

# Epson® GX8B SCARA Robot



**Epson GX8-Series. Taking SCARA robot performance to the next level.**

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

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

**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, a built-in Ethernet cable and Epson RC+ software with no recurring license fee; rich suite of safety features included with RC700E controller

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

**Optimized footprint** — table, wall- and ceiling-mount options, as well as cable bottom exit option; 450 mm, 550 mm or 650 mm reach available; longer Z axis available on all models

**Built for demanding environments** — Standard, Cleanroom (ISO3)<sup>1</sup> and ESD, Protected IP65, and new standalone ESD models available

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

Model Name		GX8B SCARA Robot								
Model Number		GX8-B45x			GX8-B55x			GX8-B65x		
Mounting Type		Tabletop	Ceiling	Wall	Tabletop	Ceiling	Wall	Tabletop	Ceiling	Wall
Arm Length	Joint #1 Plus Joint #2	450 mm			550 mm			650 mm		
Repeatability	Joints #1 - #2	± 0.015 mm								
	Joint #3	± 0.010 mm								
	Joint #4	± 0.005 deg								
Payload	Rated	4 kg								
	Max.	8 kg								
Standard Cycle Time <sup>2</sup>		0.28 sec			0.30 sec			0.33 sec		
Max. Motion Range	Joint #1	± 152 deg	± 105 deg	± 105 deg	± 152 deg	± 152 deg	± 135 deg	± 152 deg	± 152 deg	± 148 deg
	Joint #2 Std & ESD	Z: 0~-270 mm ± 147.5 deg Z: -270~-330 mm ± 145 deg	± 125 deg		± 147.5 deg			± 147.5 deg		
	Joint #2 Clean/Protected	Z: 0~-240 mm ± 147.5 deg Z: -240~-300 mm ± 137.5 deg								
	Joint #3 Std & ESD	200 mm/330 mm								
	Joint #3 Clean/Protected	170 mm/300 mm								
	Joint #4	± 360 deg								
Joint #4 Allowable Moment of Inertia <sup>3</sup>	Rated	0.01 kg-m <sup>2</sup>								
	Max.	0.16 kg-m <sup>2</sup>								
Joint #3 Downforce	150 N									
User Electric Lines	15-pin (D-sub), 9-pin (D-sub), 8-pin (RJ45 Cat5e)									
User Pneumatic Lines	ø4 mm x2, ø6 mm x2									
Brakes	Z axis only									
Power	AC 200 V - 240 V (single phase)									
Power Consumption	2.2 kVa									
Power Cable Length (Cables Ordered Separately)	3 m/5 m/10 m (flexible, straight and angled cable end options)									
Bottom Cable Exit Option (Tabletop Only)	Available	-	-	Available	-	-	Available	-	-	
Weight (Cables Not Included)	33 kg, 73 lb		35 kg, 77 lb		34 kg, 75 lb		36 kg, 79 lb		35 kg, 77 lb 37 kg, 82 lb	
Applicable Controller	RC700E									
Installation Environment	Standard/ESD/Cleanroom ISO Class 3 <sup>1</sup> with ESD/Protected IP65									
Safety Standards	ISO 10218-1, UL 1740, CSA Z434, ISO 13849									
What's Included	GX8B robot and RC700E controller with safety board, Epson RC+ software, E-Stop unit with cable, 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					
	Euromap 67 Interface				R12NZ90104					
	Epson RC+ 7.0 API				R12NZ920AE					
	GUI Builder 7.0				R12NZ920AH					
	Fieldbus Master				Available					
	Fieldbus Slave (EtherNet/IP, EtherCat, Profinet, PROFIBUS, CC-Link)				Available					
	External Control Point (ECP) Option				R12NZ920AF					
	TP3 - Teach Pendant				R12NZ00N3					
	Epson OPC UA for Robots				R19NZ901CE					
	Arm Length Calibration				R19NZ901AD					
	Bellows Kit (Standard and Long Z)				Available					
	GX8B ISO Tool Adapter				R12NZ901C2					
	GX8B Camera Mounting Bracket				R12NZ901C5					
	GX8B External Wiring Kit (Table or Wall/Ceiling)				Available					

## Support

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<sup>1</sup> Complies with ISO Class 3 (ISO14644-1) and Fed-std209D Class 1 (less than 10 0.1 µm particles per 28,317 cm<sup>3</sup>:1cft) cleanroom standards. | <sup>2</sup> Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) with 4 kg payload for tabletop model boost mode (path coordinates optimized for maximum speed). | <sup>3</sup> When payload center of gravity is aligned with Joint #4; if not aligned with Joint #4, set parameters using INERTIA command.

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