



UFACTORY xArm

Technical Specification

Since its introduction in 2018, the UFACTORY xArm series has delivered dependable automation built on harmonic-drive actuation, lightweight carbon-fiber construction, and open-source software. Available in three model variants, the xArm lineup offers reliable performance, flexible integration, and strong value for a wide range of applications.



SPECIFICATIONS			
Robot	xArm 5	xArm 6	xArm 7
Payload	3 kg	5 kg	3.5 kg
Reach	700 mm	700 mm	700 mm
Degrees of freedom	5	6	7
Repeatability	±0.1 mm	±0.1 mm	±0.1 mm
Maximum TCP speed	1 m/s	1 m/s	1 m/s
Robot arm weight	11.3 kg	12.5 kg	14.3 kg

PERFORMANCE	
Operating temperature range	0–50 °C / 32–122 °F
Power consumption	Typical: 200 W; Maximum: 500 W
Power supply input	24 VDC, 20.8 A

PHYSICAL	
Footprint	Ø 126 mm
Materials	Aluminum, carbon fiber
Base mounting pattern	5 x M5

FEATURES	
Arm mounting	Any orientation

TOOL FLANGE	
Tool flange I/O	TI x 2; TO x 2; T-AI x 2; RS-485 x 1
Communication protocol	Modbus RTU

SOFTWARE AND COMPLIANCE	
Operating system support	Windows 10 or later; macOS 10.10 or later; Ubuntu 20.04 LTS or later
Development support	ROS and ROS 2 packages; Python and C++ SDKs
Control software	UFACTORY Studio (web-based control software hosted on the control box)
Warranty & support	1-year limited warranty; lifetime technical support
Certifications	CE certified

AXIS MOVEMENT			
Robot	xArm 5	xArm 6	xArm 7
Maximum joint speed	180°/s	180°/s	180°/s
Joint 1 range	±360°	±360°	±360°
Joint 2 range	-117° to +116°	-117° to +116°	-117° to +116°
Joint 3 range	-219° to +10°	-219° to +10°	±360°
Joint 4 range	-97° to +180°	±360°	-6° to +225°
Joint 5 range	±360°	-97° to +180°	±360°
Joint 6 range		±360°	-97° to +180°
Joint 7 range			±360°

CONTROL BOX SPECIFICATIONS		
	AC Control Box	DC Control Box
Power input	100-240 VAC, 47-63 Hz	24-72 VDC
Power output	24 VDC, 20.8 A	24 VDC, 672 W max.
Weight	3.4 kg	2.5 kg
Dimensions (L x W x H)	269 x 178 x 86 mm	209 x 176 x 82 mm

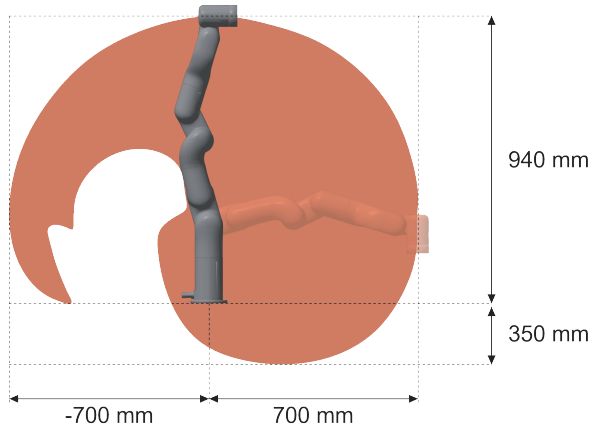
Control box I/O	8 × CI, 8 × CO, 8 × DI, 8 × DO, 2 × AI, 2 × AO
Hardware interfaces	Ethernet; RS-485 master x 1; RS-485 slave x 1
Warranty & support	1-year limited warranty; lifetime technical support



Dimensions, Reach and Interfaces

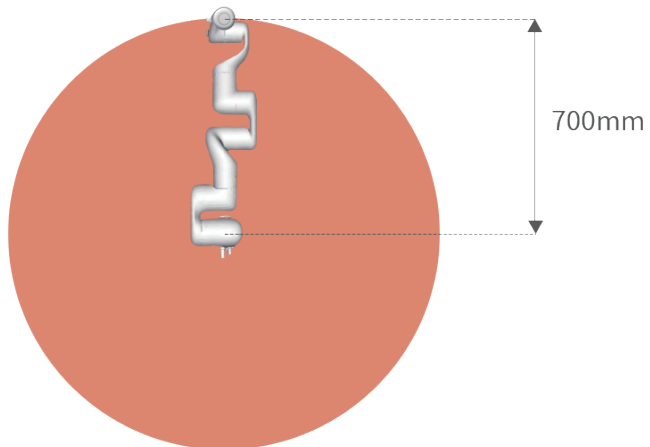
Dimensions and reach - side view

Working range diagrams are provided for safety assessment purposes only.

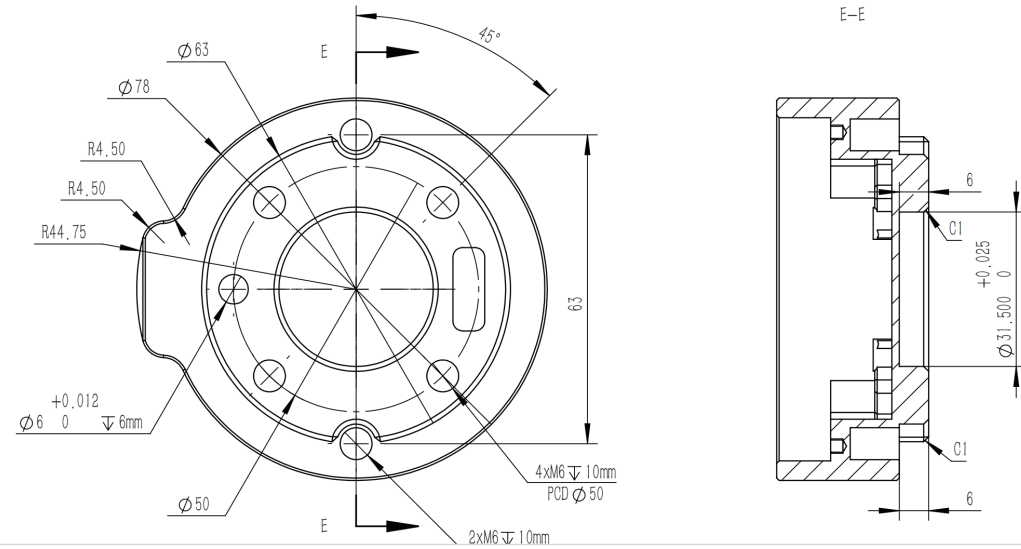


Dimensions and reach - top view

Working range diagrams are provided for safety assessment purposes only.



Tool flange



Base flange

