

EPSON G-Series

EPSON®
EXCEED YOUR VISION

G1 SCARA Robots

- Industry Leading Precision Assembly
- Best in Class Cycle Rates
- Maximum Work Envelope Usage
- Ultra Compact yet Extremely Powerful
- Arm Lengths 175 and 225mm
- High Rigidity Arm = Ultra High Speed
- Robust Design for Excellent Durability
- ISO 3 Clean & ESD Compliant Models
- Fully Integrated Options including: Vision Guidance, .Net Connectivity, EtherNet/IP, DeviceNet, Profibus, Expansion I/O and more

Industry Leading Mini SCARA

EPSON G1 robots are the low cost, high performance leader for mini SCARA Robots. With best in class cycle rates and motion range, G1 robots are the most powerful and compact mini SCARAs available in the market today.

G1 Mini SCARAs provide everything you've come to expect from EPSON Robots except they are smaller. Our 225 mm robot arms can handle many applications with large working range requirements that other robots need 250 mm of reach to handle. G1 robots lead the industry in footprint to workspace ratios. Imagine now being able to use a 225 mm arm for applications that used to require a much larger 250 mm SCARA arm - What a great saving of valuable floor space.

High rigidity construction combined with superior controls enable G1 arms to achieve industry leading speed and precision. 3-axis models allow for superior performance for press fit screw tightening and linear dispensing applications.

G1 robots are ideally suited for applications and industries which require high precision assembly of small components, demanding cycle times and compact production lines.

Low Cost
AND High
Performance



Available with our Low Cost
Micro PowerDrive
RC180 Controller



The Best Just Got Better

G1 Specifications



EPSON ROBOTS		4-axis		3-axis		
		G1-171x	G1-221x	G1-171x	G1-221x	
Arm Length (mm)	Horiz. (J1 + J2)		75 + 100 = 175	125 + 100 = 225	75 + 100 = 175	125 + 100 = 225
Payload (kg)	Max. / Rated		1 / 0.5		1.5 / 0.5	
Repeatability	mm	J1 + J2	+/-0.005	+/-0.008	+/-0.005	+/-0.008
		J3	+/-0.010			
	deg	J4	+/-0.01		-	
Cycle Time w/ 0.5kg (sec)			0.29	0.30	0.29	0.30
Max. Operating Speed	mm/sec	J1 + J2	2,630	3,000	2,630	3,000
		J3	1,200			
	deg/sec	J4	3,000		-	
Motor Wattage (W)			50 / 50 / 50 / 50		50 / 50 / 50	
Insertion Force			50N (5.1 kgf)			
U inertia	kg·m ²	Max. / Rated	0.004 / 0.0003		-	
Axis Motion Range	J1 (deg)		+/-125			
	J2 (deg) (Std/ Clean)		+/-140 / +/-140	+/-152 / +/-149	+/-135 / +/-123	+/-135 / +/-132
	J3 (mm) (Std/ Clean)		100 / 80			
	J4 (deg)		+/-360			
User Lines	Electric		24 lines (15pin, 9pin)			
	Air		ø4 x 1, ø6 x 2			
Z Axis Diameter (mm)			ø8			
Mounting Hole Footprint (mm)			125 x 88 (4-M6)			
Weight (kg)			8			
Environmental	Temperature		5 - 40 deg C			
	Humidity		10 - 80% (non condensing)			
	Mounting Type		Tabletop			
	Clean & ESD IP Rating		ISO 3 Clean & ESD -			
Robot Cables (Meters)			3M (standard) / 5M (optional) / 10M (optional)			
Available Controllers			Micro PowerDrive RC180 PC Based Controller RC620+			

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See Our
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