kg		12kg	
Reach	630mm		915mm		1300mm	
Speed(Tool)	1m/s		1m/s		1m/s	
Weight	13kg		21kg		51kg	
Repeatability	± 0.1mm		± 0.1mm		± 0.1mm	
IP Level	IP 64		IP 54		IP 54	
Motion Range	• J1: ±360° • J3: ±160° • J5: ±360°	• J2: ±360° • J4: ±360° • J6: Infinite	• J1: ±360° • J3: ±165° • J5: ±360°	• J2: ±360° • J4: ±360° • J6: ±360°	• J1: ±180° • J3: ±165° • J5: ±170°	• J2: ±150° • J4: ±190° • J6: ±360°



Control Box

Size	450 mm x 560 mm x 223 mm(WxHxD)	
Communication Protocols	TCP/IP, EtherCAT, Modbus TCP	
External Force Detection Range	25Nm - 150Nm	
Internal I/O ports	Digital In (Type)	16 (PNP)
	Digital Out (Type)	16 (PNP, supply current limit 200mA)
	Analog In	2
	Analog Out	2
Weight	20.2kg	
Power	100-240 VAC, 50-60Hz	



Teaching Pendant

Size	340mm x 268mm x 81mm	
Weight	1.8kg	
Monitor	Display Size	12 inch
	Resolution	1024 x 768
	Touch Tech.	Resistive
User interface	Power Switch	1
	Emergency Switch	1
Port	USB 2.0	1
Cable Length (touchscreen ↔ control box)	5 m	
Accessory	T/P Holder	1

Hanwha
Collaborative
Robot

HCR

YOUR BEST ASSISTANT



Hanwha presents the collaborative robot HCR for a more convenient and safer future.

The collaborative robot HCR is easy to control and is flexible in responding to changes in production layout, effectively cutting investment and operating expenses. It not only automates manual work but also provides a safe and convenient work environment for employees.



HCR series are used in many different industries to solve a variety of challenges.

HCR-3: The small-lightweight collaborative robot, HCR-3 is ideal for narrow spaces that are not reachable by the operator. Benefits of infinite rotation on the end joint, it has an advantage of screw driving and assembly applications.

HCR-5: The most popular model, HCR-5 has its reach of 915mm which is equivalent to average man's arm. HCR-5 helps employees to improve upon existing applications to increase productivity.

HCR-12: Thanks to its large working radius, HCR-12 is easy to pick-and-place heavy products. Notably, it is suitable for loading-unloading and palletizing applications.



Due to its easy deployment and flexible mounting options, HCR offers the optimal use of space



* Ceiling-mount is not recommended for HCR-12



HCR provides stable use and is capable to collaborate with employees.

Safety functions

- Collision detection (25NM~150NM), Impact mitigation (to prevent jamming)
- Joint rotation limit, joint speed limit, TCP speed limit and virtual safety fence
- Reliable control system with redundant design of safety module

* ISO-13849 Cat3 PLd achieved



Intuitive software GUI allows anyone to set-up and operate HCR

To use traditional industrial robot, operators should have long-term training or hire the experts from outside. However, HCR operation software "Rodi" let even unexperienced operators intuitively and efficiently control the robot or even peripheral systems.

- Easy programming thanks to icon based GUI. (provides script systems)
- Timeline basis programming allows users to intuitively monitor the workflow
- API makes it easier to develop customer applications



Flexibility in different applications

Thanks to its flexible deployment, safe collaboration and easy use, HCR can be applied to various process, from simple tasks such as pick-and-place and palletizing to screw driving, polishing and dispensing.

Also, HCR-5 achieved the clean class ISO 2. It enlarged its application to meet the requirement of clean environment.

