



UFACTORY



UFACTORY XARM

Technical Specification

SHENZHEN UFACTORY CO., LTD.

UFACTORY xArm series Specifications



PERFORMANCE				
*1.Ambient Temperature Range		0-50°C		
Power Consumption		Min 8.4 W, Typical 200 W, Max 400 W		
Input Power Supply		24V DC, 16.5A		
PHYSICAL				
Footprint		Ø 126 mm		
Materials		Aluminum, Carbon Fiber		
Base Connector Type		M5*5		
FEATURES				
ISO Class Cleanroom		5		
Robot Mounting		Any		
I/O PORTS				
Controller	8*CI	8*CO	2*AI	2*AO
End Effector	2*Digital Input	2*Digital Output	2*AI	1*RS485
COMMUNICATION (ROBOTIC ARM)				
Communication Protocol		self-defined		
COMMUNICATION (CONTROL BOX)				
Communication Protocol		Modbus TCP		
Communication Mode		Ethernet		
END EFFECTOR COMMUNICATION PROTOCOL				
End Effector Communication Protocol		Modbus RTU		
End Effector Communication Mode		RS-485		

1. The operating temperature of the robot is 0-50 °C. When the joint is continuously operated at high speed, please lower the ambient temperature.

UFACTORY xArm series Specifications

SPECIFICATION			
	xArm 5 Lite	xArm 6	xArm 7
Payload (kg)	3kg	5kg	3.5kg
Reach (mm)	700mm	700mm	700mm
Degrees of Freedom	5	6	7
Repeatability (mm)	±0.1mm	±0.1mm	±0.1mm
Maximum Speed (m/s)	1m/s	1m/s	1m/s
Weight (kg) (robot arm only)	11.2kg	12.2kg	13.7kg



MOVEMENT				
	Robot Arm	xArm 5 Lite	xArm 6	xArm 7
Maximum Joint Speed		180°/s	180°/s	180°/s
Working Range	Joint 1	±360°	±360°	±360°
	Joint 2	-118°~120°	-118°~120°	-118°~120°
	Joint 3	-225°~11°	-225°~11°	±360°
	Joint 4	-97°~180°	±360°	-11°~225°
	Joint 5	±360°	-97°~180°	±360°
	Joint 6	—	±360°	-97°~180°
	Joint 7	—	—	±360°

*See manual for further information

Gripper



ELECTRICAL SPECIFICATIONS

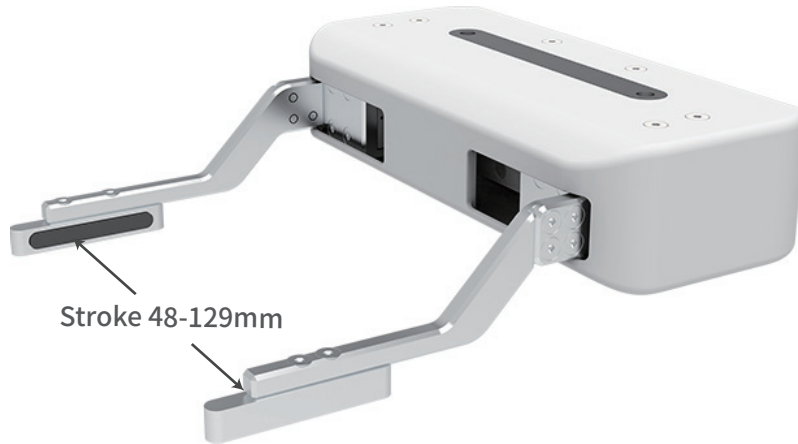
Rated Supply Voltage	24V DC
Absolute Maximum Supply Voltage	28V DC
Static Power Consumption (minimum power consumption)	1.5W
Peak Current	1.5A
Weight	802g
Maximum Gripping Force	30N

CONTROL

Communication Mode	RS-485
Communication Protocol	Modbus RTU
Programmable Gripping Specification	Position, Speed
Feedback	Position

*See manual for further information

Bio Gripper



CONTROL

Communication Mode	RS-485
Communication Protocol	Modbus RTU
Programmable Gripping Specification	Speed Control
Status Indication	Working Status, Power
Feedback	Drop Detection, Pick-up Detection

ELECTRICAL SPECIFICATIONS

Rated Supply Voltage	24V DC
Absolute Maximum Supply Voltage	28V DC
Static Power Consumption (minimum power consumption)	0.96W
Peak Current	1.5A
Maximum Gripping Force	20N
Weight	816g

Vacuum Gripper



ELECTRICAL SPECIFICATIONS

Rated Supply Voltage	24V DC
Absolute Maximum Supply Voltage	28V DC
Vacuum	78%
Air flow (L/min)	> 5.6L/min
Weight (g)	610g
Dimensions(L*W*H)	122.5*91.6*75mm
Payload (kg)	≤5kg

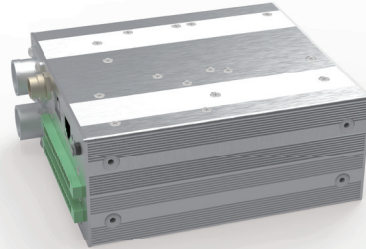
ELECTRICAL SPECIFICATIONS

Noise Level(30cm away)	<60dB
Quiescent Current (mA)	30mA
Peak Current (mA)	400mA
Communication Mode	Digital IO
State Indicator	Power,Working Status
Feedback	Air Pressure (Low or Normal)

Control Box



AC Control Box



DC Control Box

ELECTRICAL SPECIFICATIONS

	AC Control Box	DC Control Box
Input	100-240VAC 50/60Hz	24VDC
Output	24VDC 16.5A	24VDC 16.5A
Weight	3.8kg	1.6kg
Dimension(L*W*H)	280*200*116mm	180*145*68mm
Control Box IO	8*CI (Digital In) 8*CO (Digital Out)	2*AI (Analog In) 2*AO (Analog Out)
Communication	Ethernet	Ethernet



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