

FANUC

ROBOT

GENERAL CATALOG



Solve Your Labor Shortages With FANUC Robots!



65 years of experience with CNC and more than 45 years of experience with industrial robots.
More than 1 million robots shipped worldwide.

High Reliability

- In-house design and manufacture (mechanical arms, servo motors, controllers, software and sensors), with thorough testing.



Easy to use and Safe Robot

- Intuitive and Easy to use even for novice users.
- Safely stops with light force.
- Easy installation.



AI robot to solve labor shortage

- No additional hardware, easy to use integrated robot vision.
- FANUC supports for both robots and vision.
- Reduce jig and equipment costs with FANUC robots.



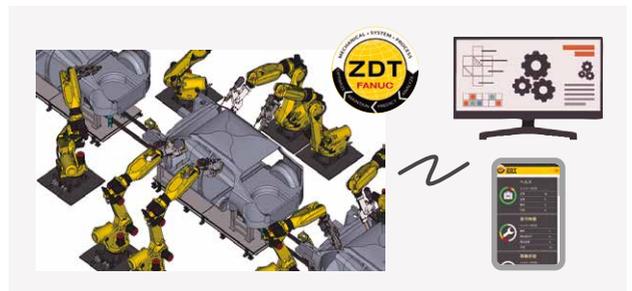
Visualize designs with ROBOGUIDE

- Layout design and robot programming.
- Highly accurate simulation.
- Review the robot system with VR goggles.



Utilize ZDT to save manpower for maintenance

- Zero downtime with failure prediction.
- Process status monitoring and traceability.
- Notification of optimal maintenance timing.



FANUC Robot Lineup



Collaborative Robot

FANUC Robot CRX		CRX-3iA	CRX-5iA	CRX-10iA	CRX-10iA/L	CRX-20iA/L	CRX-30iA
						CRX/20-14A	CRX/30-18A
	Controlled axes	6					
	Max. payload at wrist	3kg	5kg	10kg		20kg	30kg
	Motion range(X,Y) *To end of flange(J4=+90deg.)	692mm, 1384mm	994mm, 1988mm	1249mm, 2498mm	1418mm, 2836mm		1756mm(30kg payload mode), 3778mm 1889mm(25kg payload mode), 3778mm
	Repeatability	±0.02mm	±0.03mm	±0.04mm			±0.05mm
	Mass	11kg	25kg	40kg		41kg	135kg
	Installation	Floor, Upside-down, Angle					
	Matching controller	· R-30iB Mini Plus ... CRX-3iA, 5iA, 10iA, 10iA/L, 20iA/L, 30iA · R-50iA(A-Cabinet), R-50iA Mate ... CRX/20-14A, 30-18A					
Application	Handling, Assembling, Arc welding						
FANUC Robot CR		CR/50F-16B					
	Controlled axes	6					
	Max. payload at wrist	50kg					
	Motion range(X,Y)	1643mm(50kg payload mode), 3266mm 1831mm(35kg payload mode), 3266mm					
	Repeatability	±0.03mm					
	Mass	386kg					
	Installation	Floor					
	Matching controller	R-50iA(A-Cabinet)					
Application	Handling, Assembling						

