

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.



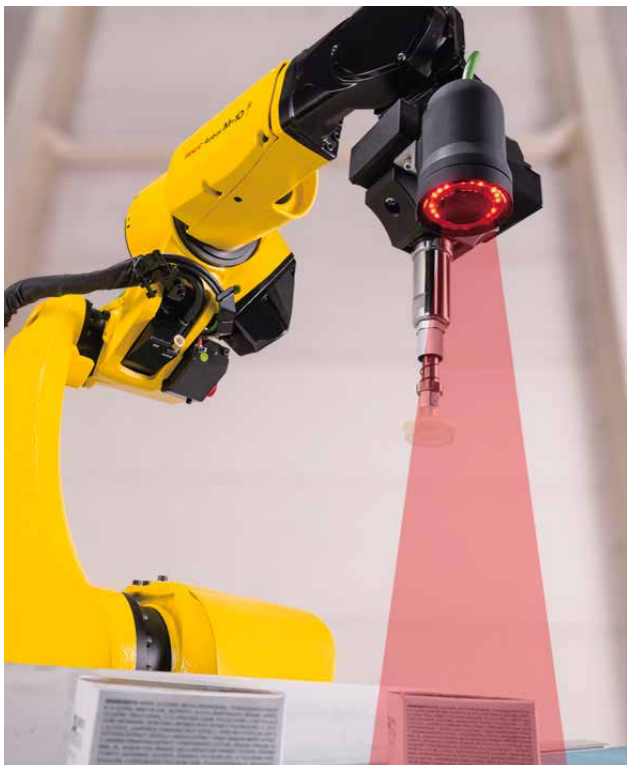
Easy to use and Safe Robot

- 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.



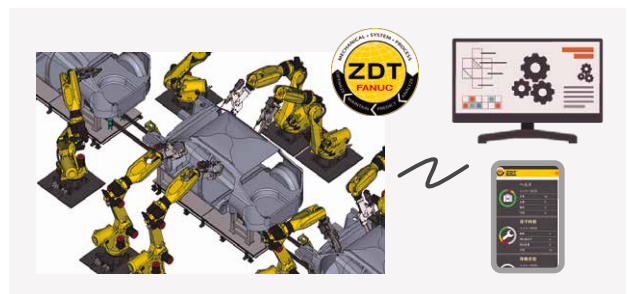
Visualize designs with ROBOGUIDE

- 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-5iA	CRX-10iA	CRX-10iA/L	CRX-20iA/L	CRX-30iA	
	Controlled axes			6			
	Max. payload at wrist	5kg	10kg		20kg	30kg	
	Motion range(X,Y)	994mm, 1988mm	1249mm, 2498mm	1418mm, 2836mm		1756mm(30kg payload mode), 3778mm 1889mm(25kg payload mode), 3778mm	
	Repeatability	±0.03mm		±0.04mm		±0.05mm	
	Mass	25kg	40kg		41kg	135kg	
	Installation	Floor, Upside-down, Angle					
	Matching controller	R-30iB Mini Plus					
	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						

R-30iB Mini Plus

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

R-30iB Compact Plus

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			
Max. payload at wrist		3kg		6kg(option: 8kg)		
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		/7-7D	/7-9D	/4-6D	/14-9D	/4-6D Entry	
FANUC Robot ARC Mate							
	Controlled axes	6					
	Max. payload at wrist	7kg		4kg	14kg		
	Motion range(X,Y)	717mm, 1274mm	911mm, 1643mm	550mm, 970mm	911mm(load capacity<12kg), 1643mm 820mm(load capacity≥12kg), 1643mm		
	Repeatability	±0.01mm					
	Mass	25kg	27kg	20kg	27kg	20kg	
	Installation	Floor, Upside-down, Angle				Floor, Upside-down	
	Matching controller	R-50iA Mate					
	Application	Handling, Assembling, Arc welding, Sealing, Mold release spray, Deburring					
			Handling, Assembling				
FANUC Robot LR Mate		/7-7D Wash	/7-7D Food/Clean	/7-9D Food/Clean			
	Controlled axes	6				5	
	Max. payload at wrist	7kg					
	Motion range(X,Y)	717mm, 1274mm		911mm, 1643mm	717mm, 1274mm		
	Repeatability	±0.01mm					
	Mass	25kg		27kg	24kg		
	Installation	Floor, Upside-down, Angle					
	Matching controller	R-50iA Mate					
	Application	Handling, Washing	Handling, Assembling, Clean room			Handling	
			Handling, Assembling, Arc welding, Sealing, Deburring				
FANUC Robot LR Mate		/10-11A	/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					
	Application	Handling, Assembling, Sealing, Mold release spray, Deburring	Handling, Assembling, Arc welding, Sealing, Deburring	Handling, Assembling, Clean room	Handling, Assembling, Arc welding, Sealing, Deburring		
			Handling, Assembling, Arc welding, Sealing, Deburring				
FANUC Robot ARC Mate		/16-11D	/12-14D	/10-16D			
FANUC Robot M-10							
	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-Cabinet), R-50iA Mate					
	Application	Handling, Assembling, Arc welding, Sealing, Deburring					
			Handling, Assembling, Arc welding, Sealing, Deburring				
FANUC Robot ARC Mate		/25-18D	/35-18D				
FANUC Robot M-20							
	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-Cabinet), R-50iA Mate					
	Application	Handling, Assembling, Arc welding, Sealing, Deburring					
			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					5
	Max. payload at wrist	50kg	70kg	12kg	20kg		50kg
	Motion range(X,Y)	2606mm, 4758mm	2104mm, 3788mm	3123mm, 5609mm	3110mm, 5583mm	2582mm, 4609mm	2003mm, 3451mm
	Repeatability	±0.06mm	±0.03mm	±0.06mm			±0.03mm
	Mass	600kg	580kg	540kg		530kg	540kg
	Installation	Floor, Upside-down, Angle					Floor, Upside-down
	Matching controller	R-50iA(A-B-Cabinet)					
	Application	Handling, Assembling, Arc welding, Sealing, Spot welding, Deburring, Laser cutting					Handling
			Handling, Assembling, Arc welding, Sealing, Spot welding, Deburring, Laser cutting				Handling



