

# Equator<sup>™</sup> 300 versatile gauge

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Equator 300

## **Equator 300 Extended Height**



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Working volume (WV)	XY	Ø300 mm					
	z	150 mm					
WV height from base*	55 mm						
Machine weight	25 kg						
Dimensions (W×D×H)	570 mm × 500 mm × 700 mm						

Working volume (WV)	XY	Ø300 mm			
	Z	150 mm			
WV height from base*	205 mm				
Machine weight	27 kg				
Dimensions (W×D×H)	570 mm × 500 mm × 850 mm				

The position of the working volume in the Z direction depends on the length of the stylus. For example, the dimensions shown above are when using an SP25 with a 21×5 stylus. When using a 75 × 8 stylus on the EQ 300 standard height, the working volume boundary starts at the fixture plate.

## **Specification**

Comparison uncertainty*	±0.002 mm
Probe type - scanning	Renishaw 3-axis SP25 analogue scanning
Maximum scanning speed (SP25)	200 mm/s
Scanning rate (SP25)	1000 points/s
Probe type - touch-trigger	Renishaw 3-axis TP20 kinematic touch-trigger
Recommended touch speed (TP20)	10 mm/s
Maximum movement speed	500 mm/s
Scale resolution	0.0002 mm
Fixturing requirement*	±1 mm
Machine air supply requirement	No air required
Operating temperature	+5 °C to +50 °C
Storage temperature	-25 °C to +70 °C
Relative humidity operating range	Maximum 80 %RH at 40 °C, non condensing
Machine electrical supply requirements	100-240 V AC ±10 %, 50-60 Hz
Maximum power consumption**	190 W
Typical power consumption***	80-100 W
Fixture plate	$305 \text{ mm} \times 305 \text{ mm}$ aluminium
Maximum workpiece weight	25 kg

The process of measuring on an Equator involves defining a series of gauge points on the component surface. Periodic calibration of a master part on a CMM establishes datum values for each gauge point. The same gauge points on the same master part are measured on Equator, 'mastering', to establish a correlation with the certified CMM. Subsequently, a regular 're-mastering' process is used to account for changing environmental conditions. Size and position measurements made immediately following re-mastering will have a comparison uncertainty of ±0.002 mm relative to the certified measurements of the master part. This specification applies where each part is fixtured to within 1 mm relative to the master part.

Peak consumption at power up

\*\*\* 3-axis system typical consumption based on taking touch points under DCC control.

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## Equator 300 ordering



	Α	-	EQ	3	3	-	1	S	1	1	Α
Part number type											
A = Assembly											
Series											
EQ = Equator with SP25 EH = Equator Extended Height with SP25 TQ = Equator with TP20 TH = Equator Extended Height with TP20											
Working volume											
3 = 300 mm diameter Number of axes 3 = 3 axes											
Controller standard											
<ul><li>1 = Controller kit with Organiser and MODUS (Operator version)</li><li>2 = Controller kit with Organiser and MODUS (Programmer version)</li></ul>	) sion)										
Manual functions											
S = Stop button J = Joystick kit B = Button interface and stop button kit											
Fixture plate hole size											
1 = M6 41 holes 2 = M8 41 holes 3 = Imperial ¼ in. 41 holes 4 = Imperial ¼ in. 441 holes modular fixture plate 5 = M6 441 holes modular fixture plate 6 = M8 441 holes modular fixture plate											
Extended warranty											
0 = Without extended warranty											
1 = 1 year extended warranty (covering year 2 of ownership)											
Power cables (x 2 per system)											

A = UK; B = EU and Korea; C = USA, Mexico, Canada, Japan and Taiwan; D = China; E = South Africa and India; F = Switzerland; G = Denmark; H = Australia; I = Israel; J = Italy and Chile; K = Brazil

### For worldwide contact details, visit www.renishaw.com/contact

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