SCARA Robot

FANUC Robot SR		SR-3iA	SR-3iA/H	SR-6iA	SR-6iA/H	SR-12iA	SR-20iA
	Controlled axes	4	3	4	3	4	
	Max. payload at wrist	3kg		6kg		12kg	20kg
	Motion range(X,Y)	400mm, 800mm		650mm, 1300mm		900mm, 1800mm	1100mm, 2200mm
	Stroke(Z)	200mm		210mm		300mm(option: 450mm)	300mm(option: 450mm)
	Repeatability	±0.004deg.		±0.004deg.		±0.005deg.	
	J1+J2 axis			±0.01mm		±0.02mm	
	J3 stroke			±0.01mm			
J4 axis							
Mass	19kg	17kg	30kg	28kg	53kg	64kg	
Installation	Floor, Wall						
Matching controller	R-30iB Compact Plus						
Application	Handling						
FANUC Robot SR		SR-3iA/C	SR-6iA/C	SR-12iA/C	SR-3iA/U	SR-9iA/R	
	Controlled axes	4					
	Max. payload at wrist	3kg	6kg	12kg	3kg	9kg	
	Motion range(X,Y)	400mm, 800mm	650mm, 1300mm	900mm, 1800mm	350mm, 700mm	620mm, 1240mm	
	Stroke(Z)	200mm	210mm	300mm(option: 450mm)	140mm	200mm	
	Repeatability	±0.004deg.		±0.005deg.		±0.004deg.	
	J1+J2 axis			±0.01mm			
	J3 stroke			±0.01mm			
J4 axis							
Mass	21kg	32kg	56kg	27kg	76kg		
Installation	Floor, Wall				Upside-down	Rack	
Matching controller	R-30iB Compact Plus						
Application	Handling, Clean room				Handling		

Delta Robot

FANUC Robot DR		/05-3A-6X	/05-3A	/05-4A-6X	/05-4A
	Controlled axes	6	4	6	4
	Max. payload at wrist	0.5kg(option: 1kg)			
	Motion range(X,Y)	φ280mm, 100mm		φ420mm, 150mm	
	Repeatability	±0.02mm			
	Mass(without stand)	17kg	14kg	20kg	17kg
	Installation	Floor, Upside-down, Angle			
	Matching controller	R-50iA Mate			
Application	Handling, Assembling	Handling	Handling, Assembling	Handling	
FANUC Robot DR		/3-8A	/3-11A	/6-14A	/12-14A-3X
	Controlled axes	4		4	3
	Max. payload at wrist	3kg		6kg(option: 8kg)	12kg
	Motion range(X,Y)	φ800mm, 300mm	φ1130mm, 400mm	φ1350mm, 500mm	
	Repeatability	±0.03mm			
	Mass	130kg		160kg	155kg
	Installation	Upside-down			
	Matching controller	R-50iA(A-Cabinet), R-50iA Mate			
Application	Handling				
FANUC Robot DR		/6-12B Stainless		/8-16B	
	Controlled axes	4			
	Max. payload at wrist	6kg		8kg	
	Motion range(X,Y)	φ1200mm, 450mm		φ1600mm, 500mm	
	Repeatability	±0.03mm			
	Mass	250kg		170kg	
	Installation	Upside-down			
	Matching controller	R-50iA(A-Cabinet), R-50iA Mate			
Application	Handling				



