

# Equator™ 500 versatile gauge

## Equator 500 Standard Height



<b>Working volume (WV)</b>	XY	Ø500 mm
	Z	250 mm
<b>WV height from base</b> <i>(see note 1)</i>	0 mm	
<b>Machine weight</b>	74 kg	
<b>Dimensions (WxDxH)</b>	1204 mm x 1139 mm x 1535 mm	

## Equator 500 Extended Height



<b>Working volume (WV)</b>	XY	Ø500 mm
	Z	250 mm
<b>WV height from base</b> <i>(see note 1)</i>	150 mm	
<b>Machine weight</b>	75 kg	
<b>Dimensions (WxDxH)</b>	1204 mm x 1139 mm x 1685 mm	

## Specification

<b>Comparison uncertainty</b> <i>(see note 2)</i>	±0.002 mm
<b>Probe type – scanning</b>	Renishaw 3-axis SP25 analogue scanning
<b>Maximum scanning speed (SP25)</b>	250 mm/s
<b>Scanning rate (SP25)</b>	1000 points/s
<b>Maximum movement speed</b>	750 mm/s
<b>Scale resolution</b>	0.0002 mm
<b>Fixturing requirement</b> <i>(see note 2)</i>	1 mm
<b>Machine air supply requirement</b>	No air required
<b>Operating temperature</b>	+5 °C to +50 °C
<b>Storage temperature</b>	-25 °C to +70 °C
<b>Relative humidity operating range</b>	Maximum 80% RH at 40 °C, non-condensing
<b>Machine electrical supply requirements</b>	100 Vac to 240 Vac ±10%, 50 Hz to 60 Hz
<b>Maximum power consumption</b> <i>(see note 3)</i>	190 W
<b>Typical power consumption</b> <i>(see note 4)</i>	100 W
<b>Fixture plate</b>	510 mm x 510 mm
<b>Maximum workpiece weight</b>	100 kg

Note 1 The position of the working volume in the Z direction depends on the length of the stylus. The dimensions shown above represent using a SP25 probe and SM25-2 module with a 75 mm x 8 mm stylus so that the working volume boundary starts at the fixture plate

Note 2 The process of measuring on an Equator gauging system 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 the Equator system, – ‘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.

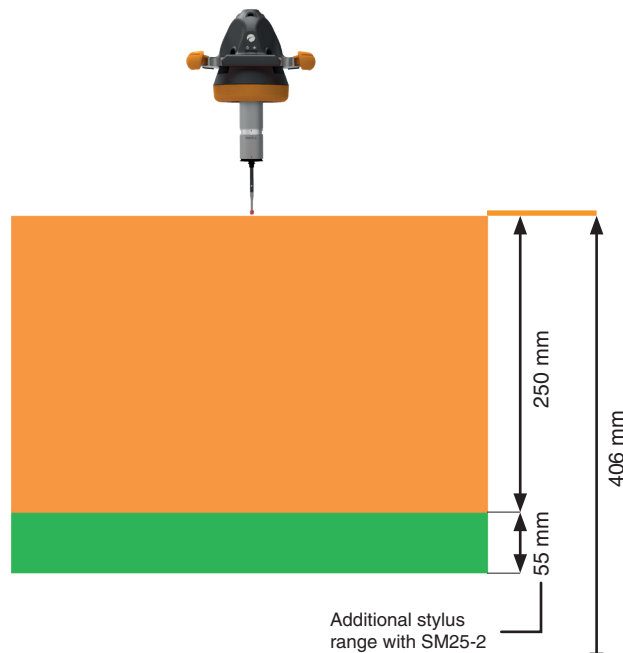
Note 3 Peak consumption at power-up.

Note 4 3-axis system typical consumption based on taking touch points under DCC control + peak consumption at power-up.

## Equator 500 Extended Height – range of Z-axis with different modules and styli

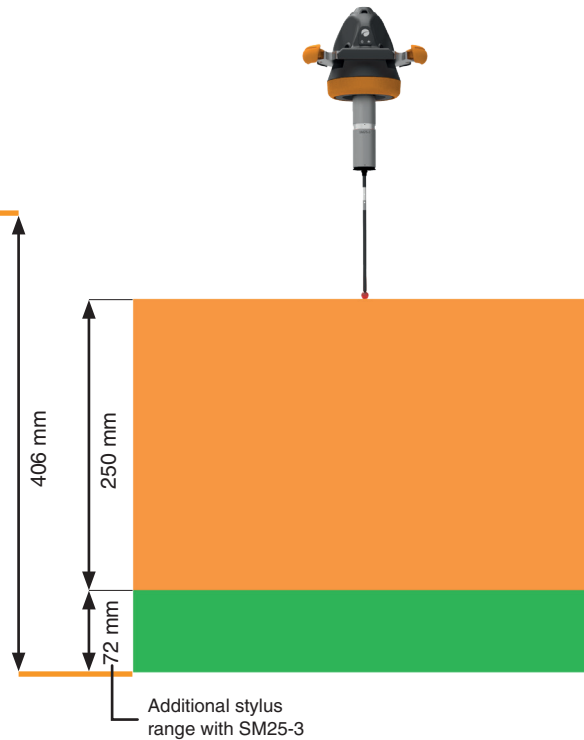
### SM25-2

50 mm to 105 mm stylus capability



### SM25-3

120 mm to 200 mm stylus capability



#### Machine

Equator 500 Standard Height gauging machine	A-6078-0070
Equator 500 Extended Height gauging machine	A-6078-0085

#### Controller standard

Equator Controller and MODUS Operator	A-5696-0101
Equator Controller and MODUS Programmer	A-5696-0102

#### Probe kit

Equator SP25 probe kit with SM25-2	A-5504-0205
Equator SP25 probe kit with SM25-2U	A-5504-0295
Equator SP25 probe kit with SM25-3	A-5504-0605

#### Manual interface

EQ500 EQ-J MCUlite-2 Equator joystick	A-6078-0258
EQ500 EQ-EBI Button Interface and EQ-S stop button	A-6088-0050
EQ500 EQ-S Equator stop button	A-6078-0259

#### Fixture plates

EQ-5F-M8 Fixture plate – 41 hole	A-6078-0209
EQ-5F-S150 Fixture plate spacer kit (H+150)	A-6078-0208

#### Warranty

Extended Warranty (Year 2 ownership)	EW1
Extended Warranty (Year 3 ownership)	EW2

#### Power cables

UK	A-5504-0261
Europe and Korea	A-5504-0262
US, Mexico, Taiwan, Canada, Japan	A-5504-0263
China	A-5504-0264
S. Africa and India	A-5504-0265
Switzerland	A-5504-0266
Denmark	A-5504-0267
Australia	A-5504-0268
Israel	A-5504-0269
Brazil	A-5504-0270

#### Cleaning kit

Equator cleaning kit	A-5504-9055
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