

# EPSON G-Series

EPSON®  
EXCEED YOUR VISION

## G3 SCARA Robots

Low Cost  
AND High  
Performance

- Leader in its Class for both Cycle Time and Precision
- Best in Class Motion Range
- High Rigidity Arm - Ultra High Speed
- Small yet Extremely Powerful
- Robust Design for Excellent Durability
- Arm lengths in 250, 300 and 350 mm
- Cleanroom/ESD Compliant Models
- Fully integrated Options including: Vision Guidance, .Net Connectivity, EtherNet/IP, DeviceNet, Profibus, Expansion I/O and more



## Compact, Ultra Powerful and Low Cost

EPSON G3 robots lead the industry with best in class cycle time, precision and motion range. Simply put, they are the low cost, high performance leader for small SCARA Robots. With over 30 models available in sizes from 250-350mm, EPSON G3 robots are able to meet the demanding space requirements of factories with limited workspace areas.

All EPSON G3 arms are available with our low cost, high performance Micro PowerDrive RC180 Controller that provides the ultimate experience in ease of use, compact size, and reliability all at an incredibly low price. *Why choose a low performance solution when you can have a high performance EPSON G3 with Micro PowerDrive Controller?*

EPSON G3 arms are ideally suited for applications and industries requiring demanding cycle times, high precision and high reliability such as: hard disk assembly, lab automation, electronics, medical device assembly, photonics, semiconductor, telecommunications and many others.



Available with our Low Cost  
Micro PowerDrive  
RC180 Controller



# The Best Just Got Better

# G3 Specifications

EPSON ROBOTS		G3-251	G3-301	G3-351	
Arm Length (mm)	Horiz. (J1 + J2)	120 + 130 = 250	170 + 130 = 300	220 + 130 = 350	
Payload (kg)	Max. / Rated	3/1			
Repeatability	mm	J1 + J2	+/-0.008		
		J3	+/-0.010		
	deg	J4	+/-0.005		
Cycle Time w/ 2kg (sec)		0.41	0.43	0.41	
Max. Operating Speed	mm/sec	J1 + J2	3,550	3,950	
		J3 (150 / 120)	1,100		
	deg/sec	J4	3,000		
Motor Wattage (W)		200 / 150 / 150 / 150			
Insertion Force		150N (15.3 kgf)			
U inertia	kg m <sup>2</sup>	0.05 / 0.005			
Axis Motion Range	J1 (deg)	Table Top Mount:			
		Straight Arm	+/-140		
		Curved Right	—	-125 to +150	-110 to +165
		Curved Left	—	-150 to +125	-165 to +110
		Multimount (Ceiling/Wall):			
		Straight Arm	—	+/-115	+/-120
	J2 (deg)	Table Top Mount:			
		Straight Arm (Std / Clean)	+/-141 / +/-137	+/-142 / +/-141	+/-142
		Curved Right (Std / Clean)	—	-135 to +150 / -135 to +145	-120 to +165 / -120 to +160
		Curved Left (Std / Clean)	—	-150 to +135 / -145 to +135	-165 to +120 / -160 to +120
		Multimount (Ceiling/Wall):			
		Straight Arm	—	+/-135	+/-142
	J3 (mm)	Curved Right (Std / Clean)	—	—	-120 to +160 / -120 to +150
		Curved Left (Std / Clean)	—	—	-160 to +120 / -150 to +120
J4 (deg)	All (Std / Clean)	150 / 120			
User Lines	Electric Air	+/-360			
		15 lines			
Z Axis Diameter (mm)		ø4 x 1, ø6 x 2			
Mounting Hole Footprint (mm)		ø16			
Weight (kg)	Table Top Mount	120 x 120 (4-M8)			
	Multimount (Ceiling/Wall)	14			
Environmental	Temperature	5 - 40 deg C			
	Humidity	10 - 80% (non condensing)			
Optional Arm Configurations	Mounting Type	—			
	Clean & ESD	Multi-mount ISO 3 Clean & ESD			
Robot Cables (Meters)		3M (standard) / 5M (optional) / 10M (optional)			
Available Controllers		Micro PowerDrive RC180 PC Based Controller RC620+			

## EPSON Robots

18300 Central Avenue  
Carson, CA 90746

Tel: +1 (562) 290-5910  
Fax: +1 (562) 290-5999

E-mail: info@robots.epson.com  
Web: robots.epson.com

EPSON reserves the right to make changes in specification at any time and without notice. The information furnished in this document is believed to be accurate and reliable. However, no guarantees are made. For the latest information, check our website at: www.robots.epson.com. Windows, Windows XP™, Windows Vista™ and Microsoft are trademarks of Microsoft Corporation. EPSON RC+ and SPEL+ are trademarks of SEIKO EPSON CORPORATION.  
Rev: EPSONG3D