Small/Medium Size Robot, Arc Welding Robot

FANUC Robot LR Mate		/4-6D Entry	/4-6D	/7-7D	/14-7D			
FANUC Robot ARC Mate						/7-9D	/14-9D	
	Controlled axes	6						
	Max. payload at wrist	4kg		7kg	14kg	7kg	14kg	
	Motion range(X,Y)	550mm, 970mm		717mm, 1274mm		911mm, 1643mm	911mm(load capacity<12kg), 1643mm 820mm(load capacity≥12kg), 1643mm	
	Repeatability	±0.01mm						
	Mass	20kg		25kg		27kg		
	Installation	Floor, Upside-down		Floor, Upside-down, Angle				
	Matching controller	R-50iA Mate						
Application	Handling, Assembling		Handling, Assembling, Arc welding, Sealing, Mold release spray, Deburring					
FANUC Robot LR Mate		/7-7D Wash	/7-7D Food/Clean	/7-9D Food/Clean				
	Controlled axes	6						
	Max. payload at wrist			7kg				
	Motion range(X,Y)	717mm, 1274mm		911mm, 1643mm		717mm, 1274mm		
	Repeatability	±0.01mm						
	Mass	27kg	25kg	27kg	24kg			
	Installation	Floor, Upside-down, Angle						
	Matching controller	R-50iA Mate						
Application	Handling, Washing		Handling, Assembling, Clean room		Handling			
FANUC Robot LR Mate		/10-11A	/10-11A Food/Clean	/25-19A	/25-19A Food/Clean			
	Controlled axes	6						
	Max. payload at wrist	10kg		25kg		35kg		
	Motion range(X,Y)	1101mm, 1988mm		1853mm, 3345mm		1445mm, 2591mm		
	Repeatability	±0.01mm		±0.02mm				
	Mass	46kg		210kg		205kg		
	Installation	Floor, Upside-down, Angle						
	Matching controller	R-50iA Mate		R-50iA(A-,B-,C-Cabinet), R-50iA Mate				
Application	Handling, Assembling, Sealing, Mold release spray, Deburring	Handling, Assembling, Clean room	Handling, Assembling, Arc welding, Sealing, Deburring	Handling, Assembling, Clean room	Handling, Assembling, Arc welding, Sealing, Deburring			
FANUC Robot ARC Mate								
FANUC Robot M-10		/16-11D	/12-14D	/10-16D				
	Controlled axes	6						
	Max. payload at wrist	16kg	12kg	10kg	8kg			
	Motion range(X,Y)	1103mm, 1977mm	1441mm, 2616mm	1636mm, 3006mm	2032mm, 3762mm			
	Repeatability	±0.02mm		±0.03mm				
	Mass	145kg		150kg		180kg		
	Installation	Floor, Upside-down, Angle *Floor, Upside-down for 4BK						
	Matching controller	R-50iA(A-,B-,C-Cabinet), R-50iA Mate						
Application	Handling, Assembling, Arc welding, Sealing, Deburring							
FANUC Robot ARC Mate								
FANUC Robot M-20		/25-18D			/35-18D			
	Controlled axes	6						
	Max. payload at wrist	25kg	35kg		12kg			
	Motion range(X,Y)	1831mm, 3461mm		2272mm, 4343mm				
	Repeatability	±0.02mm		±0.03mm				
	Mass	250kg						
	Installation	Floor, Upside-down, Angle						
	Matching controller	R-50iA(A-,B-,C-Cabinet), R-50iA Mate						
Application	Handling, Assembling, Arc welding, Sealing, Deburring							
FANUC Robot M-710		/50-26D	/70-21D	/12-31C	/20-31C	/20-26C	/50-20C-5X	
	Controlled axes	6						
	Max. payload at wrist	50kg	70kg	12kg	20kg			
	Motion range(X,Y)	2606mm, 4758mm	2104mm, 3788mm	3123mm, 5609mm	3110mm, 5583mm	2582mm, 4609mm	2003mm, 3451mm	
	Repeatability	±0.04mm		±0.03mm		±0.06mm		
	Mass	600kg	580kg	540kg		530kg	540kg	
	Installation	Floor, Upside-down, Angle						
	Matching controller	R-50iA(A-,B-,C-Cabinet)						
Application	Handling, Assembling, Arc welding, Sealing, Spot welding, Deburring, Laser cutting					Handling		



M-800/60-20B M-810/270-27B R-1000/80-22A R-2000/210F-27C R-2000/165R-31C R-2000/210F-26D Hollow R-2000/270F-27C M-900/360-27B M-910/700F-28B

Small/Medium Size Robot

FANUC Robot M-800		/60-20B		/190-20B		/270-27B	
FANUC Robot M-810							
	Controlled axes			6			
	Max. payload at wrist	60kg		190kg		270kg	
	Motion range(X,Y)	2040mm, 3221mm		2040mm, 2739mm		2687mm, 3787mm	
	Repeatability	±0.015mm		±0.02mm		±0.03mm	
	Mass	820kg		1360kg		1430kg	
	Installation			Floor			
	Matching controller			R-50iA(A,B,C-Cabinet)			
	Application	Laser machining, Sealing, Machining				Machining	
FANUC Robot R-1000		/80-22A		/100-22A		/130-22A	
	Controlled axes			6			
	Max. payload at wrist	80kg		100kg		130kg	
	Motion range(X,Y)			2230mm, 3738mm			
	Repeatability			±0.03mm			
	Mass	620kg		665kg		675kg	
	Installation			Floor, Upside-down			
	Matching controller			R-50iA(A,B,C-Cabinet)			
	Application			Handling, Assembling, Sealing, Spot welding			