M-800/60-20B

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		
	Controlled axes	6		
	Max. payload at wrist	60kg		
	Motion range(X,Y)	2040mm, 3221mm		
	Repeatability	±0.015mm		
	Mass	820kg		
	Installation	Floor		
	Matching controller	R-50iA(A-B-Cabinet)		
	Application	Laser machining, Sealing		
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-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-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-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-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-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.



M-950/500F-28A M-1000/1000F-33A M-2000/2300F-37A M-2000/1700F-47A M-410/800F-32C CRX-10iA/L Paint P-40iA P-350iA/45 P-250iB/15 P-1000iA

Large Size Robot

FANUC Robot M-950		/500F-28A			
FANUC Robot M-1000				/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-Cabinet)	R-50iA(A,B-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							
	Mass	8600kg		9600kg		11000kg		12500kg	
	Installation	Floor							
	Matching controller	R-50iA(A,B-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					
	Max. payload at wrist	110kg		140kg		185kg		315kg		500kg		800kg	
	Motion range(X,Y)	2403mm, 2238mm		2850mm, 3546mm				3143mm, 2958mm				3203mm, 3028mm	
	Repeatability	±0.05mm											
	Mass	1030kg		1200kg		Pedestal type 1600kg ^{*1)} No pedestal 1330kg ^{*2)}		Pedestal type 2410kg ^{*1)} No pedestal 1910kg ^{*2)}				2500kg	
	Installation	Floor											
	Matching controller	R-50iA(A,B-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) *To end of flange(J4=+90deg.)	1418mm, 2836mm			
	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	10kg(1500mm/s), 15kg(1200mm/s)			
	Motion range(X,Y)	3396mm, 4391mm(Metal arm) 3348mm, 4343mm(Plastic arm)			
	Repeatability	±0.5mm			
	Mass	700kg			
	Installation	Wall			
	Matching controller	R-30iB Plus(A-Cabinet)			
	Application	Painting			

R-30iB Mini Plus

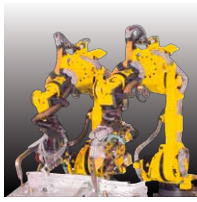
R-30iB Plus/R-30iB Mate Plus

Wide range of applications

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



Load/Unload



Spot Welding



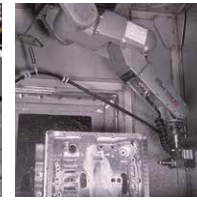
Arc Welding



Laser machining



Sealing



Washing



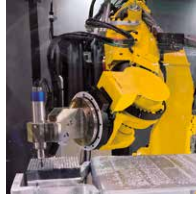
Painting



Palletizing



Polishing, Deburring



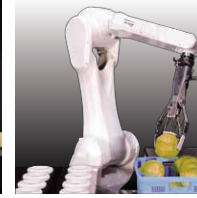
Machining



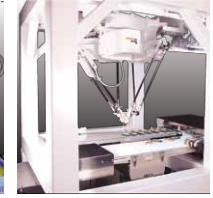
Inspection



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)



Academy

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.



Reliable cyber security measures

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

*According to FANUC's research



Productive system setup function

- Reduce setup time and costs with a variety of interfaces.



Environmentally Conscious Design

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



R-50iA Video

Controller Specification

	R-50iA A-Cabinet	R-50iA B-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 <small>NOTE1)</small>	160 to 180 <small>NOTE1)</small>	35/40 <small>NOTE1)</small>	20/22 <small>NOTE1)</small>	9
Dimensions(mm) W×D×H	600×470×500	600×550×950	470×322×400 470×402×400 <small>NOTE1)</small>	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, FL-net, DeviceNet, PROFIBUS, PROFINET, CC-Link, CC-Link IE <small>NOTE2)</small> , 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

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