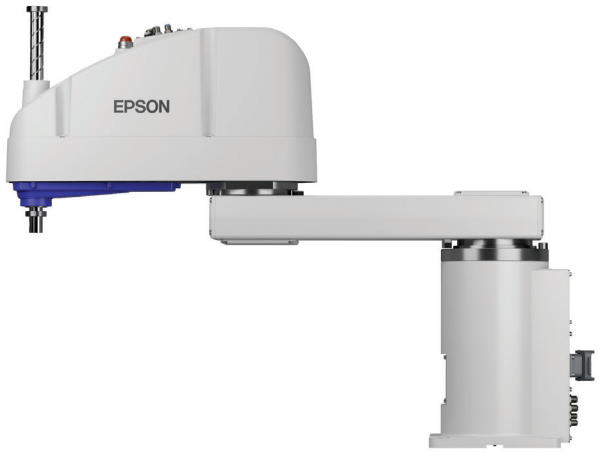
Epson® GX20B SCARA Robot



Epson GX20-Series. Taking SCARA robot performance to the next level.

Ultra high performance and flexibility — high throughput with heavy payloads and multiple arm configurations to accomplish the most demanding tasks with leading-edge precision

Unique high-power-density SCARA — innovative design handles heavy workloads at fast speeds, all in a compact footprint

Fast cycle times — high acceleration, smooth motion and fast settling times help maximize throughput with proprietary GYROPLUS® vibration reduction system, plus no ringing or overshoot[1]

Ultimate ease of use — intuitive and feature-packed Epson RC+® development software helps create powerful solutions with a simple user interface, integrated debugger and advanced 3D simulator

Low total cost of ownership — includes battery-less encoders and Epson RC+ software with no recurring license fee; rich suite of safety features included with RC700E controller

SafeSense™ technology — standard and advanced safety features can allow for increased productivity and worker protection while potentially minimizing machine footprint due to the reduction of physical barriers

Optimized footprint — table, wall- and ceiling-mount options; 850 mm and 1,000 mm reaches available; longer Z axis available on all models

Built for demanding environments — Standard, Cleanroom (ISO3)[2] and ESD, and Protected IP65 models available

Advanced integrated options — Vision Guidance, Parts Feeding, Force Guidance, Conveyor Tracking, Fieldbus and API.NET

Industry 4.0 ready — advanced OPC UA for robotics connectivity provides next-level integration and monitoring

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Epson® GX20B SCARA Robot

Model Name		GX20B SCARA Robot					
Model Number		GX20-B85x			GX20-BA0x		
Mounting Type		Tabletop	Ceiling	Wall	Tabletop	Ceiling	Wall
Arm Length	Joint #1 Plus Joint #2	850 mm			1000 mm		
Repeatability	Joints #1 - #2	±0.025 mm					
	Joint #3	±0.010 mm					
	Joint #4	±0.005 deg					
Payload	Rated	10 kg					
	Max.	20 kg					
Standard Cycle Time[3]		0.37 sec			0.42 sec		
Max. Motion Range	Joint #1	±152 deg	±107 deg		±152 deg	±107 deg	
	Joint #2 Std	±152.5 deg	±130 deg		±152.5 deg		
	Joint #2 Clean & Protected				Z: 0~-360 mm ± 152.5 deg Z: -360~-390 mm ± 151 deg		
	Joint #3 Std	180 mm/420 mm					
	Joint #3 Clean	150 mm/390 mm					
	Joint #4	±360 deg					
Joint #4 Allowable Moment of Inertia[4]	Rated	0.05 kg·m²					
	Max.	0.45 kg·m²					
Joint #3 Downforce		250 N					
User Electric Lines		15-pin (D-sub), 9-pin (D-sub)					
User Pneumatic Lines		ø4 mm x2, ø6 mm x2					
Brakes		Joint #3 and Joint #4					
Power		AC 200 V - 240 V Single Phase					
Power Consumption		2.5 kVa					
Power Cable Length		3 m/5 m/10 m (flexible, straight and angled cable end options)					
Weight (cables not included)		49 kg, 108 lb		53 kg, 117 lb	50 kg, 110 lb		55 kg, 121 lb
Applicable Controller		RC700E					
Installation Environment		Standard/Cleanroom ISO3[2] & ESD/Protected					
Safety Standards		TUV Certified to meet ISO 10218-1, UL 1740, CSA Z434, ISO 13849					
What's Included		GX20B robot and RC700E controller, Epson RC+ software, E-Stop unit with cable, E-stop unit with flying leads, connector set (I/O, hand I/O and safety circuit connectors)					
Options							
		Vision Guide CV2		Available			
		IntelliFlex™		Available			
		Force Guidance		Available			
		Conveyor Tracking Kit		R12NZ900AA			
		Epson RC+ 7.0 API		R12NZ920AE			
		GUI Builder 7.0		R12NZ920AH			
		Fieldbus Master		Available			
		Fieldbus Slave (EtherNet/IP, EtherCat, Profinet, Profibus, CCLink)		Available			
		External Control Point (ECP) Option		R12NZ920AF			
		TP3 – Teach Pendant		R12NZ00N3			
		Epson OPC UA for Robots		R19NZ901CE			
		Arm Length Calibration		R19NZ901AD			
		GX20B ISO Tool Adapter		R12NZ911C3			

Support

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1 When operated within specifications. | **2** Complies with ISO Class 3 (ISO 14644-1) and Fed-std209D Class 1 (less than 10 0.1 µm particles per 28,317 cm3:1cft) cleanroom standards. | **3** Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) with 2 kg payload of table top model boost mode (path coordinates optimized for maximum speed). | **4** When payload center of gravity is aligned with Joint #4; if not aligned with Joint #4, set parameters using INERTIA command.

See the latest innovations from Epson Business Solutions at **www.epson.com/forbusiness**

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