Large Size Robot

FANUC Robot R-2000		/100F-26D Hollow		/165F-26D Hollow		/210F-26D Hollow		/165F-27C		/210F-27C		/240F-27C		/125F-31C	
	Controlled axes							6							
	Max. payload at wrist	100kg		165kg		210kg		165kg		210kg		240kg		125kg	
	Motion range(X,Y)			2605mm, 3315mm				2655mm, 3414mm				3100mm, 4304mm			
	Repeatability							±0.05mm							
	Mass			1150kg						1090kg				1115kg	
	Installation									Floor					
	Matching controller									R-50iA(A,B,C-Cabinet)					
	Application			Handling, Assembling, Sealing, Spot welding, Press to press handling, Deburring											
FANUC Robot R-2000		/270F-27C		/210F-31C		/165R-31C		/210R-31C		/270R-31C		/100R-35C			
	Controlled axes							6							
	Max. payload at wrist	270kg (option: 300kg)		210kg		165kg		210kg		270kg		100kg			
	Motion range(X,Y)	2655mm, 3414mm		3100mm, 4304mm				3095mm, 4733mm				3540mm, 5623mm			
	Repeatability							±0.05mm							
	Mass	1320kg		1350kg				1370kg		1590kg		1495kg			
	Installation			Floor						Rack					
	Matching controller									R-50iA(A,B,C-Cabinet)					
	Application			Handling, Assembling, Sealing, Spot welding, Press to press handling, Deburring								Press to press handling			
FANUC Robot R-2000		/190-20C		/220U-25C		/210F-25C Wash									
	Controlled axes			6											
	Max. payload at wrist	190kg		220kg		210kg									
	Motion range(X,Y)	2040mm, 3170mm		2518mm, 3414mm		2450mm, 3415mm									
	Repeatability	±0.03mm		±0.05mm		±0.10mm									
	Mass	1120kg		1020kg		1180kg									
	Installation	Floor, Upside-down		Upside-down		Floor									
	Matching controller					R-50iA(A,B,C-Cabinet)									
	Application	Handling, Assembling, Sealing, Spot welding, Press to press handling, Deburring				Washing									
FANUC Robot M-900		/360-27B		/280-31B		/280-27B		/330F-32B		/200R-35A					
FANUC Robot M-910												/700F-28B /400F-37B			
	Controlled axes							6							
	Max. payload at wrist	360kg		280kg		330kg		200kg		700kg		400kg			
	Motion range(X,Y)	2655mm, 3308mm		3103mm, 4200mm		2655mm, 3308mm		3203mm, 3539mm		3507mm, 3876mm		2832mm, 3288mm, 3704mm*, 4621mm			
	Repeatability							±0.1mm							
	Mass	1540kg		1600kg		1700kg		1780kg		2670kg		3030kg, 3150kg			
	Installation			Floor, Upside-down, Angle		Floor		Rack		Floor					
	Matching controller					R-50iA(A,B,C-Cabinet)		R-50iA(B,C-Cabinet)		R-50iA(B-Cabinet)					
	Application											Handling, Assembling, Sealing, Spot welding, Press to press handling, Deburring			

* Wrist motion is restricted when the wrist payload is over 300kg.



FANUC Robot M-950		/500F-28A		/1000F-33A		/550F-46A			
	Controlled axes	6							
	Max. payload at wrist	500kg		1000kg		550kg			
	Motion range(X,Y)	2830mm, 3610mm		3253mm, 4297mm		4601mm, 6473mm			
	Repeatability	±0.08mm		±0.10mm					
	Mass	2500kg		5300kg		5800kg			
	Installation	Floor							
	Matching controller	R-50iA(B-,C-Cabinet)		R-50iA(A-,B-,C-Cabinet)					
	Application	Handling							
	FANUC Robot M-2000		/1200F-37A		/900F-47A		/2300F-37A		/1700F-47A
	Controlled axes	6							
	Max. payload at wrist	1200kg(option: 1350kg)		900kg		2300kg		1700kg	
	Motion range(X,Y)	3734mm, 4683mm		4683mm, 6209mm		3734mm, 4683mm		4683mm, 6209mm	
	Repeatability	±0.18mm				±0.27mm			
	Mass	8600kg		9600kg		11000kg		12500kg	
	Installation	Floor							
	Matching controller	R-50iA(A-,B-,C-Cabinet)							
Application	Handling								

Large-size Palletizing Robot

FANUC Robot M-410		/110F-24C		/140F-29B-5X		/185F-31C		/315F-31C		/500F-31C		/800F-32C			
	Controlled axes	4		5		4		4		4		4			
	Max. payload at wrist	110kg		140kg		185kg		315kg		500kg		800kg			
	Motion range(X,Y)	2403mm, 2238mm		2850mm, 3546mm		3143mm, 2958mm		3143mm, 2958mm		3143mm, 2958mm		3203mm, 3028mm			
	Repeatability	±0.05mm												±0.04mm	
	Mass	1030kg		1200kg		Pedestal type base 1615kg ^{*1)} Compact base 1330kg ^{*2)}		Pedestal type base 2410kg ^{*1)} Compact base 1910kg ^{*2)}		Pedestal type base 2410kg ^{*1)} Compact base 1910kg ^{*2)}		2500kg			
	Installation	Floor													
	Matching controller	R-50iA(A-,B-,C-Cabinet)													
Application	Handling														

*1) Controller mass(120kg) is included. *2) Controller mass(120kg) is not included.

Paint Robot

FANUC Robot CRX		CRX-10iA/L Paint	
	Controlled axes	6	
	Max. payload at wrist	10kg	
	Motion range(X,Y)	1418mm, 2836mm *To end of flange(J4=+90deg.)	
	Repeatability	±0.04mm	
	Mass	47kg	
	Installation	Floor, Upside-down, Angle	
	Matching controller	R-30iB Mini Plus	
Application	Painting		

FANUC Robot P-40iA, P-350iA, P-250iB		P-40iA		P-350iA/45		P-250iB/15	
	Controlled axes	6					
	Max. payload at wrist	5kg		45kg		15kg	
	Motion range(X,Y)	1300mm, 2308mm		2606mm, 4575mm		2800mm, 5272mm	
	Repeatability	±0.03mm		±0.06mm		±0.2mm	
	Mass	110kg		590kg		530kg	
	Installation	Floor, Upside-down, Wall, Rack, Angle					
	Matching controller	R-30iB Mate Plus		R-30iB Plus(A-Cabinet)			
Application	Painting						

FANUC Robot P-1000iA		P-1000iA	
	Controlled axes	7	
	Max. payload at wrist	15kg	
	Motion range(X,Y)	3396mm, 4391mm(Metal arm) 3348mm, 4343mm(Plastic arm)	
	Repeatability	±0.08mm	
	Mass	700kg	
	Installation	Wall	
	Matching controller	R-30iB Plus(A-Cabinet)	
Application	Painting		

FANUC Robot P-55		P-55/15-21A	
	Controlled axes	6	
	Max. payload at wrist	15kg	
	Motion range(X,Y)	2050mm, 3743mm	
	Repeatability	±0.07mm	
	Mass	430kg	
	Installation	Floor, Upside-down, Wall, Rack, Angle	
	Matching controller	R-50iA(C-Cabinet)	
Application	Painting		

Wide range of applications

- A wide range of lineups that can be used in various manufacturing applications.



Load/Unload



Spot Welding



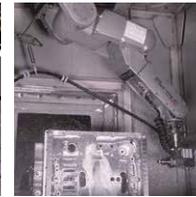
Arc Welding



Laser machining



Sealing



Washing



Painting



Palletizing



Polishing, Deburring



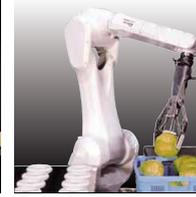
Machining



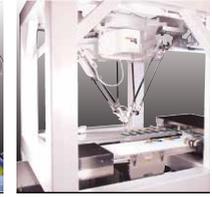
Inspection



Logistics



Food Packing



Pharmaceuticals

Reliable Support System

- Fully supported by dedicated and knowledgeable technical staff.
- A wide variety of in person and hands-on training courses are available.

FANUC ACADEMY



(Headquarters area)



(Nagoya branch)



Complete maintenance system

FANUC service team delivers customer trust and confidence based on direction of service “Maximizing Uptime”, “Global Service” and “Lifetime maintenance”.

Service First

Conforming to the spirit of “Service First”, FANUC provides lifetime maintenance to its products for as long as they are used by customers, through more than 270 service locations supporting more than 100 countries and regions throughout the world.

Maximizing Uptime



Global Service



Lifetime Maintenance

Compliant with various safety standards



- Strict quality control.
- Compliant with safety standards of each country.

Sustainability efforts



FANUC continues to contribute to the sustainability of society through continuous technological innovations that help overcome environmental and social challenges.

Robot Controller R-50iA

Compact & high-performance control

- High speed processing with multi-core CPU.

Environmentally Conscious Design

- Reduce power consumption with low power consumption fan, amplifier with low loss power element, and highly efficient brake control.



Reliable cyber security measures

- World's first* robot controller to receive international certification.

*According to FANUC's research

- IEC62443-4-1, IEC62443-4-2

Productive system setup function

- Reduce setup time and costs with a variety of interfaces.
- Python, Visual Studio Code, Software PLC, ROS 1 / ROS 2, PLC Motion Interface



*Python is a registered trademark of the Python Software Foundation.

*Visual Studio Code is a registered trademark of Microsoft Corporation.

*ROS 1 and ROS 2 are a trademark of Open Source Robotics Foundation.

Teach Pendant



Combines ease of use and excellent design, reducing operator stress



- Class-leading lightweight
- Large screen with high resolution
- Ergonomic design fits comfortably in the hand
- High performance, high sensitivity touch panel (Operable even with gloves)
- Smartphone-like smooth operation

Controller Specification

	R-50iA A-Cabinet	R-50iA B-Cabinet	R-50iA C-Cabinet	R-50iA Mate	R-30iB Mini Plus	R-30iB Compact Plus
Rated Supply Voltage	200 to 575V AC +10% - 15% 50/60Hz ± 1Hz, 3-Phase			200 to 240V AC +10% - 15% 50/60Hz ± 1Hz, 1/3-Phase	100 to 120V AC +10% - 10% 200 to 240V AC +10% - 15% 50/60Hz ± 1Hz, 1-Phase	200 to 240V AC +10% - 15% 50/60Hz ± 1Hz, 1-Phase
Mass(kg)	120 to 140 ^{NOTE1)}	180 to 200 ^{NOTE1)}	190 to 210 ^{NOTE1)}	35/40 ^{NOTE1)}	20/22 ^{NOTE1)}	9
Dimensions(mm) W×D×H	600×470×500	600×550×950	740×600×870	470×322×400 470×402×400 ^{NOTE1)}	410×277×370	440×260×85.5
Protection Class	IP54					IP20
Safety Function	Emergency stop function Position/Speed check function		PL=e, Cat4 (ISO13849-1) SIL3 (IEC61508) PL=d, Cat3 (ISO13849-1) SIL2 (IEC61508)			
External Memory	USB, SD				USB	
Field Network	Ethernet, DeviceNet, PROFINET, CC-Link, CC-Link IE ^{NOTE2)} , EtherNet/IP, EtherCAT					
Supported Robot Model	Refer to the controller row on the robot line-up table				CRX	SR

NOTE1: These values differ depending on the robot model. NOTE2: Excludes R-30iB Compact Plus.

FANUC CORPORATION